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Final Evaluation

The Healthy Child and Mother Project

January 2015

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Grace Kreulen, External Consultant

Front-cover photo: People's Institution primary group member, Sheuli Rani Borman, with her infant son, Shoristala village, Durgapur, Bangladesh (Kohima Daring, photographer).

The Healthy Child and Mother Project Final Evaluation: Reducing mortality and improving health status among mothers and newborns through building public and private partnerships in Bangladesh

September 30, 2009 to September 29, 2014

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DISCLAIMER

The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

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ACRONYMS

ADS	Automated Directives System
AMTSL	Active management of the third stage of labor
ANC/PNC	Antenatal care/postnatal care
CC	Community Clinic (ward level)
CCC	Central Cooperative Committee (middle tier of PI structure, also known as Union Committee)
CHT	Community health trainer (SUSOMA staff)
CHV	Community health volunteer
CHW	Community health worker
CSBA	Community skilled birth attendant
CSSA	Child Survival Sustainability Assessment
DDFP	District Director of Family Planning
DEC	Development Experience Clearinghouse
DTAC	District Technical Advisory Committee
EHF	Emergency health funds
ENC	Essential newborn care
EPI	Expanded program for immunization
FWC	Family Welfare Center (union level)
FY	Fiscal Year
GOB	Government of Bangladesh
HMIS	Health ministry information system
ICDDR,B	International Centre for Diarrhoeal Disease Research, Bangladesh
IGA	Income generation activities
ISP	Informal service provider (village doctor)
KPC	Knowledge, practices, and coverage survey
LAMB	Lutheran Aide to Medicine in Bangladesh
LQAS	Lot Quality Assurance Sampling
MNC/MNCH	Maternal newborn care / Maternal newborn child health
MOHFW	Ministry of Health and Family Welfare
NHD	National health days
NID	National immunization day
OR	Operations Research
PG	Primary group (bottom tier of PI structure)
PI	Peoples Institution (top tier of PI structure)
PICI/CCI	People's Institution Capacity Indicators/Community Capacity Indicators
PPP	Public-Private Partnership
RD	Rural Dispensary (union level)
RHFA	Rapid Health Facility Assessment survey
SOW	Scope of Work

TOT	Train the trainer
TTBA	Trained traditional birth attendant
UFPO	Upazilla family planning officer
UH&FPO	Upazilla health and family planning officer
UHC	Upazila health complex
USAID	U.S. Agency for International Development
UTAC	Upazila Technical Advisory Committee
WRA	Women of reproductive age



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Peoples Institution group member with infant son
(Photographer, Kohima Daring)

Key Findings:

- 493 poor communities with locally lead CBO in PPP for MNC
 - 78% CBOs have EHF
 - 1,078 trained volunteer community-based providers promoting MNC & supporting GOB health workers
 - CBOs managing local health clinics/making decisions for MNC with MOH officials
 - Active referral and EHF systems providing access to care for poor
 - Significant gains in intervention group versus comparison group in ANC, delivery, PNC, care-seeking, newborn care, quality of care, POU and handwashing
- ⇒ 4+ ANC ↑ 2.6 times
⇒ Inst. delivery ↑ 2.4 times
⇒ SBA delivery ↑ 2.4 times
⇒ NB PNC ↑ 2.2 times

The Healthy Child and Mother Project Final Evaluation: Executive Summary

This project was funded by the U.S. Agency for International Development through the Child Survival and Health Grants Program

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Evaluation, Purpose, and Evaluation Questions

The overarching purpose of the evaluation is to determine the extent to which the Healthy Child and Mother Project that was implemented by World Renew and its local partners from 2009-2014 accomplished the intended results. The evaluation describes key factors that contributed to what worked or did not work and shares project learnings. The findings can be used by the government and NGOs in Bangladesh and elsewhere to inform decisions related to best strategies for enhanced maternal and newborn health care in developing communities. The evaluation answers the following questions: 1) To what extent and in what ways did project interventions contribute to improved MNC household and community behaviors and the utilization, availability and quality of health services? 2) What challenges were faced and how were they overcome? 3) What project strategies have the potential to be sustained or expanded? 4) Did the operations research provide evidence that supports attribution of results to the project innovation?

Project Background

Neonatal and maternal mortality in the rural districts of Bangladesh remains high, especially in remote areas where health facilities are few and critical child and maternal health indicators are consistently lower than the national average. The purpose of this project was to contribute to reducing mortality and improving health status among mothers and newborns through building public private partnerships in the Netrokona district in northern Bangladesh. The project used a maternal newborn intervention package focused on promotion of essential newborn care, appropriate care-seeking behavior and key family practices, which was intentionally integrated into the GOB C-IMCI strategy (expanded to include newborns) and delivered by a cadre of trained CHWs at household and community levels. The project innovation is the People's Institution (PI) community mobilization model, adapted to empower the poor and marginalized to collaborate with the public health sector to promote maternal newborn health. The operations research study measured PI model effectiveness, equitability, cost-effectiveness, performance, and impact on social capital.

Evaluation Design, Methods, and Limitations

The final evaluation team used a comprehensive participatory approach to determine project accomplishments and challenges, the sustainability of project results, and the impact of project interventions. Quantitative and qualitative data from a variety of sources informed the evaluation. These include project

documents and M&E/HMIS data, the OR study, KPC surveys (with a comparison group), and RHFA surveys. Stakeholder interviews were conducted over a 3-day period to gain a broader understanding of the how and why of project accomplishments. The evaluation team was limited by difficulties encountered by the operations research (OR) study team in finalizing KPC and OR data and reports.

Findings and Conclusions

The project effectively mobilized women and men for maternal newborn health and involvement with the health system in a strong PPP by founding the People's Institution Model with marginalized people. A 3-tiered functional PI system was established within 2-years that served as the foundation for public private partnership development, enhanced health services, trained volunteer community-based providers, emergency health funds, and MNC gains. The project strengthened public private health system collaboration with memos of understandings, a referral system, and participatory health committee structures in which the poor are active MNC advocates with the government and government officials and health workers are meeting with them to make policies and decisions to meet community needs. Significant ($p \leq 0.05$) gains seen from baseline to endline in the intervention group include: 4+ ANC visits increased from 5% to 14%, quality of ANC increased from 0% to 5%, institutional delivery from 8% to 19%, SBA delivery from 9% to 22%, thermal care of newborn from 10% to 45%, clean cord care from 55% to 65%, postnatal newborn care from 8% to 19%, and handwashing practices from 22% to 39%. Of these, gains in ANC visits, SBA delivery, institutional delivery, newborn and maternal PNC visits, care-seeking for ANC and PNC complications, and handwashing practices were significantly greater ($p \leq 0.05$) in the intervention group versus the comparison group. The intervention group also had significant improvements versus the comparison group in use of clean birth kits, thermal care of the newborn, delayed bathing, quality ANC, AMTSL, and essential newborn care at delivery. In addition, the availability of weekly ANC services at health facilities increased from 60% to 90%, and 24/7 facility-based delivery services from 3% to 17%. OR findings show that in 2014 over 60% of WRA in the intervention area were active members of the PI groups and PI group members were significantly more likely to have higher levels of social capital than non group members with increases in both structural and cognitive social capital. Qualitative data supports attribution of growth in social capital and improvements in MNC to the PI model intervention. The average cost for the intervention per woman of reproductive age is USD 9.73 and per community volunteer is USD 1,045. Scaling up a similar program with a population of 1.5 million is estimated cost USD 3.6 million.

Best practice for the global and Bangladesh health community to consider in promoting maternal newborn health care in marginalized communities include:

1. The PI Model delivery platform of empowerment and local governance to increase social capital of marginalized women and improve community-based MNC and health practices in partnership with MOH officials and health facilities/providers.
2. Community-supported and managed emergency health funds to promote access to care for the poor.
3. The public-private partnership (PPP) based referral system with which poor mothers and children get priority access to care.
4. A volunteer system of trained village-based health providers working in collaboration with health facility providers to promote ANC, safe deliveries, newborn care, and PNC.
5. CBO (PI) involvement in the management and operations of local clinics to increase quality of care.
6. HMIS matching meetings between PI and government providers/officials for accurate data to address MNC needs.
7. Using Theater for Development for strategic MNC messaging at the community level.
8. Grantee working through local NGO partners (civil society) to increase local organizational capacity.

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For more information about SUSOMA contact www.worldrenew.net

EVALUATION PURPOSE AND EVALUATION QUESTIONS

EVALUATION PURPOSE

This document presents the final performance evaluation (FE) for the Healthy Child and Mother Project (SUSOMA) funded by USAID's Child Survival and Health Grants Program (CSHGP) *GHS-A-00-09-00009-00* that was implemented by World Renew and its local partners from September 30, 2009 to September 29, 2014 in Netrokona, Bangladesh. USAID's CSHGP supports community-oriented projects implemented by U.S. nongovernmental organizations (NGOs) and their local partners. The purpose of this program was to contribute to reducing mortality and improving health status among mothers and newborns. USAID reviewed and approved the FE Scope of Work (SOW) and approved the final evaluator. Grace J. Kreulen, PhD, was hired with project funds as an independent consultant to serve as the FE team leader. The evaluation was conducted in a manner protective of the evaluator's independence and neutrality. The draft report was directly submitted to USAID simultaneously by the evaluator at the time it was provided to the grantee.

The primary aim of the FE is to determine the extent to which the project accomplished the intended results, to describe key factors that contributed to what worked or what did not work, and to demonstrate strategies directly relevant to improving MOH policies/practices and to global learning. In addition the impact of the innovation, the People's Institution model, was assessed as part of the operations research study.

The FE provides an opportunity for all project stakeholders to take stock of accomplishments to date and to listen to the beneficiaries at all levels, including mothers and caregivers, other community members and opinion leaders, health workers, health system administrators, local partners, other organizations, and donors. The following audiences will use the FE report as a source of evidence to help inform decisions about future maternal newborn care program designs and policies, especially programs desiring to utilize public-private partnerships to enhance maternal newborn health:

1. In-country partners at national, regional, and local levels, including the GOB MOHFW and other relevant ministries, district officials and health providers, local organizations, and communities.
2. USAID (CSHGP, Global Health Bureau, USAID Mission in Bangladesh) and other CSHGP grantees.
3. The international global health community. The FE report will be posted the USAID Development Experience Clearinghouse <https://dec.usaid.gov>.

FINAL EVALUATION QUESTIONS

Primary Questions	Related Sub-Questions
1. To what extent did the SUSOMA project contribute to improved MNCH-related household and community behaviors, availability and utilization of quality services?	a) To what extent and in what ways did the local NGO's (SATHI and PARI) effectively engage communities to strengthen private/public partnerships in support of MNCH? b) How did community engagement and mobilization strategies using the PI model impact public-private collaboration, allocation of resources for health (local EHF, community and facility-based care), local government capacity for facility services, and policy advocacy? c) To what extent and in what ways did the utilization of volunteer CHWs contribute to improved MNCH practices and increased coverage and utilization of ANC, assisted delivery, and post partum care? d) To what extent and in what ways were community health system enhancement strategies effective? Did the Quality Improvement System improve services at the village level? Did engaging the informal health system reduce harmful practices? What was the impact of the referral process for mothers and sick newborns?
2. What strategies and factors (both planned and unplanned) lead to achievement of key	a) Was the project implemented as designed, including the incorporation of key partners outlined in the DIP? What changes were made to the implementation plan and why? b) What is the quality of the data and of the system for measuring project results? Did the

critical results? What challenges/ barriers were faced and how were they overcome?

3. Which project strategies have potential be sustained or expanded? What are the promising practices and lessons learned?

4. Did the operation research provide evidence that supports attribution of project results to the PI model? How could scale-up of the PI model impact MNCH in Bangladesh?

quantitative and qualitative indicators provide useful evidence for decision-making?

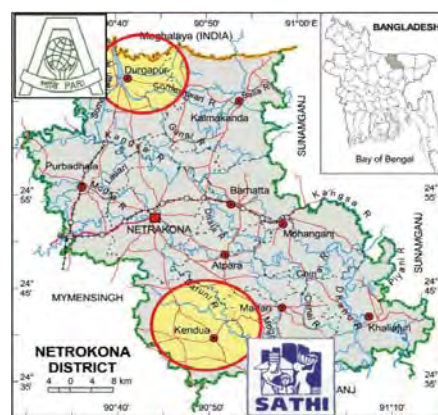
- c) How did consideration of socioeconomic factors and gender affect implementation and outcomes? Were females and males appropriately engaged in the PI model strategy? Did the project effectively unify the socially and economically underprivileged and create opportunities and resources for MNCH not usually available to these individuals/groups?
- d) What synergy/integration occurred between strategies that impacted results?
- a) What evidence is there that SATHI and PARI have become more sustainable as organizations able to support community engagement and mobilization?
- b) To what extent and in what ways has the project developed an enabling and learning environment to support sustainable capacity and advocacy for quality MNCH care?
- c) What aspects of the program can be or are being scaled-up to benefit more people and to foster lasting policy/program development? What factors influence the success of scale-up efforts?
- d) What resources would be required to institutionalize or scale up key intervention components (cost analysis)?
- a) What role did the OR study have in evaluating and improving the impact of the PI model on MNCH outcomes at the community level? To what extent did OR results provide evidence that the PI model of community mobilization (vs other confounding factors):
 - 1) Promotes equity by engaging the poor and marginalized to have power to make decisions in health and care-seeking
 - 2) Builds local capacity to identify and address community needs, provide quality services, raise social capital (SC) and contribute to desired MNCH outcomes
 - 3) Enables the community to establish linkages with health facilities to improve quality and access to health services and to advocate for policy changes
- b) How were results of the OR study used for informed decision making and improvement of the PI model?

PROJECT BACKGROUND

PROJECT AND OR DESIGN

Despite recent overall improvements, neonatal and maternal mortality in Bangladesh remain high (53/1000 live births and 194/1000 live births, respectfully), especially in remote rural areas where health facilities are few and critical child and maternal health indicators are poor and consistently lower than the national average.¹ The Netrokona district in northern Bangladesh is a priority district of USAID and one of the 14 GOB low performing districts.² The main causes of neonatal deaths are birth asphyxia, low birth weight, severe infection, and acute respiratory infection. Maternal deaths primarily occur due to hemorrhage, sepsis, and obstructed or prolonged labor.³ A skilled birth attendant attends only 26.5% of births in Netrokona.⁴

For the CSHGP SUSOMA⁵ project, World Renew worked with local partners, SATHI and PARI, in two rural sub-districts or



¹ Bangladesh Demographic and Health Survey, 2011; Bangladesh Maternal Mortality and Health Care Survey, 2010, Multiple Indicator Cluster Survey, Bangladesh, 2006.

² UNICEF, 2007

³ World Health Organization (WHO), 2005. World Health Report 2005: Make every mother and child count

⁴ National Institute of Population Research (NIPORT), 2011. Bangladesh maternal mortality and health care survey 2010: Summary of key findings and implications.

upazilas in Netrokona: Kendua with 13 unions and Durgapur with 7 unions.

Durgapur is close to the border of India, very remote with limited roads and electricity, and has large Garo and Hajong populations. In Kendua there is very limited access to health services. At the inception of the project, both sub-districts had a large population of women of reproductive age (WRA), infants and children (Table 1). The total population in these two sub-districts (upazilas) is 484,920. The project benefitted 96,571 children under five and 124,313 WRA.

The goal of the SUSOMA project in Bangladesh was to reduce mortality and improve health status among the most marginalized mothers and newborns in two sub-districts of Netrokona: Kendua and Durgapur. The project's overarching objective was improved household and community MNC-related behaviors and increased utilization of quality MNC services for hard to reach families and communities. The project specifically sought to mobilize communities for MNC utilizing the People's Institution model strategy to establish community-based organizations and public-private partnership structures for ongoing MNC gains.

The SUSOMA project devoted 100% effort to a maternal and newborn intervention package focused on promotion of essential newborn care, appropriate care-seeking behavior and key family practices that was intentionally integrated into the GOB C-IMCI strategy (expanded to include newborns) and delivered by a cadre of trained volunteer community health workers (CHVs and TTBA) at household and community levels. The project worked closely with the GOB IMCI Program Manager in Dhaka to address the GOB's goal of decreased maternal newborn mortality, and supported GOB priorities and strategies articulated in the National Health Policy, the National Neonatal Health Strategy, and the Maternal, Neonatal, and Child Survival Programme⁶. The project innovation is the People's Institution (PI) community mobilization model, adapted to empower the poor and marginalized to interact and collaborate with informal service providers (village doctors), private providers, and the public health sector (MOHFW) to promote maternal newborn health. World Renew has 18-years of experience implementing the PI model successfully in Bangladesh to help poor communities form independent, self-sustaining community-based organizations.

World Renew contracted with ICDDR,B to conduct operations research (OR) to measure PI model effectiveness, equitability, cost-effectiveness, performance, and its impact on social capital. The PI model innovation was evaluated with a mixed method quasi-experimental operations research design that included a) quantitative appraisal of program effects utilizing baseline and endline KPC survey data, b) qualitative process documentation of SUSOMA PI model implementation, and c) measurement of social capital as it relates to participation in the PI model.

The project detailed implementation plan (DIP) specified project goals, objectives, intended results, and intervention mechanisms in a manner that facilitated project implementation and evaluation. Table 2 presents the project results framework and mechanisms utilized to meet the project strategic objective. To strengthen a public/private partnership, project staff established and built capacity of 3-tiers of PI groups for management of local MNC, linkages with the public health sector, health facility collaboration, and emergency health funds. To promote MNC practices, key MNC behavior change communication

Table 1: Beneficiaries Population in Kendua and Durgapur

Beneficiary Population	Kendua	Durgapur	Total
Infants 0-11 mos.	11,253	8,061	19,314
Children 12-23 mos.	11,253	8,061	19,314
Children 24-59 mos.	33,759	24,184	57,943
Children 0-59 mos.	56,265	40,306	96,571
Women 15-49 yrs.	73,312	51,001	124,313
Total Population	286,594	198,326	484,920

Source: Population Census, Netrokona. Bangladesh Bureau of Statistics and Health Demographic Surveillance. 2001

⁵ The project name is formed from the Bangla words Shusto Sontan O Ma, which means 'healthy child and mother'

⁶ IMCI, target high poverty areas, use informal health sector and community-based service providers, mobilize women/families/opinion leaders, establish public-community linkages.

(BCC) messages were delivered by volunteer CHWs to households, PI groups, and communities. To improve quality of care, a cadre of community-based volunteers (CHVs, TTBAAs), ISPs, and MOHFW staff received C-IMCI-based training focused on ANC, safe delivery, essential newborn care actions (ENC), and PNC. Additionally, a referral system and structures to support care quality in local clinics were effectively established. To increase capacity of local NGOs, World Renew trained and mentored local implementing NGOs, PARI and SATHI, as they networked with the MOHFW and built the capacity of the four local PIs, who have become GOB licensed NGOs and are capable of continuing PI strategies for MNC. An enabling environment for MNC was strengthened both in Netrokona and nationally through public-private partnership activities, such as HMIS data collaboration, learning circles, and MNC advocacy for the marginalized.

Table 2: Project Results Framework

<i>Goal/Impact</i>	To reduce mortality and improve health status among the most marginalized mothers and newborns in two sub-districts of Netrokona: Kendua and Durgapur				
<i>Strategic Objective</i>	Improved household and community MNC-related behaviors and increased utilization of quality services for hard-to-reach families and communities				
	1	2	3	4	5
<i>Results/ Outcomes</i>	Strengthened private (civil society)/public partnerships in support of MNC	Improved MNC practices of marginalized mothers and families	Increased quality of MNC services	Increased NGO capacity to support People's Institutions	Enhanced enabling environment
<i>Intermediate Results/ Mechanisms</i>	1 Increase community capacity for management of health and the health system (via PI model). 2 Establish public/private health system collaboration with mechanisms for CBO feedback on health facilities. 3 Increase community access to health services through community-based financing scheme, the Emergency Health Fund.	1 Improve knowledge of pregnancy, childbirth and postpartum danger signs. 2 Increase coverage and utilization of quality ANC services. 3 Equitable access to delivery by skilled personnel. 4 Increase training and coaching of mothers and communities on essential newborn care actions 5 Increase promotion of key MNC-related behaviors	1 Increase engagement community-based providers in provision quality MNC care. 2 Improve referral of mothers and newborns. 3 Decrease harmful practices of informal service providers. 4 Establish quality improvement system between public health facilities and community sectors. 5 Improve capacity of MOHFW to provide MNC services.	1 Increase capacity of NGOs to assist PIs in implementing and monitoring their own activities. 2 Strengthen capacity of local NGOs to work with MOHFW at district and national levels. 3 Develop capacity of local NGO partners to train community-based providers in advocacy and networking with local government within the CBO (PI) model.	1 Strengthen and sustain community and local government capacity in MNC. 2 Improve ability of CBOs to advocate for local level policies that benefit the health status of the poor. 3 Establish partnerships with key services and programs to advance awareness of the MNC needs of marginalized citizen and to improve social and policy environment for MNC.
<i>USAID theme</i>	Community engagement	Service delivery/equity	Service delivery/quality	Scale-up/ sustainability	Learning/ adaptation

PARTNERSHIPS/COLLABORATION

The project was highly aligned with in-country partners at national, regional, and local levels (See Table 3). There was close collaboration with the USAID Mission in Bangladesh and project achievements contributed to the Mission's overall health objectives.

Table 3. Project Partnerships and Alignment

Partner	Alignment	Collaboration Activities
USAID Mission Bangladesh	USAID Bangladesh Strategic Statement FY2007-2010 (2005), Program components 1, 2, & 4. USAID Bangladesh Country Development Cooperation Strategy FY 2011-2016 (2011), Development objective: IR 3.2, 3.3.	World Renew provides quarterly updates and gets advice; works closely with Dr. Umma Meena/others; attends annual Mission partner's meeting.
MCHIP Bangladesh	ACCESS family planning project, 2006-2009; MaMoni project (Save the Children in Sylhet and Habiganj, 2009-2014).	SUSOMA consulted with MCHIP, focused training on 10 MaMoni low-cost, high-impact community maternal newborn interventions.
MOHFW National--	National Health Plan, 2008; Maternal Health Strategy, Health and Population Sector Programme; Community-Integrated Management of Childhood Illness (C-IMCI) strategy; IMCI Working Group; Neonatal Technical Group; endorsement of SUSOMA training materials	SUSOMA results framework and training linked with GOB priorities. World Renew maintains ongoing alignment via participation in national-level groups and regular meetings with Dr. Altaf, IMCI Bangladesh.
Netrokona--	District and upazilla officials and health facilities, (Community Clinics, Family Welfare Centers and Upazila Hospitals); Monthly community clinic management and UTAC meetings; quarterly DTAC meetings	SUSOMA facilitated the building of a strong public-private partnership with collaborative working relationships between PI groups, officials and facilities.
PARI and SATHI	SUSOMA implementing partners for all project activities within their respective sub-district.	World Renew provided technical support for capacity of local NGOs in PI model.
LAMB and Joyramkura	Training Institutions for TOT of project and health facility staff; training of CHVs & TTBA's using adapted MaMoni/Saving Newborn Lives/SAVE materials	Excellent collaboration in adaptation of existing training materials and in timely completion and follow-up of training programs.
ICDDR,B	Principal Investigator for the Operations Research study, including the KPC surveys, process documentation of PI model, and investigation of social capital and PI model.	Good collaboration with project, however, partner delayed in getting KPC and OR study reports completed.
Communities in project area	PI groups with PPP MOUs and referral system; community-based providers and ISPs linked with health facilities; elite community members; private providers.	Working together to overcome deficiencies in services and enhance MNC quality.
Other NGO program affiliates	Smiling Sun Franchise White Ribbon Alliance Obstetrics and Gynecological Society of Bangladesh--salter scale training GBC (Garo Baptist Convention)--MNCH care private provider in program area DSK (Dushtha Shasthya Kendra)-- MNCH care private provider in program area	

Other NGO programs that were being implemented within the program area are:

Upazila	NGO	Intervention focus	Upazila	NGO	Intervention focus
Kendua	BRAC	Children's schools	Durgapur	BRAC	Children's schools
	Swablami	Credit		DSK	Health clinics
	Damien Fdn	Leprosy control		GBC	Health clinics
	Red Crescent	Blood work, hospital support		YMCA	Training center
Durgapur	ASA	Microfinance	Durgapur	Damien Fdn	Leprosy control
	Caritas Bgdes	Integrated development/credit		World Vision	HIV/AIDS awareness

EVALUATION METHODS AND LIMITATIONS

The 15-member final evaluation team used a participatory approach to determine project accomplishments and challenges/inputs, the sustainability of project results, lessons learned, and the impact of the project innovation on health outcomes. Both quantitative and qualitative data from varied sources were obtained and reviewed to provide a comprehensive evaluation of the project. These include 1) review of key project documents, 2) analysis of quantitative and qualitative assessment study reports, 3) cost analysis, and 4) stakeholder interviews. A more detailed description of evaluation methods and limitations is in Annex IX. Data collection instruments are in Annex X.

Review of key project documents. A comprehensive review of project reports and documents was conducted to confirm project implementation and/or revision of planned activities and to understand the environment/context in which the project was conducted. A complete listing of sources of information is in Annex XI.

Analysis of quantitative and qualitative assessment study reports. Multiple assessments that provided key data for interpreting the effects of the project on project outcomes were reviewed and analyzed: Operations Research Study (OR) Reports, Knowledge Practices and Coverage Survey (KPC) Reports, Rapid Health Facilities Assessment Reports (RHFA), and the Child Survival Sustainability Assessments (CSSA).

The Operations Research Study was done by ICDDR,B, DM Emdadul Hoque, Principal Investigator. The stated objectives of the OR study are to: 1) Evaluate the performance of the Primary Groups and PI model in reaching marginalized and poor populations and effects on maternal, newborn and child health. 2) Assess PI model effects on MNC, care-seeking for maternal, neonatal and childhood illnesses, and on compliance with referral. 3) Assess PI model effects on quality of care and utilization of maternal, neonatal, and childhood services by health workers. 4) Measure incremental intervention costs, cost-efficiency and equity aspects of the PI model and its ability in reaching marginalized population. 5) Undertake process evaluation of the implementation of the PI model. 6) Measure social capital. Objectives 1-4 are addressed in by the KPC study and 5-6 by the operations research study.

Expanded KPC surveys were done at baseline (October 2009) and endline (July 2014) by ICDDR,B as part of the SUSOMA OR study to explore the effectiveness, equity, and cost-effectiveness of the project intervention package. A 211-item questionnaire with 4-modules indexed 1) socio-economic status and PI group involvement, 2) maternal newborn care (MNC), 3) cost of care, and 4) child health care. Respondents were women who had a birth in the one year preceding the survey for the MNC and cost modules, and mothers of children 0-2 years for the child health modules. A total of 4,079 households were surveyed at baseline (2,038 intervention group, 2,041 comparison group) and 4,502 at endline (2,206 intervention, 2,296 comparison) from a listing of over 6,800 households. Sample size was calculated using standard formulas based on normal distribution, confidence levels of 95%, 80% power, and design effect of 1.5 (to allow for clustering). Randomized cluster sampling was used in which 40 clusters were selected, 20 for the intervention group from the two-upazila intervention area (Durgapur, Kendua) and 20 for a comparison group from two nearby upazilas with usual GOB services (Barhatta, Kalmakanda). Data was analyzed with the statistical software STATA 12. Forty-three maternal newborn and child health variables were calculated for baseline and endline, in addition to the cost and equity/wealth quintile indicators. The *Final KPC Report* and *Baseline KPC Report* are in Annex VI.

Two final *operations research study reports* were produced. The first focuses on documenting the process of implementing the PI model and measuring social capital and is herein called the *Final Operations Research Qualitative and Social Capital Study Report*. The qualitative process evaluation utilized nonproportional quota and snowball sampling at baseline (2011) and endline (2014) for in-depth interviews of PI group members (n=22), non-members (22), CHVs (8) and TTBA's (4). It also included focus group discussions with members (9) and non-members (8), social mapping and organizational profiling, and observations of group formation. The quantitative measurement of social capital used an adapted World Bank tool with data obtained from randomly selected samples of approximately 300 PI

group members and non-members, all poor women of reproductive age (WRA). The baseline OR measurement of social capital occurred in 2012, halfway through the project, and the endline in 2014. Analysis of qualitative data was done manually. Quantitative data analysis used SPSS for frequencies, reliability analysis to derive a social capital scale for baseline and endline, and ANOVA for testing the association between social capital and group membership/residence. The *Final Operations Research Qualitative and Social Capital Study Report* is in Annex XIXe.

The second OR report brings together findings from the qualitative process evaluation and measurement of social capital from the *Final Operations Research Qualitative and Social Capital Study Report* with the quantitative program evaluation from the KPC and RHFA reports. It seeks to address all of the OR objectives in one document utilizing the USAID OR report template and is herein called the *Final Operations Research Report*. It is in Annex XV.

The RHFA was done at baseline (November 2009) and endline (June 2014) using existing standard tools and analysis approaches to index 12 key indicators and five optional indicators of health services delivery quality and access. The RHFA provided comparable data about MNCH services in the three levels of public health facilities in the project area (upazilla health complex (UHC) outpatient department, union family welfare center (FWC)/rural dispensary (RD), and ward community clinic (CC)) and in private/NGO clinics. Data was collected from a systematic random sample of 30 health facilities and CHWs. Data collection included a health facilities checklist, health worker interviews, child sick care observations and exit interviews of child caregivers (63 cases at baseline, 141 at endline), and CHW/CSBA assessments (13 at baseline, 20 at endline). The final RHFA report is in Annex XIXa.

The CSSA is an emerging capacity monitoring tool with roots in the community mobilization work of World Renew in Bangladesh. Using selected indicators from multiple data sources, the tool is compiled on a six-month basis to monitor change in community capacity to sustain health gains. The CSSA was completed seven times during the project and indexed six components of sustainability: health outcomes (10 MNC indicators), health services (8 indicators), organizational capacity (9 indicators), organizational viability (5 indicators), community capacity (5 indicators), and environment (5 indicators). Indicator data was obtained from multiple sources: LQAS and KPC data, project M&E system, HMIS data, and PICI/CCI (PI and Community Capacity Indicator self-monitoring done by PI groups). The CSSA summary dashboard and indicator information is in Annex XIXb.

Cost analysis. A cost analysis was done by World Renew to determine what resources would be required to institutionalize or scale-up the intervention components. It estimates the average project cost per woman of reproductive age, and cost to support each community volunteer. The cost analysis report is available in Annex XIXd.

Stakeholder Interviews. In-depth qualitative interviews were conducted with SUSOMA stakeholders to gain a broader understanding of the how and why of project accomplishments and challenges. Interviews occurred as part of the final evaluation over a 3-day period at the district health complex and SUSOMA office in Netrokona, the health complexes and partner NGO offices in Kendua and Durgapur, throughout the intervention upazilas, and in Dhaka. Stakeholders to be interviewed were categorized into 6 groups: 1) government officials, 2) SUSOMA and NGO staff, 3) government health facilities and providers, CHVs, TTBA and ISPs, 4) PI groups (PI, CCC, PGs) at varied functional levels, 5) beneficiaries (pregnant women, mothers, husbands, in-laws), and 6) training institution directors. Interview questionnaires, developed to target each of the six stakeholder groups, were derived from the final evaluation questions and categorized using the A-C-S-I mnemonic:

- **A**ccomplishments: What results were achieved? How did interventions contribute to results?
- **C**hallenges & Inputs: What factors contributed to/detracted from critical results and why?
- **S**ustainability: What strategies can be sustained, scaled-up, shared globally?
- **I**mpact: What evidence links project results with the PI model?

More information about stakeholder interviews is in Annex IX.

Data Quality and Use

The evaluation team had an appropriate mix of information to inform the final evaluation report, however, multiple issues related to quality of the KPC data/report and operations research report existed. These are described in Annex IX and resolution of these issues is summarized below. In terms of other information, the RHFA presents valuable comparable data about the health services in the intervention area at baseline and endline, however, interpretation of some indicators is limited due to lack of clarity related to clinic staffing levels and lack of access to CHW health registers at the time of the interviews. The CSSA is a self-monitoring tool that portrays progress overtime in the development of local capacity for health from the perspective of the PI groups. It provides valuable subjective data. The stakeholder interviews conducted by the evaluation team provide insights into stakeholder and partner opinions of the importance of the project, the effectiveness of the overall project strategy, contextual factors that changed over the life of the project, sustainability, and lessons learned. Data from all sources aligned to support and explain project achievements during the data triangulation phase of the final evaluation.

The *Final KPC Report* and a revised *Baseline KPC Report* were received from ICDDR,B on October 30, 2014 along with data tables of results for maternal newborn child health indicators at baseline and endline for the intervention and comparison groups, including cost and wealth quintile data. A revised baseline report with MNC and cost module data limited to women who had a birth in the one year preceding the survey was required so that data presented was comparable to the data collected for the final KPC. The final KPC report was of adequate quality to utilize in writing the final report with one exception: All data comparisons in the report are observational only. There is no statistical comparison of differences between groups from baseline to endline and between intervention and controls in these reports, such as confidence intervals, chi square tests, t-tests, or ANOVA. To better understand KPC findings and be able to apply them to analysis of project accomplishments, the final evaluator utilized the data available and computed percentage change in variables from baseline to endline as well as 95% confidence intervals.⁷

The external evaluator has some concern about the selected comparison group. ICDDR,B states that they selected the KPC survey comparison upazilas in Netrokona because they had “usual GOB services” (Final KPC Report, p. 20). However, during the life of the SUSOMA project, donor health projects were occurring in the comparison areas. PARI was conducting a large maternal newborn health project (EDM Switzerland funded) in four unions in Kalmakanda upazila and was working with a PI system in Barhatta in integrated programming. These activities in the comparison upazilas have the potential to confound estimation of SUSOMA program effects and must be considered in comparing intervention and comparison group findings.

The *Final Operations Research Qualitative and Social Capital Study Report* was received from ICDDR,B on November 3, 2014. This report was of adequate quality to utilize in writing the final evaluation report. However, because this report and a summary report that followed did not meet the USAID/Evidence Project Operations Research Report guidance, World Renew contracted with Grace J. Kreulen to write a final operations research report that brought together all aspects of the operations research study. This *Final Operations Research Report* is in Annex XV.

FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

FINDINGS

SUSOMA addressed the project strategic objective (SO) of improved household and community MNC behaviors and increased utilization of quality services for hard-to-reach families and communities through five intermediate results (IRs). Findings are summarized in Table 4 and presented in detail related to each IR, the OR study, and other influencing factors. Conclusions and recommendations follow presentation of findings.

⁷ <https://www.mccallum-layton.co.uk/tools/statistic-calculators/confidence-interval-for-proportions-calculator/>

SUSOMA made good use of quantitative and qualitative data in monitoring and planning during the life of the project. This includes project MIS data directly collected in the community, data from the MOHFW HMIS, and indicator data from project assessments. The partner NGO health coordinators presented updated project data in monthly and annual progress reports based on the DIP M&E and work plan. The project management and implementation teams used these data to make informed decisions. For example, when more targeted interventions related to improving ANC and assisted deliveries were indicated, additional effort was made to track these accurately at the village level on an ongoing basis. In addition, the MOHFW HMIS data system and the project's M&E data and reports were systematically used for decision-making in the public-private partnership (PPP). For example, maternal newborn data gathered at the village and union-level by CHVs and TTBAAs were discussed with health facility providers during monthly coordination meetings at the local health center and 'merged' with MOHFW data at union and upazila-level matching meetings attended by the UH&FPO, UFPO, and Health officer in charge. Data was then discussed at the district level in quarterly meetings with the Civil Surgeon, Deputy Civil Surgeon, DDFO, and Guiney Specialist during which aggregate data were analyzed collaboratively for recommended action.

Table 4. Summary of Inputs, activities and Outputs that Contributed to Key Outcomes

Goal: To reduce mortality and improve health status among the most marginalized mothers and newborn. Strategic Objective: Improved household and community MNC behaviors and increased utilization of quality services for hard-to-reach families and communities.			
Inputs	Activities	Outputs	Outcomes (* p≤0.05)
Intermediate Result #1 (IR1): Strengthened private/public partnerships (PPP) in support of MNC			
40 CHT staff	Mobilized, established and built capacity of Peoples Institution model in 494 villages	4 PIs, 22CCCs, and 541 PGs provide community-based management of local MNC	All communities have active empowered PIs promoting MNC
TOT training	Formed, trained, and developed PI health sub-teams	4 PI health sub-teams formed, 126 meetings held	PI health sub-teams functioning independently to promote MNC
Training materials	Strengthened PI-health facility collaboration and feedback	Signed PI-GOB MOUs, 3,326 coordination meetings held	PI groups established strong functional ties w GOB for MNC
Supportive supervision	PG's supported to establish and manage EHF's	EHF save BDT 437,004/USD 5,660. EHF records kept	96% PGs have active EHF, 2,406 women & children used EHF
	PGs establish bank accounts and health savings accounts.	All PGs have bank accounts, health savings = BDT 9,443,810 /USD 121,672	PGs giving small business loans for IGA for health (<i>unintended</i>)
Intermediate Result #2 (IR2): Improved practices of marginalized mothers and families regarding MNC			
Monitoring, supervision	Established BCC-based household counseling by trained CHVs and TTBAAs to promote ANC, skilled delivery/ENC, PNC.	TTBAAs counseled 73,966 pregnant mothers/20,147 newborns mothers, CHVs counseled 46,383 pregnant women/19,970 newborns mothers	<i>Mother of 0-11 month old:</i> -Knowledge of pregnancy dangers increased 65% → 72% -4+ ANC 5.3% → 13.6%* -SBA birth 9.3% → 21.9%* -Facility birth 8% → 19.3%*
BCC & IEC materials			-Newborn PN visit 7.9% → 18.7%* -Mother PNC visit 8.6% → 18.5%* -Contraceptive use 49% → 71% -No pre-lacteal feed 59.3% → 81.6%
Mother health cards/registry	Knowledge & skill-building of PG members re MNC, PI/CHV led community MNC promotion	CHV held 14,576 community group and 55,486 primary group MNC promotion meetings, PI leaders educated pregnant women in 1,083 meetings.	-Immediate BF 52.8% → 77.6% -Exclusive BF 47.2% → 52.9%* -2+TT 86.9% → 80.2%
Gov't training in NID	PI participation in NHD/NID events & Theater for Development (TfD) for influencing groups	3 trained drama teams in PI system, PIs held 113 BCC drama events, PIs participated in 881 NHDs, CHVs/TTBAAs assisting with	

NID 2x/year			
Intermediate Result #3 (IR3): Increased quality of MNC services			
TOT training	Trained community-based and informal service providers in MNC, counseling, and referrals.	537 CHVs and 541 TTBA trained to teach ANC PNC safe delivery and ENC actions, referrals, 377 ISPs trained in safe practices and referrals	1,078 trained volunteers promoting MNC in villages: -Clean cord care 54.5%→65% -Clean birth kit 4.2%→32%* -Thermal care 9.7%→44.7%*
Training materials	Supervision of CHVs/TTBAs		
Supportive supervision	Selection and training of Super CHVs	79 Super CHVs make weekly supervisory visits, facilitate learning, advocate with officials	CHVs share best practices in monthly Super CHV meetings
Networking	Established SUSOMA PI referral system with health facilities & government officials with poor getting priority treatment	Coordinated referrals for ANC, delivery PNC, illness care being made by CHV, TTBA, village doctor, PI	Facilities w/ 1+ CHV referral/month increased 37%→80%, 5,006 MNC referrals made by CHV & TTBA, 461 by ISP
Pictorial HMIS registry	Assisted PIs to monitor facility utilization and develop methods to improve quality of care	Tracking pregnant women and newborns in local registry, 190 PG members serve on CC management committees, 30 PI managed 'model CCs'	100% PGs involved in clinic decision-making & advocacy, Clinic service availability increased: -ANC 4x/month 60% →90% -Institutional delivery 3% →17%
Facilitation, training and support	Government health worker (HW) TOT and MNC training, PI advocacy for health clinic strengthening	123 facility HWs trained in MNC/ TOT, 15 in IMCI/ETAT,	HW training increased- -training child health 37%→87% -training MNC 3% →37% -training CSBA 31% →43%
Intermediate Result #4 (IR4): Increased NGO capacity to support People's Institutions			
WR training, materials & support	Capacity building of PARI/ SATHI in implementing PI model	PI Training Manual published	All villages in Kendua and Durgapur have established PIs
	Established the capacity of LAMB for community-based TOT training	Joyramkura, Pari, Sathi, GOB trainers and PIs equipped to train CHVs, TTBA, and ISPs	Sustainable training mechanisms in place
Lessons, supplies, funds	Engagement in learning circles and exchange visits	SATHI/PARI share project at NGO learning circle, visit MaMoni & PLAN-Bd	NGOs linked with health NGO/government sectors
		PI and Super CHV participation in learning exchanges	
Facilitation and advocacy	PI assisted to apply for registration with GOB	All 4 PIs registered with GOB as social welfare agencies	4 PIs independent NGOs
Intermediate Result #5 (IR5): Enhanced enabling environment			
Networking support	Established and strengthened PI-MOHFW HMIS system	Monthly HMIS matching meetings between government officials and PI/CHV/TTBA	Government MNC HMIS provides data for decision-making/ resource allocation
Advocacy training	PI establish networks with government officials at national, district, & sub-district levels	712 monthly/quarterly meetings held between PI leaders and health officials for MNC	60 documented evidences of policy change that benefitted the poor
	Advocacy with national NGOs for MNC policies for poor	WR met 30 times with WRA and Neonatal Working Team	GOB official for C-IMCI supporting PI efforts for MNCH

* Percentage change from baseline to endline in intervention group significantly different ($p \leq 0.05$) from comparison group.

IRI. Strengthened public private partnerships (PPP) in support of MNC

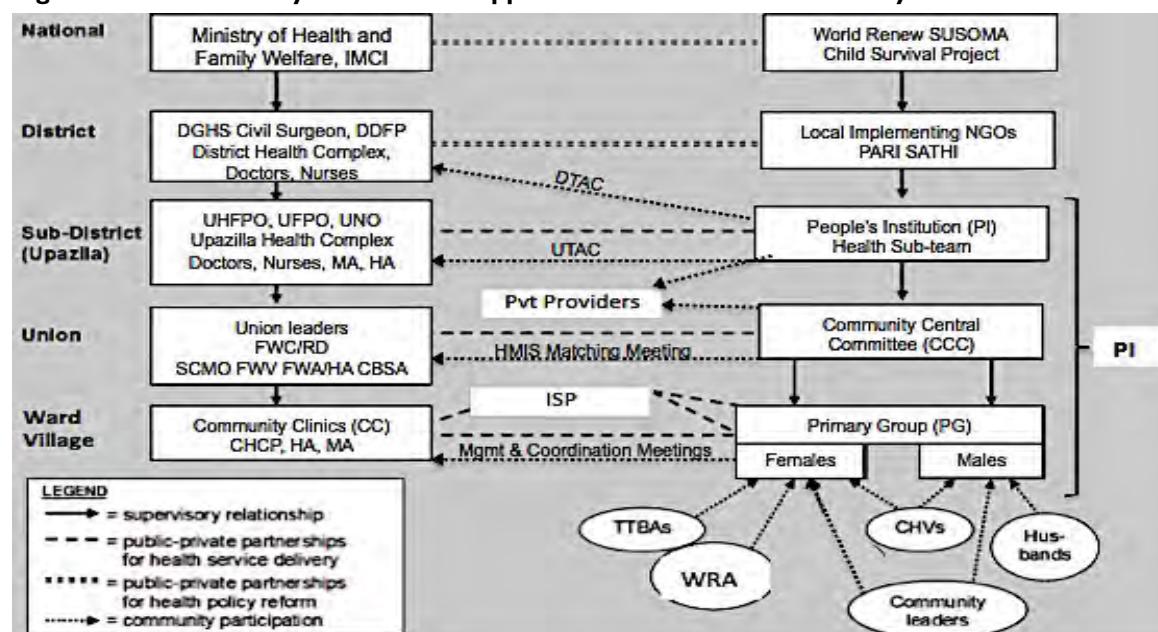
SUSOMA effectively built strong public private partnerships (PPP) with ties between the Kendua and Durgapur communities and government health officials and facilities by 1) mobilizing and empowering all 494 village communities in the intervention area to support maternal newborn health by forming a total of 541 self-help primary groups (PG), 22 union-level Central Cooperative Committees (CCC), and 4 upazila-level People's Institutions (PI) utilizing the People's Institution model; 2) effectively aligning and networking these PI groups and their health sub-committees with the government health system at district, upazila, union and ward levels and with national MNCH priorities; and 3) establishing active emergency health funds for care of pregnant women, newborns and mothers.

Community mobilization using the PI model strategy. In the first two years of the project, staff community health trainers (CHTs) established and built the capacity of three tiers of community groups to mobilize poor marginalized community members for maternal newborn health (see Figure 1). Initially, CHTs went household to household in each village to build awareness and engage pregnant women and mothers in forming Primary Groups (PG) to address mother and newborn health concerns. CHTs trained PG members and supported them to work together to solve problems, to claim their rights, and to track group gains in capacity. The PGs selected local volunteers providers, CHVs and TTBA, to promote maternal newborn health in their village. Of the 541 PGs established during the project, 42% are high-level/independent functioning, 38% are medium-level, and 20% are low-level/emerging. There is at least one PG in each of the 494 villages in Kendua and Durgapur.

"Before we did not know the problems and let people die... now we know and do"
The 'Friendship' PG

Initially, PG formation focused exclusively on women but since midterm efforts were made to form men's groups. Of the 541 PGs formed during the project, 22 of these are male. Stakeholder interviews confirm that poor marginalized women have become leaders and found their voice. Female leadership is accepted by husbands, in-laws and communities as fewer mothers and newborns are dying.

Figure 1. PI community mobilization approach and links to the health system



Once the PGs became established the CHT helped each select two representatives to form a union-level Central Cooperative Committee (CCC). The CCCs received training and were supported to become functional. Each CCC then selected six representatives to the upazilla-level PI group. In the two upazillas covered by the project, 22 CCCs and 4 PIs are functioning. Each PI (with the CCC and PGs under it) has one trained health sub-team with a MNC-focus responsible for overseeing local MNC health

services through maintaining PPP networks and community mobilization. With the addition of male PGs in 2012, the 22 CCCs and 4 PIs have mixed-gender leadership and enhanced MNC advocacy potential. CHTs trained the three-tiers of PI groups in leadership, management, record keeping, register, gender, local resource mobilization, M&E, sustainability, audit, advocacy, networking, and capacity measurement. Utilizing a TOT strategy, over 40,000 community members have received PI-related training in the intervention upazilas.

Aligning Public-Private Partnerships. The PGs, CCCs, and PIs have developed strong PPP networks by which they interact and collaborate with the local formal, informal and private health care systems to advocate for enhanced MNC service delivery and policy change. (See Figure 1). Active collaborative linkages formalized during the project include:

- A PPP network established between PI and health facilities committed to decreasing maternal newborn deaths and illness by improving MNC health services. The PIs have signed MOUs with local government and private (GBC, DSK) facilities in which each extends to the other support and cooperation for training, education, meeting together, improving quality of services, referrals and emergency care, and maintaining maternal newborn registries.
- PIs promote maternal newborn health as they link at the upazila and district levels with government officials and serve on the Upazila and District Technical Advisory Committees that meet quarterly (UTAC) and semi-annually (DTAC). They share progress, inform officials of needs, influence strategies to meet gaps, and participate in decision-making related to MNC.
- CCCs link at the union level to the Family Welfare Centers (FWCs) and Rural Dispensaries (RDs) and participate in clinic decision-making. They have developed a common maternal newborn HMIS data format and meet monthly with the UFPO and UH&FPO in 'HMIS matching meetings' to sync the CHV and TTBA registries with clinic staff registries (SACMO, FWV, FWA/HA, CSBA). They do microplanning to enhance quality of services and availability of supplies and drugs to meet the need.
- PGs serve and participate in decision-making at the ward level on the 60 Community Clinic (CC) Management Committees. Community-based CHVs and TTBA trained by the project, in conjunction with ISPs, have met monthly (3,326 times) to coordinate MNC with government health providers (CHCP, HA, MA) and set goals/strategies for local action. These providers now have improved communication channels, work together in the clinics, share data, and jointly promote local MNC through satellite clinics, national immunization and health days (NID/NHD), and other events.

"The PI model is excellent for motivating community people in reducing maternal newborn deaths...one of the most effective approaches to bring positive change within the community."
Government Health Workers

Stakeholder interviews confirm that community people have become aware of and created demand for MNC services at the local health facilities and that health facility staff and government officials are working to supply those services. All PI groups have developed friendly reciprocal relationships with higher government officials, and meet quarterly for guidance and support with local elites (non-poor) who are on their PI Advisory Committees. The officials and the elites/influential expressed appreciation for the work of the CHVs/TTBAs and PIs and their desire to continue collaborating to improve MNC.

Emergency health funds (EHF). To provide access to emergency MNC for the poor in their community, 520 PG groups (96%) have set up, raise funds for, and actively manage EHF with financial records, policies, and bank accounts. In addition, groups have purchased or had donated rickshaw ambulances. A total of BDT 437,004 (USD 5,660) has been saved in project-linked EHF and 2,406 women and children have taken interest-free loans from the funds for emergency transportation and care. The EHF are a noted access to care enhancing accomplishment of SUSOMA. An unintended but popular development in all the PGs is health savings, which have accumulated a total of BDT 9,443,810 (USD 121,672). Loans are taken from these funds for IGA, enabling parents to better feed and protect

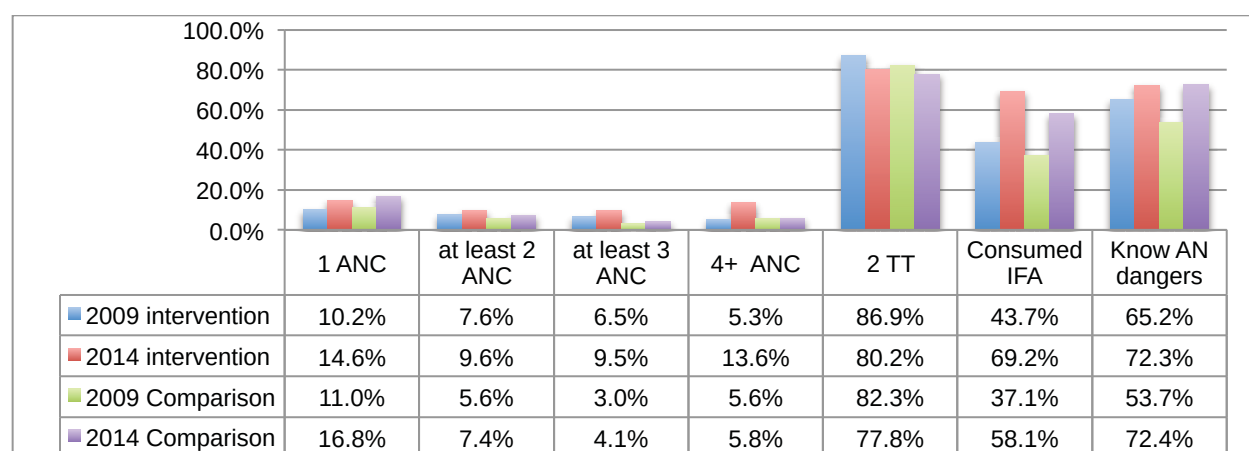
"The biggest accomplishment of SUSOMA is the EHF" FWV-CSBA

the health of their families. Group members bring 2-5 taka to the weekly meetings for these funds. The EHF's are managed at the CCC level; the health savings accounts belong to and are managed by the PGs.

IR2. Improved MNCH health practices

To achieve improved health practices among marginalized mothers and families, the project established BCC-based counseling with all pregnant women and key stakeholders in each village. Trained CHVs and TTBA's promote ANC, safe institutional/SBA delivery, essential newborn care (ENC), kangaroo care, and PNC. Over the life of the project, these volunteer providers raised awareness and motivation for MNC through 120,349 household visits to pregnant mothers and 40,117 visits to newborn mothers. CHVs also held 14,576 educational meetings with PGs on MNC. PI leaders also taught pregnant women at 1,083 meetings and collaborated with government providers in 881 NHDs. Additionally, three trained Theater for Development (TfD) teams, which are integrated into the PI system, performed 113 community dramas to raise the awareness of MNC-related issues and overcome resistance of influencing husbands and in-laws. Stakeholder interviews confirm that these activities increased MNC awareness, health practices and utilization of health services, and created demand on the government for equitable distribution of MNC at the village level. Over time in-laws and husbands became involved in promoting MNC and facility-based deliveries. Tables 5 and 6 present data for changes in antenatal knowledge, health practices, and care utilization of women with children 0-11 months in both the intervention and comparison groups from baseline (2009) to endline (2014).

Table 5. ANC practices of mothers with children age 0-11 months in intervention and comparison groups, 2009 baseline and 2014 endline KPC Survey.



Over the life of the SUSOMA project, the number of health facilities offering ANC four times a month increased 50% from 60% to 90% (Final RHFA Report), with a corresponding significant increase ($p \leq 0.05$) in the intervention group in receipt of four-or-more ANC from a medically trained provider (5.3% at baseline to 13.6% at endline). The number of women in the intervention group with three ANC increased by 46% and those with four-or-more ANC increased by 157% (versus 37% and 4% gains, respectively, in the comparison group). By endline, significantly more ($p \leq 0.05$) women in the intervention group than in the comparison group had had three and four-or-more ANC visits despite being comparable at baseline. The percentage change from baseline to endline was significantly greater ($p \leq 0.05$) in the intervention vs. the comparison group. Increases in ANC visits occurred across both groups in all age, educational, and wealth quintile categories (Final KPC Report). In the intervention group all wealth quintiles at least doubled in the number of women receiving four-or-more ANC. Because the project educated and engaged both poor and elites in intervention strategies, it is not surprising that all quintiles in the intervention group saw increases.

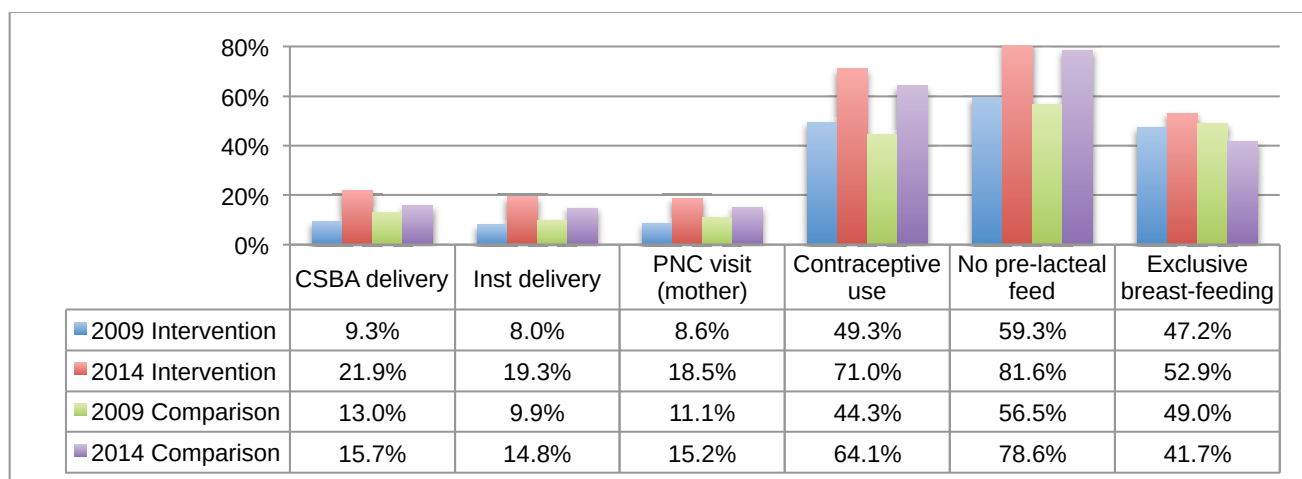
Other ANC practices also improved in the intervention group during the life of the project.

- There was a significant 58% increase ($p \leq 0.05$) from baseline to endline in the number of women in the intervention group that consumed IFA (43.7% to 69.2%). The comparison group saw similar gains (37.1% to 58.1%), however, by endline the intervention group reported significantly more ($p \leq 0.05$) IFA intake than the comparison group. This may reflect, in addition to the effectiveness of the project messaging, the RHFA documented 49% increase in the availability of IFA tablets at health facilities that occurred during the project in the intervention area (67% to 100%).
- The percentage gain across time in maternal knowledge of pregnancy, delivery, postpartum and neonatal danger signs were significantly lower in the intervention than the comparison group. While knowledge of danger signs during pregnancy increased by 11% in the intervention group (65.2% to 72.3%) it increased 35% in the comparison group (53.7% to 72.4%). Likewise, knowledge of maternal danger signs during delivery was higher in the intervention group at baseline and made only small gains during the project (67.2% to 67.4%) while the comparison group saw greater gains (48.1% to 69.9%). Gains in knowledge of postpartum complications had a similar pattern. Overtime, the comparison group's knowledge of ANC, delivery, PNC and neonatal complications became comparable to the knowledge levels in the intervention group. In addition, by the end of the project 91.7% of women in the intervention group had learned about and made preparations for the birth of their youngest child (89.6% at baseline), which was similar to the comparison group. These findings may reflect the effect of ongoing MNCH projects in the comparison upazilas and/or a knowledge ceiling effect in these populations.

While the intervention group did not significantly increase in knowledge of complications over the comparison group, application of knowledge may be more effective in the intervention group. The intervention group had significantly greater ($p \leq 0.05$) improvements in care-seeking practices from a qualified provider for all reported antenatal complications (26.4% to 37.6%, 42% gain) compared to the comparison group (24.4% to 27.4%, 12% gain), as well as in care-seeking for postpartum complications (29.3% to 43.4%, 48% gain) compared to the comparison group's decrease (30.4% to 23.1%, -24%). Care-seeking for delivery complications saw a non-significant 6.3% decline in the intervention group and a 23.7% decline in the comparison.

- The percentage of women that received two tetanus toxoid injections decreased 8% in the intervention group as well as 5% in the comparison group from baseline to endline, with decreases occurring across all education and wealth quintile categories. This unexpected finding may reflect systemic issues beyond control of the project, such as the availability of tetanus toxoid and measurement timing.

Table 6. Delivery and PNC practices of mothers with children age 0-11 months in intervention and control groups, 2009 baseline and 2014 endline KPC Survey.

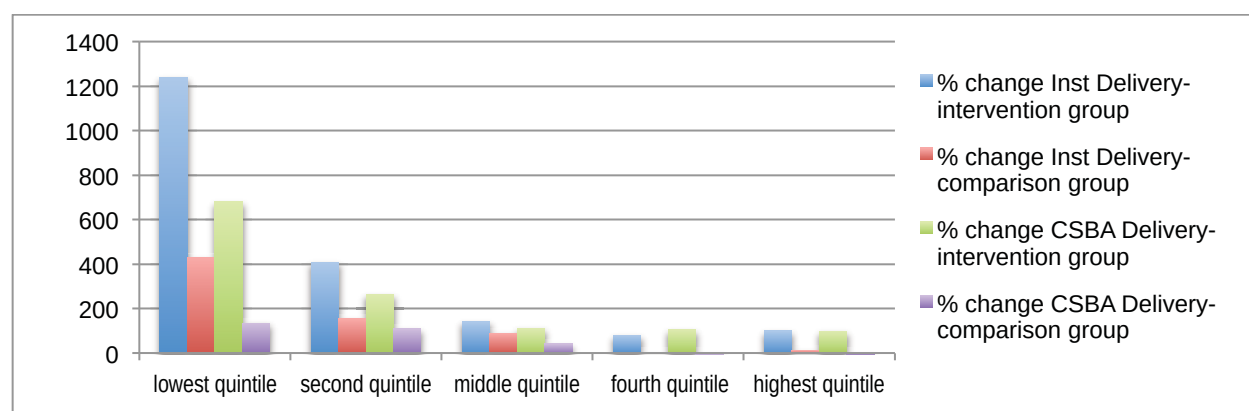


Over the life of the project, there was a 500% increase the number of facilities offering 24/7 institutional delivery services (3% to 17%, Final RHFA Report) with a significant increase ($p \leq 0.05$) in institutional deliveries (8% at baseline to 19.3% at endline). While an increase in institutional deliveries occurred in both intervention and comparison groups, the 141% gain in the intervention group was significantly greater ($p \leq 0.05$) than the 49% gain in the comparison group. In addition, deliveries assisted by CSBAs,⁸ which are primarily skilled home deliveries, also increased significantly ($p \leq 0.05$) in the intervention group (9.3% to 21.9%, 135% gain) versus the comparison group (13% to 15.7%, 21% gain), with significantly more women in the intervention group having CSBA-assisted deliveries. Together institutional and CSBA-assisted skilled deliveries accounted for 41.2% of all deliveries at endline in the intervention group. Examining institutional and CSBA-assisted deliveries by wealth quintiles reveals a greater increase for women in the lower poor quintiles than those in the upper richer quintiles with the greatest gains in the intervention group (see Table 7), reinforcing the effectiveness of program interventions that targeted improving equity in MNC for the poor and ultra-poor.

"We have fewer deaths, more safe deliveries...hospital deliveries increase day by day" Jhinuk PI

There was a significantly greater percentage increase ($p \leq 0.05$) in the intervention group than in the comparison group in the number of newborns and mothers that received post-partum care from an appropriate trained health worker within two days after birth, with the number increasing significantly ($p \leq 0.05$) from baseline to endline in the intervention group but not in the comparison group (See Table 6). Post-partum visits to newborns in the intervention group increased 137% (10.7% at baseline to 15% at endline) and to mothers increased 135% (8.6% to 18.5%). Contraceptive use, part of project MNC messaging, increased significantly from baseline to endline in both the intervention and comparison groups, indicating that the 44% gain seen in both groups may be influenced by common factors, such as district-wide MOHFW family planning program initiatives. Improvements in post-partum visits were greatest in the lower as compared with the higher wealth quintiles with greater change in the intervention group. The lowest quintile in the intervention group had 5-fold and 7-fold gains against the highest quintiles for newborn and maternal post-partum visits, respectively, versus 4-fold gains in the comparison group.

Table 7. Percentage change by wealth quintile in institutional and CSBA-assisted deliveries in the intervention group from 2009 baseline to 2014 endline.



Breast-feeding practices also improved significantly ($p \leq 0.05$) from baseline to endline, both in terms of gains in the number of newborns put to breast within one hour of delivery (52.9% to 77.6%) and children 0-23 months not receiving pre-lacteal feeds (59.3% to 81.6%). Since similar gains in these indicators occurred in the comparison group, these increases in breastfeeding may be due to district-wide breastfeeding initiatives and/or local program efforts. The intervention group experienced a

⁸ CSBAs are community-based government health providers (FWV, FWA, HA) with SBA training. They do many home deliveries in the area because most health facilities in the area have not been upgraded to delivery sites.

significantly greater ($p \leq 0.05$) increase in exclusive breastfeeding (47.2% to 52.9%, 12% gain), which was significantly greater than the comparison group at endline. Improvements in exclusive breastfeeding occurred relatively equally across all wealth quintiles.

Because the MNC intervention was embedded in the C-IMCI framework, MNCH program effects related to ORT use, care-seeking for pneumonia, handwashing practices, and underweight children were tracked in assessing program effects. In the intervention group ORT use for diarrhea increased 15% (73.3% to 85%) while the comparison group had a significantly greater ($p \leq 0.05$) 73% increase (49.6% to 85.9%) with both groups having equivalent ORT use at endline. Appropriate care-seeking for pneumonia increased significantly ($p \leq 0.05$) in the intervention group (22.3% to 32.6, 42% gain), while there was no improvement in the comparison group. Similarly, handwashing practices in the intervention group saw a significant ($p \leq 0.05$) improvement (21.6% to 39.3%, 82% gain) while there were declines in the comparison group. Both groups saw equivalent decreases in the percentage of underweight children. Declines were 18% in the intervention group (33.3% to 27.3%) and 13% in the comparison group (36% to 31.4%). The gains in ORT use, care-seeking, and fewer underweight children in the intervention group were greatest in the lower as compared with the higher wealth quintiles.

"The PI, CHVs and TTBAAs are mobilizing the marginalized for MNC." GBC Physician

IR3. Increased quality of MNCH services

SUSOMA improved the quality of maternal newborn care services through 1) training community-based health providers, 2) supervising PI-linked CHVs and TTBAAs, 3) establishing an active referral system, and 4) facilitating PI monitoring and support of health facility (HF) utilization and care quality.

Training community-based health providers. A total of 1,201 community-based volunteers (537 CHVs, 541 TTBAAs) and 123 government facility-based providers received training and refresher training in ANC, safe delivery, PNC, ENC actions, and IMCI. Of these, 79 CHVs were trained as regional Super CHVs to oversee and strengthen CHV performance. An additional 377 ISPs received training and refresher training in IMCI and referrals to reduce harmful practice. SUSOMA supported 10 local government health workers for intensive IMCI training and six for ETAT training in HBB in Dhaka. The endline RHFA revealed that 87% of government health workers reported receiving training in child health (37% baseline), 38-40% had training in maternal newborn care/ANC (0-3% baseline), and 43% had received government CSBA training (31% baseline).

The impact of this training on maternal newborn care is evidenced in the MNC gains discussed in IR2 and summarized in Tables 5 and 6 (above). The effect of training in essential newborn care actions on the quality of home delivery practices is evidenced in Table 8 (below). Significant improvements ($p \leq 0.05$) from baseline to endline in the intervention group include a 661% increase in the use of clean birth kits by women during home deliveries (4.2% to 32%), a 323% increase in thermal care (immediate drying and wrapping) after home delivery (9.7% to 40.2%), a 103% increase in delaying bathing for three days after delivery (22.7% to 46.3%), and a 19% increase in clean cord care at the time of birth (57% to 69%). With the exception of clean cord care, significant increases in these birthing practices were also seen in the comparison group; however, the percentage increases in the comparison group were lower for each behavior. Stakeholder interviews confirm attribution of these gains to project-supported training in which both government health workers and community volunteers (CHVs, TTBAAs, and PG members) were empowered with greater knowledge and skills that impacted both the messaging given to women and communities (IR2) and PPP-generated improvements in quality of MNC delivery.

"There is increased ANC, knowledge of services, and trust." FWA-CSBA

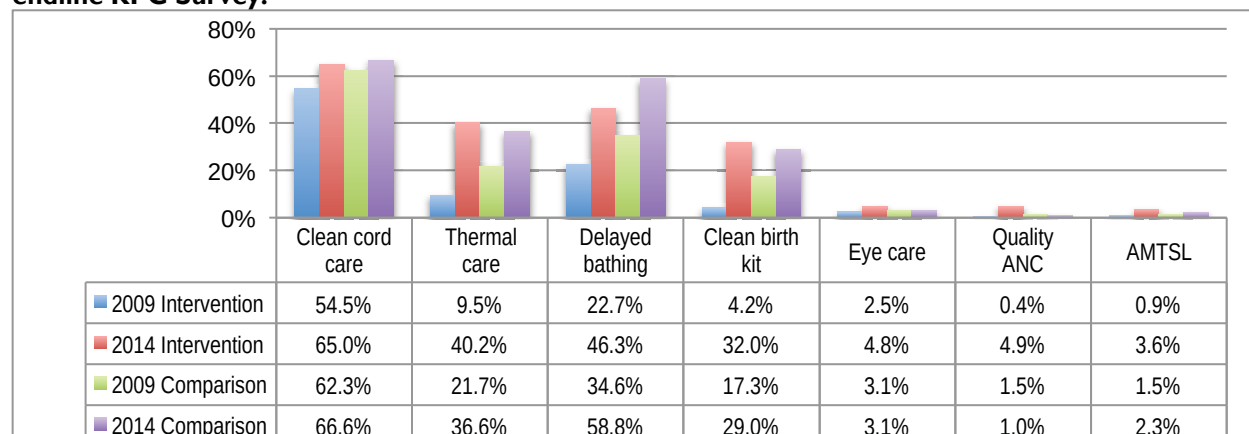
Quality of care saw several important gains over the life of the project that, although the endline values are low, may point towards future potential for care improvement with ongoing PPP synergies. In the

intervention group, active management of the third stage of labor (AMTSL⁹) increased 4-fold (0.9% to 3.6%) and quality of ANC¹⁰ increased 12-fold (0.4% to 4.9%). These significant ($p \leq 0.05$) gains were not seen in the comparison group. At endline, quality of ANC was significantly greater ($p \leq 0.05$) in the intervention (4.9%) than the comparison group (1.0%). Receipt of essential newborn care¹¹ during home delivery increased significantly ($p \leq 0.05$) in both intervention and comparison groups; however, the 14.1-fold increase in the intervention group (0.9% to 12.7%) was significantly greater ($p \leq 0.05$) than the 2.8-fold increase in the comparison group (4.8% to 13.6%). Although there was a 92% increase in prophylactic eye care in the intervention group, the fact that only 4.8% of newborns received this care at endline may reflect the lack of availability of eye ointment for CSBA-assisted home and institutional deliveries, as the RHFA found low supplies of newborn eye ointment at health facilities (33% at baseline, 27% at endline). The project may have had an impact on the small gain that was seen in prophylactic eye care, as the comparison group did not change during the project period.

Training was done effectively and efficiently utilizing a TOT strategy to train 42,610 people (4,624 male/37,986 female) over the life of the project. World Renew and SUSOMA staff developed curriculum with the LAMB Training Center who conducted TOT training with SATHI and PARI health coordinators, assistant health coordinators and CHTs, government health providers (FWVs, SACMOs, MAs, CBSAs) from district, upazila and union levels, and Joyramkura trainers. These then did training and refresher training in Kendua and Durgapur for the three-tiers of PI members, CHVs, TTBA, ISPs, and health providers.

*"We have learned
to solve problems"
Jhinuk Society PI*

Table 8. Quality of care practices in intervention and comparison groups, 2009 baseline and 2014 endline KPC Survey.



Supervision. Supportive supervision of volunteers to nurture and maintain quality was built into the project. Project MIS data show that project staff made 45,413 supervisory visits to CHVs and TTBA. MOHFW staff that are taking over this role made an additional 6,359 supervisory visits to oversee CHV and TTBA care quality. The Super CHVs also oversee CHVs and hold monthly meetings of to facilitate ongoing learning and sharing of case studies and best practices. The RHFA demonstrated that, in government facilities, supervisory visits to health workers increased over the life of the project from 7% to 87% and supervision of CSBAs increased from 23% to 30%. Stakeholder interviews confirmed that MOHFW staff and volunteers are working together to promote quality MNC.

⁹ AMTSL includes administering a prophylactic uterotonic, gentle cord traction, and uterine massage after delivery of the placenta.

¹⁰ Quality ANC includes receipt of 4 or more ANC visits from medically trained providers with all necessary services (blood pressure and weight measurement, urine testing for proteinuria, blood testing) and advising about danger signs of pregnancy complications and their management.

¹¹ Essential newborn care includes thermal protection (immediate drying and wrapping), clean cord care, and immediate and exclusive breastfeeding.

Referral system. The project established a referral system collaboratively with health facilities and government officials that gives priority status to SUSOMA referrals. Marginalized poor mothers and newborns with ‘the slip’ now ‘go to the front of the line’ at health facilities. Community and facility-based providers, trained in the referral system, meet monthly at union/FWC and ward/CC levels to coordinate referral follow-up and plan care. Stakeholder interviews verify that the referral system is well established and respected, and that patients with referral slips get priority care. The referral system is used most often CHVs, TTBAAs, PI leaders, who consult by cell phone with health providers and often accompany pregnant women/ newborn mothers for emergency care. During the project 5,156 SUSOMA referrals to health facilities for ANC, delivery, PNC, and illness/emergency care were made by CHVs, TTBAAs and PIs. In addition, ISPs made 461 referrals. Eighty percent of health facilities sampled in the RHFA reported receiving referrals by endline, compared with 37% at baseline (116% increase).

“I triage by mobile with the PIs as to best care and give priority to SUSOMA referrals”
Gyneec Specialist, Sadar

Quality improvement of health facility care. The primary activity to improve quality of health facility care was involvement of PGs in their local community clinics (CC, FWC, RD). Initial monitoring of clinic functioning led to active involvement of PGs in clinic management committees. All PGs are now involved in clinic decision-making and advocacy with local elites. Thirty ‘Model CCs’ have developed in which the PG opens the clinic, cleans it daily, assists and holds health workers accountable, and makes improvements in the clinic (stakeholder interviews). Logistical support has been provided, such as delivery kits, delivery beds, weighing scales, and blood pressure cuffs. Since midterm, the PIs have been engaged with government on a ‘Helping Workers Thrive’ campaign, which has supported clinic personnel.

PG, CCC, and PI involvement in the local health facilities has enhanced the availability of clinic health services (stakeholder interviews). At baseline there were 55 CCs of which 48 were open but RHFA data collectors found them without staff or patients. At endline, there were 60 CCs and all are open, staffed, and providing care. Stakeholders attribute these improvements to the involvement of the PGs in local clinics. The MOHFW also played an important role by instituting a new cadre of government health workers, the community health care providers (CHCP), that staff the CCs six days per week. The marked improvements that occurred over the life of the project in government health facility service availability, supplies, and quality of care in the intervention area attest to the impact of the demand created by SUSOMA for quality of care (See table 8).

“Quality is increasing since SUSOMA. The PIs are improving ANC, PNC and have EHF. We have better service in the CCs and increased CSBA deliveries. Village level motivation through the PI is encouraging mothers and children to go to clinics.” Civil Surgeon, Netrokona District MOHFW

Table 8. MNCH Quality improvements in government health facilities, RHFA 2009 baseline and 2014 endline

Child Health Summary	2009	2014	Maternal Newborn Summary	2009	2014
Availability sick care	60%	100%	ANC available 4x per month	60%	90%
Availability growth monitoring	7%	20%	Institutional delivery available daily	3%	17%
Availability essential care supplies	34%	66%	Availability neonatal drugs	17%	22%
Availability first line drugs	39%	63%	Availability neonatal supplies	9%	22%
Availability care guidelines	7%	21%	Availability ANC drugs	19%	22%
Staff training in CH past 12 months	37%	87%	Availability ANC supplies	9%	28%
Appropriate treatment/diagnosis	23%	53%	CSBA supply availability	31%	43%
Supervision past 6 months	7%	51%	CSBA drug availability	15%	22%
Facility-community collaboration	73%	90%	Availability care guidelines	7%	21%
Community referral	37%	67%	MNC information system	14%	38%
Infrastructure (latrine/water/privacy)	22%	42%	Staff training MNC past 12 months	3%	53%

IR4. Increased NGO capacity to support PIs

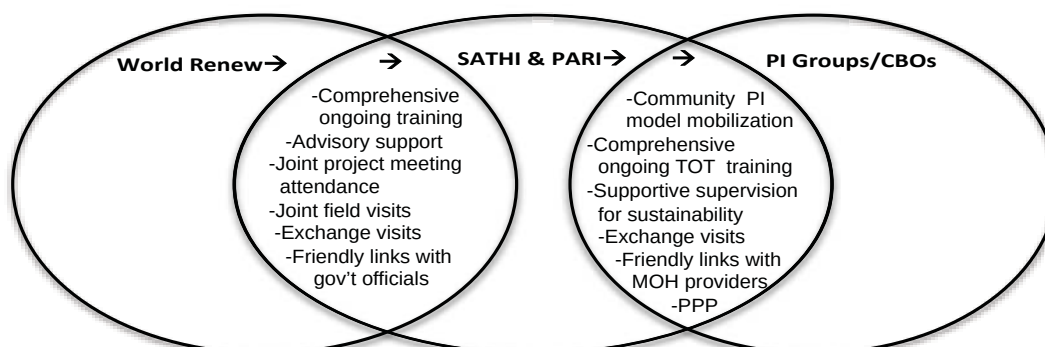
World Renew effectively built the capacity of local implementing partners PARI and SATHI through ongoing training and advisory support mechanisms. Training occurred both formally and informally throughout the project. It was all encompassing, including the TOT course on MNC and IMCI from LAMB, Learning that Lasts, Behave framework, communication, survey data collection, leadership and group management, financial records/audit, development, community capacity monitoring, sustainability, HMIS, and values formation. World Renew's Asia Region Health Advisor and Bangladesh Team Leader visited the field frequently, kept abreast of project activities, and served on the DTAC, The Health Advisor headed the Project Management Team (PMT, an oversight body for the project), and was readily available by phone and email. To further increase capacity, after midterm SATHI and PARI coordinators and directors became more involved in SUSOMA activities and events, including project implementation team (PIT) meetings and field visits. During stakeholder interviews, these local NGOs confirmed that they had gained knowledge and skill in the PI model, EHF, volunteerism, MNC, reporting systems, training mechanisms, survey techniques, evaluation methodology, and grant writing.

"SUSOMA created a learning environment ...staff received important trainings...seeing the change in communities inspired us" PARI & SATHI Directors/ Coordinators

Stakeholder interviews confirm that SATHI and PARI established friendly working relationships with key government officials and health-oriented local NGOs. They held over 700 meetings with district, upazilla, and union level government officials, civil servants, and elites to facilitate the MNC-focused PPP. In addition, they attended 64 upazila and district NGO coordination meetings and have become active participants in a learning circle of 18 local NGOs engaged in community development, where they presented SUSOMA project strategies and results. They participated in exchange visits with the MCHIP MaMoni project in Habiganj, and with LAMB/PLAN-Bd to learn their approach to community clinic management. During the project PARI and SATHI were instrumental in publishing a compendium of the PI model program, entitled the *PI Manual*, with the support of the primary author, Kohima Daring, who is a PI Model expert and the Bangladesh Team Leader for World Renew.

As evidence of their increased capacity, PARI and SATHI effectively initiated, monitored, and supported community mobilization for maternal newborn health in Durgapur and Kendua. They achieved rapid uptake of the 3-tiered PI system through communication, networking, encouragement and training. As a result of their work, all villages have equipped local community leadership and established CHV/TTBA volunteers actively promoting MNCH. All four PIs have an advisory council of local elites, executive committee, development plans, data monitoring systems, and sub-committees for health, leadership/peace, justice, IGA, and networking. PI leaders have been trained in leadership role, capacity building, sustainability, capacity monitoring, and SUSOMA exit strategy planning. Learning was strengthened as exchange visits were made by PIs to other successful PIs, and the Super-CHVs made exposure visits to the partner project upazila to clarify and strengthen CHV roles, responsibilities, and supervision strategies. The PGs track capacity every six months using community capacity indicators (CCI) in the six areas of financial, management, technical, maternal newborn health, community governance, and networking. The PIs track capacity on a six-month basis using PI Capacity Indicators (PICl) on the seven areas of shared vision, leadership and management, financial capacity, resource/knowledge/skills, gender, networking, and ownership. The CSSA dashboard (Annex XIXb) summarizes the substantial growth in PI community capacity over the life of the project for six capacity components--health outcome (50% in 2009 to 95% in 2014), health services (33% to 75%), community capacity (13% to 64%), organizational capacity (15% to 70%), organizational viability (8% to 69%), and environment (2% to 77%). Figure 2 portrays the flow of capacity building that occurred during SUSOMA.

Figure 2. Flow of capacity building during the SUSOMA project from World Renew to local implementing partners to CBOs with illustrative activities.



Learnings from SUSOMA are being applied by these NGOs to projects in other districts and to new grant programs. SUSOMA hosted an exchange visit from the World Renew SUJIBON project in Nilfamai district in 2012. SATHI has extended their work in rural areas and is implementing a four-year child-centered community development project (EU/KNH Germany funded) and a one-year farming project (World Renew funded) using the same design in Atpara upaxila, Netrokona district. PARI shared its increased capacity with its PI-based integrated community development program in Barhatta and four-year maternal newborn health program in Kalmakanda, Netrokona (EDM Switzerland funded). World Renew, with SATHI and PARI, has applied for funding to start a three-year integrated nutrition program that will build on the established PI structures in Kendua and Durgapur upazilas.

World Renew enhanced the MNC capacity of LAMB training department to develop effective community-based TOT training, to support a local training institution (Joyramkura) in rolling out TOT strategies, and to follow-up in the field with health workers to assess training uptake. Joyramkura, PARI, SATHI, GOB trainers, and PI members are equipped to train PI groups, CHVs, TTBAAs, drama teams, and ISPs. Sustainable training mechanisms are in place.

"LAMB has made their training systematic and organized"
LAMB Training Director

A capstone in the ongoing growth of PIs is that all four PIs are registered with the GOB Social Welfare Department as independent NGOs. They have begun taking loans from the government department and pregnant women and widows are receiving government allowances through the PIs.

IR5. Enhanced learning environment

Stakeholder interviews confirmed that a highly valued strategy that fostered an enabling environment between the PIs, government officials and clinic providers was establishment of a joint community-government MNC HMIS system with monthly PPP matching meetings during which HMIS data is complied and examined. Since the CHVs and TTBAAs go house to house throughout the upazilas delivering MNC, they had an accurate count of the number of pregnant women and began collecting SUSOMA data using a standardized pictorial format. In meetings with district officials, the decision was made for the CHV, TTBA, and PIs to meet monthly with officials at the union/upazila level to merge MOHFP and SUSOMA information to arrive at a complete picture of the maternal newborn situation, allowing for more informed allocation of staff and supplies. Evidence from the RHFA coupled with stakeholder inputs link this data to the enhanced ANC and delivery services, a 3-fold increase in health facilities with all essential ANC supplies (9% to 28%), 1.35-fold increase in facilities with all essential delivery and neonatal drugs (17% to 22%), and with all ANC drugs

MNC HMIS Indicators

- # Pregnant women
- delivery type
- newborn sex/weight
- referrals
- ANC-PNC visits
- maternal child deaths
- abortions

(19% to 26%). The HMIS matching meetings are evidence of the strength of the PPP and are a SUSOMA best practice.

Advocacy, networking, and communication training provided to PI groups empowered PI members to effectively work with government officials for local level policies that met health needs of mothers and children. Over the course of the project, the PIs were at the table telling their story at a total of 712 meetings with government officials at district and upazila levels, including monthly meetings with the deputy commissioner, semi-annual DTAC, quarterly UTAC, and annual General Assembly meetings of the PIs, CHV/TTBAs and ISPs. They documented 60 evidences of policy change as a result of these meetings that benefitted the poor. At the SUSOMA dissemination in Netrokona, the 10 district and upazila government officials in attendance each expressed appreciation for the work of the PIs and re-affirmed the commitment expressed during stakeholder interviews to support the PI-government PPP in the years ahead.

In addition, World Renew, PARI, and SATHI established and maintained key relationships at the national level to advance MNC for marginalized citizens. Project staff met 24 times with the White Ribbon Alliance, and 6 times with the Neonatal Working Team. World Renew is a member of the National IMCI Working Group led by the GOB and UNICEF, wherein seven NGOs¹² collaborate and integrate individual plans with the national yearly strategy for IMCI. In addition, World Renew has a close relationship with the national IMCI Program Manager who chairs project DTAC meetings in Netrokona and lends support to PI initiatives.

Operations research study: PI group development and social capital

(Quotes in this section are from the *Final Operations Research Qualitative and Social Capital Study Report* in Annex XIX. Italicized quotes are interview data, non-italicized quotes are report narrative descriptions.)

The *qualitative process evaluation* of the OR report indicates that the PI groups in Kendua and Durgapur at endline are “well aware of their groups’ activities, purposes, and vision” to reduce maternal child mortality, and have developed trust, solidarity, and problem-solving capabilities. The process of group formation by NGO staff, who “provide the know-how and orient potential group members on activities and goals,” takes several months and is “arduous and requires a lot of patience...to find the right persons who...have a vision of doing well for themselves and their community.” The female groups are comprised of married WRA and, although there are no set income criteria, they decide “who is poor and who can join the group.” PG members elect their leaders, choosing educated persons that can read, write and calculate, and have the time to “*run the activities of the group properly.*” At endline the PGs were working on creating health guidelines, flipcharts and books to discuss during weekly meetings, during which they also deposited money, sanctioned loans, and provided emergency assistance to mothers and children. Groups have developed confidence in their emergency and health savings, “distrust over the bank has disappeared,” and they are receiving donations from upazilla Parishid chairmen, local elites, and government officials that value the PI efforts for MNC.

The CHVs and TTBAs are teaching PG members and households about MNC and proper care-seeking. The CHVs confirmed the training received in surveillance, MNC, and group formation from NGO staff, stating, “*we have learned a lot.*” The TTBAs confirmed their work in promoting MNC and meeting with government health workers to share information and work. They report that previously, “*Mothers died, babies died...now you won’t find any mother dying...none of the newborns die now...few babies are born with weight less than 3 kilo...now mothers go to the hospital as they understand that delivery at the hospital would ensure good health for the mother and baby.*” The ISPs interviewed connect with the CHVs/TTBAs and have learned about MNC. They know PG members and are making SUSOMA referrals.

Observations made of the CCCs and PIs confirm that these groups are functioning effectively to coordinate the work of the PGs for MNC, deliberate emergency issues, account for regular funds and EHF, coordinate with health personnel, and prepare for independence. Group members have capacities

¹² ICDDR,B, JEPIEGO, CARE, PLAN, SAVE the Children, World Renew and CONCERN Worldwide

in MNC, record-keeping, financial management, decision-making, and team functioning and are “*confident to run the PG without NGO help*” in the future. Evidence given for group capabilities to work independently as an organization is: 1) Groups jointly discuss matters before making decisions. 2) Groups are continuing learning. 3) Groups help non-group community people with EHF, welfare for the ultra-poor, and work on MNC-related community needs, such as road repairs. 4) Groups save funds, hold bank accounts, and share ideas. 5) Groups hold monthly community and annual union-level assemblies to report about PI activities and make plans. The PGs have good respectful relations with government and know that “*our information influences government decisions.*” They provide household-level maternal child HMIS data, referrals, health teaching, and activate communities for EPI, satellite clinics, and NID/NHDs. The four PIs “are playing important roles in improving maternal care” in Kendua and Durgapur by motivating pregnant women and “sending patients to the hospitals and helping them to get timely care.” The PI members represent their communities at the upazilla and district-level meetings with health and family planning officials and have “created linkages with health service providers and reduced refusal of patients at the hospitals.”

The OR process evaluation report concludes discussing four PI model-related changes observed in the intervention community at endline: 1) Improved referrals and service provider attitudes/behaviors toward rural poor community members. 2) Overall enhanced capacity of community people, including those who are not PG members. 3) A social movement in the intervention area with active PPP collaboration with HMIS, CHV-provider linkages, and trainings. 4) Sustainable PI groups able to make decisions and expanding activities to the wider community. They go on to say: “It is prudent not to expect radical changes in a project where all is dependent on community uptake of intervention messages, group formation, and savings. All this takes a lot of time...the most important thing is that the connection between mother and child health and overall development...has been made with success.”

The *Social Capital* findings presented in the OR report from the household survey confirm that at in 2014 over 60% of WRA sampled in Kendua and Durgapur were active members of the SUSOMA PI groups, and that groups were becoming more heterogeneous in terms of religion, occupation, and ethnicity. When conflicts arose, people often work it out among themselves or with the help of a neighbor, although it was noted that at times problems lead to violence. Accessibility to health services increased from the 2012 baseline but was still problematic. Credit service accessibility also increased. Over 95% of informants expressed trust in others from their community in terms of lending or borrowing money to/from others.

Analysis of the social capital tool data focused on the relationship between social capital and two variables--PI group membership status and residence. In 2012, there was no association between social capital and residence (mean Durgapur 6.61, Kendua 6.53) but a significant relationship ($p \leq 0.001$) between social capital and membership status (mean member 8.22, non-member 4.92). At endline there was a significant relationship ($p \leq 0.001$) between social capital and residence (mean Durgapur 9.24 and Kendua 15.80), and between social capital and membership status (mean member 15.35 and non-member 9.99). Although different social capital scales were used at baseline and endline, these findings do suggest a relationship between engagement in PI groups and development of social capital.

Challenges and other influencing factors

The final evaluation examined challenges that the project faced in achieving results and other factors that may have affected project strategies. These include the initial ramping up of the PGs and volunteers, gender barriers, illiteracy, inclusion of men in the program, religious superstitions and traditional practices, inadequate public health service infrastructure and availability of ANC, institutional delivery, and PNC services, homebirths by untrained personnel, frequent transfer of key government health officials and service providers, and lack of emergency transportation systems. An unexpected occurrence that facilitated project strategies and achievements was the rapid increase in the use of cell phones to coordinate delivery and emergency care. A key factor contributing to project successes is the 18-years of experience World Renew Bangladesh has had to refine the PI Model intervention.

Stakeholders and NGO staff related multiple initial challenges in setting up PGs and engaging community-based health volunteers. A primary gender barrier was resistance from families/husbands and communities to forming female PGs and allowing women to serve as CHV/TTBA. This was overcome by engaging community elites in the MNC cause, BCC messaging during household visits, PG group education, and community events/drama. Many of the TTBA and CHVs were illiterate and so picture cards and registries were used to time their teaching and track data. Initially only women's groups were formed and it was difficult to include men in the program. Eventually men began supporting the women, even carrying pregnant women and newborns to health facilities in emergencies. The NGOs and PG members recognized that males are essential for decision-making at family and community levels and that mixed-gender CCCs and PIs would strengthen their advocacy voice with government officials. In year four, the project formed men's PGs, initiating programs with fathers-in-law, husbands, and male health workers. Now men and women, rich and poor are working together with government to prevent maternal newborn death.

Religious-based superstitions and traditional practices that were barriers to community engagement with the PI model were overcome as PG members met with religious leaders/IMAMs to explain MNC goals. Religious leaders now support the program, there are reduced superstition-based care decisions, and use of traditional healers, unskilled home births, and uninformed ISPs has decreased. PIs report that continuing communication is necessary to maintain the linkage with religious leaders.

Barriers were also dealt with in relation to availability of and access to quality health services. ANC was not readily available in government health facilities initially. As PG, CCC, and PI members built PPP relationships and supported local health facilities services improved. Now both ANC and facility-based deliveries are more available from trained staff at the CC and FWC/RD levels. Adequate PNC services are also available, however, PNC utilization is increasing slowly because its value is not widely appreciated. Inadequate health facility infrastructure is also an access barrier. Initially there were not enough functional clinics or health workers. Although this has improved dramatically over the life of the project, the problem of inadequate facilities, supplies, drugs and staff continues to require advocacy by the PIs. While the government plans to enhance the number of CSBA-trained health workers they will continue to do home deliveries until the FWCs are upgraded. Institutional delivery points continue to be lacking throughout both upazilas. The PPP was challenged with frequent transfer of key government officials and workers, necessitating re-building relationships with each transfer.

Transport of pregnant/ill mothers and newborns to facilities was an access problem overcome with establishment of EHF and emergency transport mechanisms coupled with the SUSOMA referral system that gave the poor person priority treatment upon arrival at the health facility. Access to care continues to be limited by poor roads that are impassible by rickshaw ambulances in rainy seasons. Because the rivers in Durgapur divide the upazila into three areas, three PIs were formed to more readily address MNC barriers. The use of cell phones by PI leaders and CHVs/TTBAs to coordinate care with doctors and health facility staff is an unexpected but welcome enhancement to the intervention strategy that occurred during the project and correlates with the rapid increase in availability of cell phones in Bangladesh since 2009. Health providers and government officials shared cell phone numbers with PI members and volunteers as they worked together to enhance maternal newborn health.

A key factor that positively influenced the project was the 18-year experience of World Renew in successfully implementing the PI model in Bangladesh. Because the model is well developed, SUSOMA PIs were well equipped to collaborate with informal and public health sectors in ways that lead to stronger, sustainable health systems and communities with greater social cohesion and empowerment.

While findings presented from the OR study confirm the process and utility of the PI model in mobilizing communities for health and in increasing social capital, the OR/KPC studies presented challenges, especially during the end of the project that are detailed in Annex IX of this report.

CONCLUSIONS

Upon integrating and synthesizing all project findings, the FE team arrived at the following six conclusions about the SUSOMA project.

1. SUSOMA effectively increased community capacity for maternal newborn health and involvement with the health system in a PPP by establishing the People's Institution Model with marginalized people. A 3-tiered functional PI system was established within 2-years (rapid uptake) which served as the foundation for public private partnership development, enhanced MNC services, trained volunteer community-based providers, and MNC gains. Primary groups (541) were established and trained in all villages in the program area (494) after which the CCC (22) and PI (4) groups were formed. The groups developed bylaws, plans, capacity monitoring systems, EHF collections, bank accounts, and capabilities in advocacy, networking and community monitoring of maternal newborn health. All are now independent NGOs with GOB registration as a Social Welfare Society. Sustainability was integrated into the PI group model in terms of financing, monitoring capacity, continuing training for groups and volunteer health workers, and establishment of a vibrant PPP between PIs and government officials and health workers.
2. SUSOMA staff developed social capital in marginalized women through ongoing monitoring and support using a slow compassionate approach that demonstrated values and modeled trust, listening, compassion, and teaching. They effectively empowered communities, initially women, with knowledge, skills, and finances via PI model mechanisms and changing social norms using group approaches that fostered development of a helping mentality and inclusive working together. They found that trust and love are foundational to caring and community. Trust was built first among a group before taka were donated and funds managed by the group. People built friendly relationships with each other and then learned to serve their neighbors. When they formed a group and got knowledge and skill they were seen as people of worth in the community. All involved volunteered their time and resources for MNC.
3. SUSOMA effectively established public private health system collaboration, formalized with MOUs, in which the poor are active MNC advocates with the government and government officials are awakened to their needs. Multiple approaches were utilized to establish PPP relationships. These include development of friendly working relationships around a common MNC goal, common trainings, working together on NID/NHDs, communication about referrals, sharing mobile phone numbers, and an established network of joint meetings with district, upazila, union, and local officials/health workers. The PI-based CHVs and TTBAAs built relationships with government health workers and provide ongoing MNC at ward and union level clinics. PI groups are actively involved in monitoring and supporting local clinics, helping clinic health workers to thrive and provide consistent quality MNC care, and networking and advocating with government officials to address gaps in services.
4. SUSOMA improved the MNC practices of marginalized mothers and families by increasing knowledge of danger signs and improving the health practices of mothers through health counseling by trained community volunteers (CHVs TTBAAs). They increased the demand for 4 ANC, safe delivery, and PNC services by means of targeted BCC-based household counseling and community messaging through drama and health events. Trained ISPs were empowered to follow IMCI care guidelines and increase appropriate referrals. Specific training curriculums were utilized for CHVs, TTBAAs, ISPs, and government health workers to meet project objectives. Both males and females were involved in project activities to the extent culturally possible.
5. SUSOMA increased equitable access to safe CSBA home and facility delivery by increasing demand through awareness raising and change attitudes and behaviors via house to house counseling, drama events, and engaging with influencing elites to promote ANC and institutional delivery/CSBA births. With the government they developed a new role for TTBA as an advocate to promote CSBA/facility delivery rather than doing home deliveries themselves. Key to increasing access for the poor was establishment of PI-based EHF, emergency transportation mechanisms, and referral systems.

6. SUSOMA strengthened the capacity of PARI and SATHI to support the PI model, promote rural MNC, and work with MOHFW at upazilla and district levels through extensive training and support. They increased the number and capacity of NGO health staff and mentored NGO management in rapid-uptake of the PI model, working in volume, monitoring and evaluation, grant proposal writing, tool development, carrying out research, financial management, donor communication, and networking with the MOHFW at national and local levels.

Sustainability of the PI model and project accomplishments

Stakeholders interviews, project data and the OR study suggest that the PI model groups and PPP structures developed during SUSOMA are self-sustaining and will continue promoting MCH after the project ends. All PIs are registered with the GOB as independent NGOs and have advisory committees of local elites that provide support and guidance. All tiers of PI groups have strong skilled leaders and members that are equipped to continue the MNC work. Groups have bylaws, healthy bank accounts with EHF and health savings, and established capacity in the six PICI areas. They are active in planning, financial management, IGA, theater for development, and advocacy. The social capital of PI members is enriched and a culture of servant leadership for their communities established. PIs are equipped to conduct trainings for new PGs, and have formed 34 PGs directly without staff assistance. They are committed to forming male primary groups and achieving gender-equality in the PI system.

The PI partnership with the government is well established and characterized by networking, mutual commitment, cooperation and support. The PI groups have MOUs with health facilities and with the government and are accepted in the community and at the facility level. They are involved in decision-making related to the management of all clinics in Kendua and Durgapur. Local resources are being mobilized by the PIs for health service improvements. The referral system is established and strengthened with marginalized women and babies now getting better treatment by referral. The DDFP recognizes the important role CHVs and TTBA have in promoting MNC, is linking them with district family planning outreach, and plans to provide them additional training.

CHVs/TTBAs are established in the community as volunteer health providers with PI supervision and the provision of mobile phones for better communication. They are motivated to continue household visits, health lessons to primary groups, meeting with government health workers, linking with health facilities and making referrals. They report needing continued training and support. The PIs are supporting the CHVs, making lists of health lessons for them to share with the community, arranging training for them, and will continue to share best practices and successes with government and their communities through established networks of relationships, meetings, and assemblies.

Gains in MNC are expected to continue as PI's continue to promote healthy mothers and babies at the grassroots level and through PPP activities. It is possible that the full impact of the PI system on maternal newborn mortality and health status may take longer to occur than can be measured during this project.

Cost-Analysis of resources required to institutionalize scale-up the intervention

The 5-year project intervention using the PI model with volunteer community-based providers was completed at a cost of USD 1,207,572. The average project cost per woman of reproductive age is USD 9.73 and per community volunteer (CHV/TTBA) is USD 1,045. It is estimated that a similar program three times as large could be scaled up over 4-5 years in an area with a population of 1.5 million for a cost of USD 3.6 million. The complete cost analysis is in Annex XIXd.

SUSOMA's Best Practices

After integrating all evaluation findings, the evaluation team identified the following eight SUSOMA best practices for the global community to consider in promoting maternal newborn health care in marginalized communities:

-
1. The delivery platform: The PI Model of empowerment and local governance that increases social capital of marginalized poor women and improves community-based MNC and health practices by coordinating with government health facilities and officials (Daring, K. The PI Manual, 2013).
 2. Emergency health funds built and managed by PI groups for payment of health transport and services for the poor.
 3. The PPP-based referral system established jointly and used by PI groups, CHV's TTBA's, ISPs and both government and private health facilities that gives priority access to the poor.
 4. Matching meetings between PI and government providers focused on collaborative integration of HMIS, a more complete portrayal of maternal newborn data, and improved coverage.
 5. The volunteer system of MNC and promotion of ANC, safe deliveries/births and PNC at the grassroots level by trained unpaid CHVs and TTBA's working in collaboration with health facilities providers.
 6. PI involvement in the management and operations of community clinics to increase quality and availability of care.
 7. Using theater for development (TfD) for MNC messaging at the community level.
 8. WR working through local NGO partners (civil society) to increase local organizational capacity so that local NGOs have the structures and substructures for community development and are able to create and support the PIs, work with MOHFW officials and health facilities, train community-based providers, promote sustainable change and apply these learnings to other settings/projects.

Impact

The OR provides preliminary evidence that social capital can be measured in poor women engaged in PI model groups focused on improving MNC in their community. The higher social capital scale scores found in PI group members in 2012 and 2014 compared to non-members may support attribution of project results to the increase in social capital that occurred in poor women of reproductive age engaged in the PI model.

Project findings support that the PI model was foundational to improving social capital of marginalized people and to achieving MNC gains. The PI model rapidly engaged the poor in all communities in intervention upazilas in a commitment to promoting maternal newborn health with a strong private-public partnership. It empowered women socioeconomically and with decision-making leadership capacities, and actively promoted gender-based leadership as men's groups were formed. It created a cadre of new grassroots leaders, increased communication and networking between government and PI leaders both horizontally and vertically, and increased access to government and private sector health and social services. The evaluation team appraised that involvement in the PI model brought hope and health care to the marginalized poor. Now that the PIs are GOB licensed NGOs, they can take loans from the social welfare department, secure welfare support for widows and vulnerable groups, and independently work with the government to advance community health and welfare. HMIS and project findings support that the PI model is associated with health improvements in communities. There has been a decrease in maternal and newborn deaths linked temporally with an increase in MCH service utilization and coverage, an increase in institutional and skilled deliveries, a decrease in unskilled home births, and improved practice of good health habits by pregnant women and mothers.

The poor and uneducated marginalized citizens were the focus of project interventions and they benefitted the most in terms of savings, health knowledge and practices, availability of and access to health services, referrals and emergency health funds, and enhanced capacity in leadership as well as development of a common community platform for MNC and a grassroots helping mentality.

"Change comes through the PI, if there is no PI there is no development or change." PI Sukher Sandhane's Secretary

RECOMMENDATIONS

The evaluation team made three recommendations for extending the accomplishments of the SUSOMA project (Table 9).

Table 9. Final evaluation team recommendations.

Finding	Conclusion	Recommendation	Action	Who Is Responsible
-Strong PPPs for MNC established between GOB and PI groups. -Marginalized mothers and families have improved MNC practices. -Quality of MNC services is increasing.	The PI model is associated with improved MNC health practices and higher quality of MNC.	1. That the PI model receives ongoing support by GOB and NGOs and be considered for scale-up in rural poor communities with government officials interested in improving MNC health services and outcomes.	-Continued sharing of the stories and accomplishments of the PI model including the best practices and learnings. -Disseminate the PI Manual	World Renew SATHI PARI GOB
-The local NGOs have increased capacity to support community mobilization using the PI model.	PARI and SATHI are positioned to influence support for ongoing PI development.	2. That the PI groups established in this project continue to receive ongoing support	PARI and SATHI continue to engage the GOB with the established PIs for MNC gains	PARI SATHI GOB World Renew USAID Donors
-The OR study has the potential to explain the link between the PI intervention and program effects, and between development of social capital and PI group membership.	Quality OR data analysis and reports need to be finished as planned.	3. That the OR study be properly completed and published so that the story of successful community mobilization using the PI model can be told to the world.	-Complete OR data analysis of KPC, process data, and social capital and complete reports per guidance from USAID/ Evidence Project. -Use all opportunities to publish OR model.	ICDDR,B World Renew

U.S. Agency for International Development

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ANNEX II. LIST OF PUBLICATIONS AND PRESENTATIONS RELATED TO THE PROJECT

1. Hoque, D. E., Salam, S.S., Tenbroek, N., Karim I, M.R., Savic, M., Talens, A.T., & Arifeen S.E. (2011). Challenges to realizing universal coverage of maternal, newborn and child health interventions in high mortality districts: findings from a KPC survey in Netrokona, Bangladesh. Podium presentation at the ASCON Conference, March 16-18, Dhaka, Bangladesh.
2. Talens, A., TenBroek, N., & Nyangara, F. (2011). Addressing Health Equity in Bangladesh through Community Mobilization and Governance-the CRWRC Peoples Institution Model: A USAID Child Survival Program Operations Research. Poster presentation at the Consortium of Universities for Global Health (CUGH) and Canadian Society for International Health Conference, November 13-14, Montreal, Canada.
3. Story, W. T., Burgard, S. A., Lori, J. R., Taleb, F., Ali, N. A., & Hoque, D.E. (2012). Husbands' involvement in delivery care utilization in rural Bangladesh: A qualitative study, BMC Pregnancy and Childbirth, 12:28.
4. Tenbroek, N., Daring, K., Kreulen, G., & Talens, A. (2012). Reducing Mortality among Mothers and Newborns through building Public-Private Partnership: Bangladesh Child Survival Project 2009-14. Netrokona District Bangladesh. Podium presentation at the Women Deliver Conference, May 28-30, Kuala Lumpur, Malaysia.
5. Talens, A., TenBroek, N., Story, W.T. & Hoque, D.E. (2013). Closing the Gap by Design: Setting up a Maternal Newborn Health Program as if People Mattered. Podium presentation at the CORE Group Spring Meeting, May 9-13, Baltimore, MD.
6. Daring, K., TenBroek N., Sackett, S., Kreulen, G.J., & Talens, A. (2014). The People Institution Model to Close the Sustainability Gap in Child Survival Project in Bangladesh: Governance and Asset-based Capacity-Development of Civil Society Organizations. Poster presentation at the Consortium of Universities for Global Health (CUGH) Conference, Washington DC. May 7, 2014.
7. Daring, K. (2014). The People's Institution Manual. World Renew, Bangladesh.
8. Paul, M. B. & Ghagra, S. (2014). Story directory: A collection of success stories. Child Health and Survival Program SUSOMA, World Renew Bangladesh.
9. Paul, M.B., editor (2014). MCHIP newsletters with SUSOMA stories: A collection of MCHIP news. Child Health and Survival Program SUSOMA, World Renew Bangladesh.

ANNEX III. PROJECT MANAGEMENT EVALUATION

The SUSOMA Project of World Renew worked with its two long-standing partner organizations, PARI and SATHI. The Project Manager (PM) is considered a staff member of World Renew, the prime grant holder, with 100% of the PM's time devoted to the project. The World Renew staff also included a Monitoring and Evaluation Officer, Training Coordinator and a Project Accountant. This is similar to the model used in World Renew's first USAID-funded Child Survival (CSPI) grant from (2004-2010).

For the five-year period, the SUSOMA project office and staff were located in Netrokona town, close to Government health offices. This is the mid way point between the two upazilas and provided staff with easy access to the two project sites within Netrokona – Kendua and Durgapur upazila (sub district). It also allowed for good communication with the Civil Surgeon, Deputy Director Family Planning and other related health officials.

The World Renew Bangladesh-based Asia Regional Health Advisor supervised the World Renew SUSOMA Project Manager. They met together monthly for supervision and planning meetings. The Manager for the first two years left after midterm to pursue her career in dentistry. A new Project Manager was hired from another World Renew partner organization. He had much experience in managing MNCH programs so the transition went smoothly.

The World Renew Health Advisor and Capacity Development consultant also visited the fields regularly for training and consultation. The Project Manager (PM) in turn supervised the M&E Officer, Training Coordinator, and Project Accountant. The PM was responsible for daily oversight of operations of the project in both partner areas. The Project Directors of SATHI and PARI supervised the partner personnel in close cooperation with the SUSOMA Project Manager. The field staff were employees of the two partners and under their board approved policy system for wages, benefits and overall supervision. This model worked effectively for the five-year period. All SUSOMA, PARI and SATHI staff in the project had job descriptions that were reviewed annually. Each staff also had a performance evaluation yearly with six monthly follow up meetings. Initial communication challenges between the two partner organizations and the SUSOMA project staff were overcome through regular meetings with partner directors and close coordination and training from the World Renew consultant staff. A communication strategy was followed and ensured that all people involved had access to the same information.

Throughout the five years of the project, there were various levels of coordination meeting. Each project team (SATHI and PARI) held monthly meetings at their field offices in Kendua and Durgapur. These were led by the coordinators and include all field staff. Minutes were taken and distributed to the SUSOMA Project organization as well as their respective partner organization.

The next level of meeting was the Project Implementation Team (PIT) that met monthly at the Netrokona project office and included partner coordinators and assistant coordinators (the SUSOMA Project team). Partner directors and World Renew staff also frequently attended

these meetings. The PIT had a clear Terms of Reference that included program updates, HMIS reports, public private partnership updates and other pertinent information. Each meeting included action items that were included in the minutes and followed up in the subsequent meeting. The meeting location alternated between the SUSOMA, SATHI and PARI offices.

The Project Management Team (PMT) was a quarterly meeting for the project. Members included the World Renew Consultants, World Renew Accountant, SUSOMA staff, SATHI and PARI Directors, SATHI and PARI Coordinators and Assistant Coordinators. These meetings usually took place in Dhaka but occasionally took place in the project offices. Per the TOR, the meeting agendas included discussions on IR progress, HMIS, operations research, project plan update and DIP Gantt chart, midterm recommendation progress, and finance. Minutes were taken with clear action points. This meeting was extremely helpful to ensure coordination between the two partners and to ensure progress according to the plans.

For financial management, the SUSOMA project employed a full time accountant based in Netrokona. The Assistant Coordinators in SATHI and PARI also served as bookkeepers and submitted reports through their organizations to the SUSOMA accountant who recorded the reports monthly on the quick books system. Financial statements were initially approved by the SUSOMA project manager, and then reviewed by the World Renew Consultants. The SUSOMA accountant then coordinated with the World Renew Bangladesh accountant for producing the monthly financial report. This was reported to World Renew U.S., and was also reviewed with each project. Budget spending variances were also monitored. Yearly financial audits took place and these were reviewed in country and then submitted to World Renew U.S. World Renew also submitted monthly VAT reports to U.S. Aid Bangladesh per their prescribed format. The World Renew Accountant also attended regular USAID meetings regarding VAT and financial management.

Overall, the project management system and coordination with the partners ran smoothly. Adjustments made at midterm and noted in the midterm evaluation helped to strengthen each of the field offices. This included the placement of assistant coordinators and pairing experienced staff with inexperienced staff within a union for good support. The Project management at different levels of coordination ran smoothly. There was a clear staff development plan for SUSOMA and partner staff capacity. Since the midterm evaluation, no staff left the partners and one staff left SUSOMA 6 months before project end after getting a new job in a long term project.

The World Renew Capacity Development Consultant and Regional Health Advisor supported the project with regular capacity building and training per the DIP. In addition, consultancy services were obtained for refresher training from Lamb Hospital. ICDDR,B carried out the final survey with independent contract staff and they took responsible for training them.

Overall, management of the project went smoothly and both projects increased their capacity in carrying out MNCH programs.

Annex 4: Work Plan Table

Objectives/Activities	Objective Met	Activity Status
General Activities		
Monitoring using LQAS (every 2 years)	Changed	With ICDDR, B we agreed to add a mid- term KPC and not do the LQAS. LQAS was done in year 4.
Monitor sustainability using PI Sustainability Framework (every 6 months)	Completed	The PI Sustainability Framework training took place and indicators developed and measured 7 times total in March and September (2011-2014).
Monthly Report submitted to CRWRC/World Renew	Completed	Monthly HMIS submitted and reviewed monthly.
Monthly Staff Meetings	Completed	Monthly staff meetings take place at Kendua and Durgapur. The Project Implementation Team (PIT) also meets monthly in Netrokona. Minutes are circulated for all meetings.
IRI Strengthened Private (Civil Society)/Public Partnership in support of MNCH (Operation Research)		
Baseline assessment for OR	Completed	216 Primary Groups have been formed in Durgapur and 289 PGs in Kendua. Of these, 22 are male PGs formed from MTE recommendation #5. Overall the project has formed 541 groups against a plan of 495. Thirteen Community Central Committees (union level) have been formed in Kendua, and 9 in Durgapur (22 total). Four PIs have been established at the sub-district level--3 in Durgapur, and 1 in Kendua.
Formation of primary groups	Completed	
Formation of union committees	Completed	
Formation of People's Institutions	Completed	
Strengthening of primary groups, union committees and People's Institutions	Completed	
Establish quality improvement system	Completed	The QIS is developed and taking place quarterly. Results are shared with staff. Pictorial HMIS are field tested and in place monthly.
Establish Emergency Health Fund	Completed	Out of 541 primary groups, 520 (96%) have active EHF. The goal is to have 494 groups with the EHF.
Design and planning of OR (Comparison and Union selection)	Completed	See FE Report Annex XV, XVII: OR Final Report and OR Brief.
Implementation of OR	Completed	
Quality Assessment of Health Workers (OR)	Completed	
Formative Research (OR)	Completed	
Data Collection on cost (OR)	Completed	
End line assessment of OR	Completed	
OR analysis and write-ups	Completed	
Primary group meetings (4 visits/week)	Completed	These are done by CHTs (Community Health Trainer)
Community Central Committee (Union) meetings (monthly)	Completed	Union meetings are taking place monthly.
Peoples Institution meetings (Thana Federation meetings) (monthly)	Completed	The 4 PIs have monthly meetings.
Health Sub committee (PI) meeting (monthly)	Completed	The 4 PIs have active health sub-committees.
IR2: Improved knowledge and practices of pregnant women and families regarding MNCH		
Acquire BCC materials on maternal and newborn care	Completed	BCC flip charts obtained from Mamoni project (MCHIP), Saving Newborn Lives, GOB.
Staff training on Designing for Behavior Change	Completed	In March 2011, four government workers and 25 project personnel were trained in the 6- day course, which included field practicum. Five staff members were trained under the previous CSHGP award.
BCC Formative Research (doer/non-doer-analysis)	Completed	In August 2011, formative research was done in Kendua and Durgapur for ANC visits and institutional deliveries. BCC materials were refined based on findings.
Refine existing BCC materials using doer/non-doer analysis	Completed	
Finalize BCC materials	Completed	Materials used by staff, CHVs and TTBAAs. Coordination with the GOB, Mamoni project and SNL continued through project.

Objectives/Activities	Objective Met	Activity Status
IR3: Increased quality of MNCH Service		
Training of CHV and TTBA and Informal Health Providers	Completed	537 CHVs, 541 TTBA, and 377 village doctors received training and refresher training.
Implement prenatal (birth preparedness TT Immunization) / delivery care (clean delivery, referral to Emergency Obstetric Care (EmOC) and post partum care (breastfeeding, thermal care, referrals)	Completed	SMC (Social Marketing Company) and BRAC (Bangladesh Rural Advancement Company) birth kits are being promoted. Referrals are made and records kept. CHVs and TTBA promoted BCC MNC messages in households, communities, and Primary Groups. Drama teams also did targeted messaging to influencing groups.
Supportive supervision and visit	Completed	Done by CHTs, Super CHVs, and now GO health workers
Community Health Volunteer meeting (monthly)	Completed	27 Super CHVs oversee local CHVs and facilitate ongoing sharing and learning at monthly CHV meetings.
Trained Traditional Birth Attendant meeting (monthly)	Completed	
Child Weighing (monthly)	Completed	MOHFW implemented activity and not under direct project control
National Immunization Day Observation (2x/yr)	Completed	MOHFW implemented activity not under direct project control, however, the Pls, CHVs and TTBA participate in NID.
CHV and TTBA Gathering (yearly)	Completed	
IR4: Increased capacity of local NGO for implementing People's Institution		
Finalize and sign MOU with new partners	Completed	All Pls have MOUs with for MNC with GO and Pvt health facilities.
Partners Staff Training	Completed	824 staff received SUSOMA trainings.
Semi Annual Learning Circles for partners	Completed	
Learning exchange World Renew staff and partners	Completed	
IR5: Enhanced enabling environment for MNCH		
Dissemination of survey results to the community and stakeholders	Partially completed	Midterm survey results disseminated in Netrokona, Kendua and Durgapur, and in Dhaka (ICDDR, B) with participants from USAID, UN agencies, GOB and NGOs. Final evaluation dissemination occurred in Netrokona, and Dhaka (pending completions of OR).
Dissemination meetings with stakeholders (half yearly)	Yes Completed	Completed at the district level in Netrokona and at the sub-district level in Kendua and Durgapur.
Formation and meeting of sub-district/upazila advisory committee	Completed	Two upazila technical advisory committees are meeting quarterly. Terms of Reference have been completed.
Formation and meeting of district advisory committee	Completed	The district technical advisory committee started in August 2012 with approved Terms of Reference and 6-monthly meetings. Dhaka's IMCI Director and ICDDR, B staff attend these meetings.
Quarterly progress report to Civil Surgeon	Completed	Civil Surgeon receives quarterly report and the Deputy Commissioner of the District receives monthly report on GOB approved format.
Neonatal Working Team -IMCI meetings (quarterly)	Completed	The Neonatal Working Team completed its work and the IMCI annual work plan meeting was held in June 2011. World Renew has contributed to the plans and signed the document. IMCI meetings take place quarterly; World Renew is a regular member of IMCI Working Group.
White Ribbon Alliance National meetings (monthly)	Completed	World Renew served as the acting chairperson of the Bangladesh White Ribbon Alliance (WRA) Executive Committee. Advocacy issues focus on institutional delivery and early marriage.
Meeting with Local Government Health Authority (quarterly)	Completed	Four Pls meet quarterly at the sub-district level in Durgapur and Kendua
Celebration of Health Related Days	Completed	Groups in the community participated in 798 NHDs with the Government in Netrokona, such as Breastfeeding Day, Safe Motherhood Day, World Population Day, World Health Day

Annex V: Rapid CATCH table

Indicator	Baseline %	Endline %
Percentage of mothers with children age 0-11 months who had four or more antenatal visits when they were pregnant with the youngest child	5.3	13.6
Percentage of mothers with children 0-11 months who received at least two Tetanus toxoid vaccinations before the birth of their youngest child	86.9	80.2
Percentage of children 0-11 whose births were attended by skilled personnel	9.3	21.9
Percentage of children age 0-11 months who received a post-natal visit from an appropriately trained health worker within two days after birth	7.9	18.7
Percentage of mothers of children age 0-23 months who are using a modern contraceptive method.	49.3	71.0
Percentage of children age 0-5 months who were exclusively breastfed during the last 24 hours.	47.2	52.9
Percentage of children age 6-23 months who received a dose of Vitamin A in the last 6 months: card verified or mother recall.	71.7	82.4
Percentage of infant and young children age 6-23 months fed according to a minimum of appropriate feeding practices	31.7	25.2
Percentage of children age 12-23 months who received a measles vaccination.	95.1	69.8
Percentage of children age 12-23 months who received DPT1/ Penta1 according to the vaccination card or mother's recall by the time of the survey.	94.5	88.6
Percentage of children age 12-23 months who received DPT3/ Penta3 according to the vaccination card or mother's recall by the time of the survey.	90.8	76.3
Percentage of children with febrile episode during the last two weeks who were treated with an effective anti-malarial drug within 24 hours after the fever began.	---	---
Percentage of children age 0-23 months with diarrhea in the last two weeks who received oral rehydration solution (ORS) and /or recommended home fluids.	73.7	85
Percentage of children with 0-23 with chest related cough and fast and/or difficult breathing in the last two weeks who were taken to an appropriate health provider.	22.3	2.6
Percentage of households of children age 0-23 that treat water effectively.	1.8	4.4
Percentage of mothers of children age 0-23 months who live in household with soap at the place for hand washing	21.6	39.3
Percentage of children 0-23 months who slept under an insecticide treated bed net (in malaria risk area, where bed net use effective) the previous night.	5.9	8.4
Percentage of children 0-23 months who are underweight (-2 SD for the median age, according to the WHO /NCHS reference population.	33.3	27.3

Note: The Rapid Catch MNC indicators at baseline and endline were computed for mothers of children 0-11 months old. Midterm MNC indicators for mothers of children 0-11 months were not computed.

2014

Improving maternal, newborn and child health through building public-private partnerships:

Findings from knowledge, practice and coverage
endline survey

SUSOMA

A project of World Renew formal CRWRC

Netrokona district, Bangladesh

October, 2014



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List of Abbreviations

ANC	Antenatal Care
BDHS	Bangladesh Demographic and Health Survey
CBO	Community Based Organization
CHV	Community Health Volunteers
CRWRC	Christian Reformed World Relief Committee
CSBA	Community Skilled Birth Attendant
DGHS	Directorate General of Health Services
DGFP	Directorate General of Family Planning
FWA	Family Welfare Assistant
FWC	Family Welfare Centre
FWV	Family Welfare Visitor
GoB	Government of Bangladesh
HA	Health Assistant
HIV/AIDS	Human Immunodeficiency Virus/ Acquired Immune Deficiency Syndrome
ICDDR,B	International Centre for Diarrhoeal Disease Research, Bangladesh
IMCI	Integrated Management of Childhood Illness
ITN	Insecticide Treated Net
KPC	Knowledge, Practice and Coverage
MA	Medical Assistant
MCE-IMCI	Multi-Country Evaluation of Integrated Management of Childhood Illness
MDG	Millennium Development Goals
MOHFW	Ministry of Health and Family Welfare
MMR	Maternal Mortality Ratio
MNCH	Maternal, Neonatal and Child Health
MTCT	Mother To Child Transmission
NGO	Non-Government Organizations
OR	Operations Research
PI	Peoples' Institution
PMTCT	Preventing Mother-to-Child Transmission
PPS	Probability Proportionate to Size
PHSD	Public Health Sciences Division
SACMO	Sub-Assistant Community Medical Officer
TT	Tetanus Toxoid
TTBA	Trained Traditional Birth Attendant
UNICEF	United Nations Children's Fund
USAID	US Agency for International Development
WHO	World Health Organization

Executive Summary

The Christian Reformed World Relief Committee (CRWRC), a faith-based and nongovernmental organization established in 1962, is implementing a five-year child survival project in Durgapur and Kendua sub-district of Netrokona district in Bangladesh, with financial assistance from USAID. CRWRC has developed an innovative “People’s Institution” model that helps communities form independent, self-sustaining community-based organizations (CBOs). The goal of the CRWRC project is to reduce mortality among the most marginalized mothers and newborns by building sustainable public-private partnerships with the community organizations (People’s Institutions) that can mobilize poor families to access quality maternal, newborn and child health services. The project provides community-based services and health promotion delivered at the household level by trained traditional birth attendants (TTBAs) and unpaid Community Health Volunteers (CHVs).

Icddr,b, an internationally recognized health and population research institution based in Bangladesh, is partnering with CRWRC in conducting operations research (OR) to evaluate the effectiveness of the People’s Institution model to deliver maternal, newborn and child health interventions to poor and vulnerable populations and strengthening health systems in Bangladesh. This evaluation by ICDDR,B will contribute to the national and global evidence base on the potential of community mobilization approaches to improve maternal, neonatal and child health. A quasi-experimental study design has been developed for the OR and a total of forty clusters have been selected. Twenty clusters were from the two CRWRC/USAID intervention upazilas – Durgapur and Kendua, while the other 20 clusters were selected from two nearby upazilas, Barhatta and Kalmakanda with usual GoB services as comparison areas. As a part of the evaluation large household Knowledge, Practice, and Coverage (KPC) survey have been carried out in the selected intervention and comparison areas. The baseline KPC survey was conducted in 2009. The midline survey was conducted in 2012 in the intervention areas only. The endline survey was conducted in 2014, from March 09 to June 25, 2014 including mapping and listing. The respondents for the survey were women who had a birth (live/still) in the one year preceding the survey and mothers of children aged 0-2 years. A total of 4,502 households were surveyed. To allow for comparisons, the key indicators from the maternal and newborn section of the baseline survey have been reanalyzed to include women who had given birth in the one year preceding the survey.

Key findings:

Demographic and socioeconomic characteristics of the respondents:

The intervention and comparison areas were comparable in terms of proportion of the population that was male (51 percent) and female (49 percent), proportion aged less than two years (15, 17 percent), average household size (5.3 to 5.5). Availability of electricity had almost doubled with 43-44 percent of the households in intervention and comparison areas with electricity which was 21 percent at baseline. Access to improved source of drinking water was almost universal. Access to improved sanitation facilities has increased from baseline in both intervention areas (73 percent at baseline vs. 76 percent at endline) and comparison areas (63 percent at baseline vs. 78 percent at endline). Also, ownership of land was similar in intervention and comparison areas (90 percent). In terms of wealth index, the households in intervention areas were also similar to that of comparison areas.

Care during antenatal, delivery and after delivery:

Overall, the increase in Antenatal care (ANC) received from medically trained providers in intervention areas is from 29 percent at baseline to 48 percent at endline whereas the increase is less in comparison

areas from 26 percent at baseline to 35 percent at endline. Also, the change in the percentage of women receiving at least four ANC visits from a medically trained provider is more pronounced in intervention areas (5 percent at baseline vs. 14 percent at endline) than the comparison areas (6 percent at both baseline and endline). In terms of women receiving 4 or more ANC, the rich to poor ratio has remained similar over time in intervention areas over time (from 3.0 at baseline to 3.6 at endline) but has decreased substantially in comparison areas (from 33.7 at baseline to 3.7 at endline).

Deliveries most commonly took place at home in both intervention (78 percent) and comparison (84 percent) areas. About 9 percent of the deliveries took place in government health facilities in both intervention and comparison areas; and about 8 percent of the deliveries occurred in private hospitals or clinics in both intervention and comparison areas. Overall, facility deliveries have increased from baseline, and again the increase is more than double in intervention areas whereas it is only 1.5 times in comparison areas. Only 19 percent of the deliveries were assisted by a skilled provider. Skilled attendance at delivery has increased substantially in the intervention areas from 9 percent to 22 percent. The increase in comparison areas is from 13 to 16 percent. The rich to poor ratio in skilled attendance at delivery intervention areas has decreased substantially from 12.9 at baseline to 3.4 at endline. In comparison areas this ratio has decreased from 7.2 at baseline to 2.3 at endline.

A clean delivery kit was used in only 32 and 29 percent of home deliveries in intervention and comparison areas respectively at endline. Usage of clean delivery kits increased by eight times in the intervention areas while the comparison areas nearly doubled from the baseline. AMTSL increased from only 1 percent to 4 percent in intervention areas.

The proportion of women who received postnatal care from a medically trained provider within two days of delivery, has nearly doubled that of the baseline percentages in intervention areas (9 percent at baseline to 19 percent at endline) compared to the comparison areas (11 percent at baseline to 15 percent at endline). For those women who received postnatal care from a medically trained provider within two days of delivery, there has been substantial decrease in rich to poor ratio in intervention areas (23.8 at baseline to 3.6 at endline) compared to comparison areas (9.1 at baseline to 2.2 at endline). Similar findings are seen the postnatal care for newborns.

Among the women who had live births or stillbirths, 37 percent reported at least one complication at any time during antenatal period, during delivery or after delivery. Complications were most common during the antenatal period (28 percent) and least common during the postnatal period (10 percent). About 23-43 percent of women sought care from medically trained providers for complications at any time.

Neonatal health

The proportion of newborns who received thermal care (drying and wrapping before delivery of placenta) has quadrupled in intervention areas (10 percent in baseline to 45 percent at endline) and doubled in comparison areas (20 percent at baseline to 39 percent in endline). Giving the first bath to the newborn after 72 hours of birth has doubled in the intervention areas (23 percent at baseline vs. 46 percent at endline) and increased by 1.7 times in the comparison areas (35 percent at baseline to 59 percent at endline). Overall, the proportion of newborns with clean cord care increased by 10 percentage points in intervention areas (55 percent at baseline vs. 65 percent at endline) and by 5 percentage points in comparison areas (62 percent at baseline vs. 67 percent at endline). Clean cord cutting was almost universal (96 percent) in all the areas. 13-14 percent of newborns received essential newborn care in intervention and comparison areas, an increase of six fold and two fold from baseline at

intervention & comparison areas respectively. Use of prophylactics for preventive eye care within the first hour after birth was still low and only 5 percent intervention areas.

Nutrition

Overall, 77 percent of children were breastfed within one hour of birth. Colostrum feeding was almost universal in all the areas. There has been an increase in the percentage of children who were breastfed within one hour of birth and the increase is similar in both the areas (intervention- 53 percent at baseline vs. 78 percent at endline; comparison – 53 percent at baseline vs. 76 percent at endline). The proportion of children exclusively breastfed have increased from baseline (47 percent) to endline (53 percent) in the intervention areas but seen to decrease in comparison areas (49 percent at baseline to 42 percent at endline).

Overall, breastfed children (26 percent) were more likely to meet the recommendations for diversity in food groups and frequency of feeding compared to non-breastfed children (5 percent). Around one-third of the children (27 percent in intervention and 31 percent in comparison) under two years were underweight (<-2z weight for age z- score) including 13 percent who were severely underweight (<-3z weight for age z- score). Proportion of children who are underweight has decreased by 6 and 5 percentage points from baseline to endline in intervention and comparison areas respectively. Eighty two- 84 percent of children in both intervention and comparison areas had received vitamin-A supplementation in the last 6 months which has increased substantially from baseline (59-64 percent).

Child Health

The coverage of the vaccines was almost similar for the intervention and comparison areas. The coverage of DPT/Penta ranged from 89-93 percent for the first dose to 72-76 percent for the third dose for the different areas. The coverage for measles vaccination was 69-70 percent.). There has been no change in rich to poor ratio in the vaccines between baseline and endline in both intervention and comparison areas.

Around 8 percent of the children slept under Insecticide treated bed nets during the last night prior to the survey and in only 17 percent of the cases the bed nets were treated with appropriate insecticides in the past six months. Findings are similar in intervention and comparison areas. Poorer households were more likely to sleep under an ITN compared to richer households at both baseline and endline. The two-week prevalence of diarrhoea was 8 percent in both the intervention area and comparison areas among the surveyed children. The use of ORT increased from 74 percent at baseline to 85 percent in endline for intervention areas and from 50 to 86 percent in comparison areas. Overall, the equity gap has narrowed from baseline to endline in intervention areas but increased in comparison areas for use of ORT in children aged 0-23 and suffering from diarrhoea. Around 7 percent of the under-two children were reported by the mothers as suffering from suspected pneumonia in the previous two weeks of the survey. Care-seeking from medically trained providers have increased from 22 percent at baseline to 33 percent at endline in intervention areas but remained similar in comparison areas (19 percent at baseline vs. 17 percent at endline). The rich to poor ratio has remained similar between baseline and endline in intervention areas (1.7 at baseline vs. 1.9 at endline) but has decreased in comparison areas (2.2 at baseline vs. 1.1 at endline).

Knowledge on HIV/AIDS

Around 61 percent of respondents were aware of HIV/AIDS. Awareness was found to be higher in Intervention areas (65 percent) compared to comparison areas (58 percent). Overall, one-fourth of the respondents (32 percent in intervention vs. 20 percent in comparison) were aware of transmission through unprotected sex. Among the non-sexual means of transmission more mothers (24 percent) reported the use of unsterilized syringe or needles followed by unsafe blood transfusion (10 percent). The awareness on MTCT and PMTCT has been found to be lower compared to the baseline.

Contraception and birth spacing

Sixty-eight percent of currently married women in the surveyed areas were using a family planning method with majority using a modern method (67 percent). Use of modern methods has increased both in intervention (49 percent at baseline to 71 percent at endline) and comparison areas (44 percent at baseline to 64 percent at endline). More than half (54 percent) of the women responded that one should wait for 2-5 years after the birth of a child before trying to get pregnant again. The findings are similar to that of baseline. Awareness of atleast two risks associated with a birth interval of less than 24 months has increased from 37 percent at baseline to 49 percent at endline in intervention areas, whereas the increase is from 17 percent to 47 percent at endline.

Water and Sanitation

Only 5 percent mothers of children age 0-23 reported that their households treat water in intervention areas. This was slightly higher in comparison areas (10 percent). Thirty nine and 16 percent of mothers of children age 0-23 months lived in households with soap at the place for hand washing in intervention and comparison areas respectively and has doubled in intervention areas but halved in comparison areas over time. There has been no change in rich to poor ratio for appropriate water treatment and hand-washing in intervention areas.

Conclusion

The findings from the endline KPC survey provide a comprehensive portrayal of different aspects of maternal, neonatal and child health in the four upazilas of Netrokona district. These results depict the endline situation in the intervention and comparison upazilas after the implementation of SUSOMA intervention programme in the intervention area, against which progress of the project can be measured. These results depict that there has been an increase in the key coverage indicators in intervention upzilas which might be due to the implementation of SUSOMA intervention programme in those areas. Overall, there has been substantial improvement in maternal and newborn indicators such as antenatal, delivery and postnatal care, drying and wrapping, early initiation and exclusive breastfeeding, appropriate care-seeking for pneumonia. Other indicators where improvements have been similar in intervention and comparison areas are the practice of birth preparedness, overall quality of antenatal care, AMTSL, clean cord care, vitamin-A supplementation, use of ORT for diarrhea, use of contraception. The findings provide critical insights into areas that need careful attention by the project for future scale-up.

Section 1: INTRODUCTION

1.1. Background

Bangladesh is one of the few countries in the world on track to meet Millennium Development Goal 4: a reduction of childhood mortality by two-thirds from 1990 to 2015 and to meet Millennium Development Goal 5: reducing Maternal Mortality Ratio to 143 per 100,000 live births by 2015. From 1994 to 2011 there has been a dramatic decline in the rates of infant and under-five mortality (BDHS 2011). Infant mortality and under-five mortality has declined from 87 and 116 per 1000 live births in 1994 to 43 and 53 per 1000 live births in 2011. Although, rates of neonatal mortality have declined in a steady state, Bangladesh still has a neonatal mortality rate of 32 per 1,000 live births, which accounts more than half of all under-five deaths. In spite of being on track, in Bangladesh, the Maternal Mortality Ratio (MMR) is high (194/100,000 live births) (BMMS 2010). The Bangladesh Demographic and Health Survey (BDHS) 2011 data on antenatal care, skilled attendance at birth, and postnatal care also indicate gross disparity in service coverage for different economic quintiles.

The Christian Reformed World Relief Committee (CRWRC), a faith-based and nongovernmental organization established in 1962, is implementing a five-year child survival project in Durgapur and Kendua sub-district of Netrokona district in Bangladesh, with financial assistance from USAID. CRWRC has developed an innovative “People’s Institution” model that will help communities form independent, self-sustaining community-based organizations (CBOs). The goal of the CRWRC project is to reduce mortality among the most marginalized mothers and newborns by building sustainable public-private partnerships with the community organizations (People’s Institutions) that can mobilize poor families to access quality maternal, newborn and child health services. CRWRC has focused all its efforts on a maternal and newborn intervention package, using the government’s integrated strategy for childhood illness (Community IMCI) that has been expanded to include mothers, newborns and children. The project provides community-based services and health promotion delivered at the household level by trained traditional birth attendants (TTBAs) and unpaid Community Health Volunteers (CHVs).

Description of People’s Institution (PI) model:

CRWRC has 18 years of experience using a “People’s Institution (PI) Model” in Bangladesh. This innovative model is unique because it reaches the poorest members of the community. The formed CBOs are well positioned to interact and collaborate with the informal health care system (village doctors) and the public health sector (clinics) in ways that lead to stronger, more sustainable health systems.

A People’s Institution is a community-based organization (CBO) composed of several smaller women’s and men’s groups, or **Primary Groups**. The PI model organizes and mobilizes communities for health and social change and the goal is to become an independent self-sustaining organization in order to have a lasting impact on the health of their members and the broader community.

This innovative model emphasizes the GoB national policies and strategies such as targeting high poverty areas; using the informal health sector and community-based service providers to expand access to MNC services; mobilizing women, families, and opinion leaders; and establishing linkages between the public health sector and the community. Key elements of the PI model are:

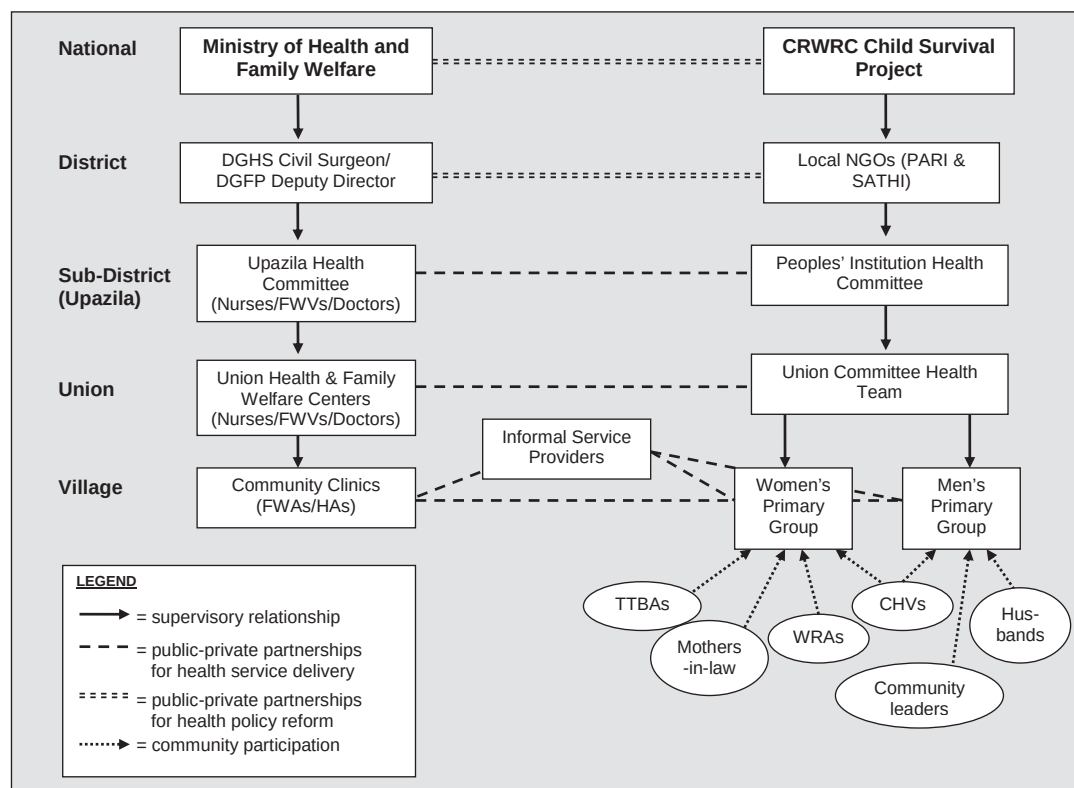
- Building **local capacity** to identify and address community needs;
- Helping to empower the **poorest and most marginalized populations** to make decisions;

- Mobilizing **local resources** for health and establishing resource management systems;
- Motivating communities to **advocate for policy changes** to respond to their needs; and
- Establishing and strengthening **linkages between communities and health facilities** to improve quality, availability, and access to health services.

The People's Institution model has a three-tiered structure: Village level women's and men's Primary Groups at the bottom level, Union Committees at the mid level, and the People's Institutions at the top or sub-district/upazila) level (Figure 1-1).

Financial area is considered as one of the areas for capacity building. Therefore, PIs are encouraged to establish emergency health funds through savings and different income generating projects. The community can then draw upon these funds to finance the necessary treatment for mothers and U-5 children by themselves. The fund is used as an interest free loan and managed by a health Fund Management committee, comprising of 5 members; 3 from PI health sub team, 1 is PI chairperson and 1 is the Community Health Volunteer (CHV). Figure 1-1 describes the community mobilization strategy by CRWRC through the PI model..

Figure 1-1: PI model



ICDDR,B, an internationally recognized health and population research institution based in Bangladesh, and in partnership with CRWRC is involved in conducting operations research (OR) to evaluate the effectiveness of the People's Institution model to deliver maternal, newborn and child health interventions to poor and vulnerable populations and strengthening health systems in Bangladesh. Since the People's Institution (PI) model is an innovative approach to promote public-private partnerships for providing maternal and neonatal care and in strengthening the overall health system at both the national and local level, the evaluation by ICDDR,B will contribute to the national and global evidence

base on the potential of community mobilization approaches to improve maternal, neonatal and child health.

As mentioned earlier measuring the effectiveness of interventions and equity of project coverage is the primary objective of the research conducted by ICDDR,B. In regards to that household Knowledge, Practice, and Coverage (KPC) surveys were carried out in the selected study population at baseline, midline, and endline. As a part of this design, the endline KPC survey was conducted in 2014 to better understand the endline status of key indicators and to provide information on possible confounders, as well as show the change between baseline and endline data.

1.2. Purpose of the endline KPC survey

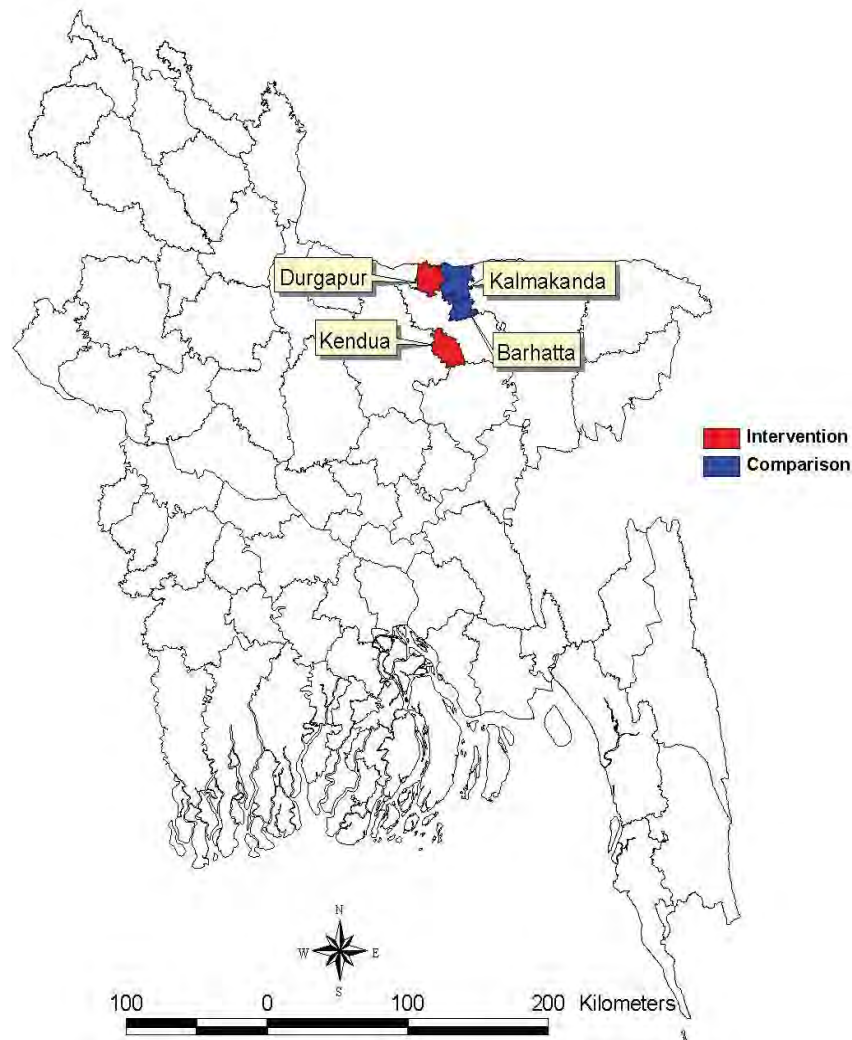
The purpose of the endline survey was to describe endline levels of knowledge and practice in relation to maternal, neonatal and child interventions, and provide endline estimates of selected maternal, neonatal and child health indicators. This survey will also provide us with estimates that will allow us to compare the changes over time in the key indicators.

Section 2: METHODS

2.1. Study area

The study was carried out in Netrokona district, which is situated in the northern part of Bangladesh. This district has been identified by the Government of Bangladesh as one of 14 low performing districts with high child mortality (MICS 2007). The study was carried out in all 20 unions of the two intervention upazilas, Kendua (13 unions) and Durgapur (7 unions). Each union was considered as cluster. The comparison group consisted of all 15 unions from Kalmakanda (8 unions) and Barhatta (7 unions) upazilas, the only two upazilas in Netrokona where similar maternal, neonatal and child survival projects are not being implemented or there are no future plans of such implementation. These 15 unions of comparison areas were divided into 20 parts and each part was considered as cluster.

Figure 2-1: Map of study area



2.2. Study design

A quasi-experimental study design was used for the study in order to explore the effectiveness, equity and cost-effectiveness of the intervention package. A total forty clusters were selected for the study. Twenty clusters were from the two CRWRC/USAID intervention upazilas, while the other 20 clusters were selected from two nearby upazilas with usual GoB services as comparison areas. The Knowledge, Practice and Coverage (KPC) survey was conducted at endline among mothers of under-two year children residing in the study areas.

2.3. Respondents and Sample size

a) Indicator and respondents

The key indicators measured in the endline KPC survey 2014 are provided in Annex 1. The list of indicators was prepared on the basis of rapid CATCH indicators.

The measurement of these indicators required a population of under-2 children and women who had a birth outcome in the previous two years (i.e, since 1st January 2012).

b) Sample size

Standard formulas (Betty 2003) have been used to estimate the required sample size based on the normal distribution, confidence levels of 95%, 80% power, and a design effect of 1.5 (to allow for clustering). Rapid CATCH indicators (and questionnaire) and the module on maternal and newborn care guided selection of indicators for the sample size calculation. Annex-1 shows the sample requirements according to selected indicators. The largest sample size required for each cluster was 96 under-2 children for the primary indicator of care seeking for suspected pneumonia. The largest sample required for the maternal and newborn care indicators was 50 women who had a birth outcome since 1st January 2012.

c) Selection of village and households from upazila

The selection process consisted of two stages. In the first stage, 4-9 villages were selected from each cluster using PPS to get 750-900 households (HHs). Next a census was done to map and list the HHs of the selected villages. In each selected village a sketch map was drawn indicating boundary, landmark and Bari locations. All HHs and all women who had a birth outcome (live birth or still birth) since Jan 01, 2012 were enumerated and listed. In the second stage sampling was done according to the following steps

Step 1: First, 125 women with pregnancy outcomes since 1st January 2012 were drawn from the list randomly for collecting information on child health, morbidity, nutrition, ITN, HIV/AIDS, family planning etc. using a computer designed programme . One hundred and twenty five women were selected to attain the required number (96) of under-2 children for the sample.

Step 2: Then, 60 women who had a pregnancy outcome since 1st January 2012 were randomly selected from the 125 women for maternal and newborn care measurement.

Step 3: Next, 30 women were randomly selected from the 60 women selected in step 2 for maternal costing who had a birth outcome since 1st January 2013.

Finally, based on the randomization, a list of HHs by village was provided to the supervisor for conducting the survey. The list contained detailed information on which module needed to be used for which selected women.

2.4. Survey instruments

A household survey questionnaire was used to collect the required information. The questionnaire consisted of four modules. These included:

Module I: Household information, socioeconomic information, information on women and information about People's Institution were collected in this module.

Module II: Information about maternal care and immediate newborn care was collected in this module.

Module III: Cost related to ANC, delivery, PNC and complication during pregnancy was collected in this module.

Module IV: Information about child health, morbidity, nutrition, ITN, HIV/AIDS, Family planning etc. and cost related to care seeking was collected in this module.

2.5. Training and data collection

Sixty three participants received training on mapping and listing from 5-6 March 2014. This included a one-day classroom session and a one day field practice session. Sixty three data collectors and 12 field supervisors received 6-day training on data collection tools from 29 March to 03 April 2014 including a one day field practice at nearby villages which were not selected as sample villages. Data collection commenced from 06 March 2014 and completed on 25 June 2014.

2.6. Quality assurance

The quality of data collection was maintained by trained field supervisors through spot checking, cross checking, consistency checking and editing. Each day, field supervisor accompanied three or four data collectors for part of their work-day and observed some interviews. Completed questionnaires submitted to the field supervisor were reviewed by the field supervisor. Any errors, discrepancies and other problems were discussed and resolved at the end of each day and at weekly meetings. This sometimes resulted in a re-visit to the household. A random sample of 5% of households interviewed was revisited by field supervisors or data collectors to check the correctness of the information collected. Any discrepancies were resolved with the original data collectors and supervisors.

2.7. Data entry and analysis

SQL server 2008 was used for data entry and the interface was designed by Visual Basic. Data was analyzed with the statistical software STATA 12.

All costs are presented in taka. To value the time of the accompanied, their occupation and average daily wages were identified. Direct cost was used to reflect out of pocket expenditure for the maternal and child illness. Direct costs refer to household expenditures related to seeking treatment (medical expenses such as physician's fee, drug cost, cost of hospital stay both for patient and accompanied person) along with non-medical expenses such as transport costs. Household health care costs were calculated per person for the pregnant women and the under two sick children in the following way:

- Total cost of consultations (at all providers, including non-government and private): The number of visits made to different types of provider, as well as the number of illness episodes for which care was not sought, along with their associated costs, were obtained through the standardized household questionnaire.

- Drug costs: The household survey collected information on expenditures incurred by households for obtaining drugs, both from public and private facilities. Using the reported cost of drugs, average cost per child (for all visits made for the illness episodes in the last two weeks preceding the survey) was derived by each upazila.
-
- Travel cost: Travel costs incurred by households to seek medical care were obtained through the household surveys. Travel expenses consist of costs associated with travel to and from the hospital by the patient and any accompanying relatives during hospitalization. The questionnaire asked households about total cost of travel and the number of individuals traveling with the patient for the visit. Total travel cost of all households taken together was divided by the total number of child reported by households to derive the cost per person. Hotel cost: Hotel cost included cost related to night stay in the hospital, food cost for night stay and any other cost was incurred during night stay.
- Diagnostic cost: the diagnostic cost includes cost related blood test, urine test, ultra sonogram, stool test or any other test needed for this treatment.
- Attendant cost: this cost included cost related to the attendant who were present or visit when the women or the child was hospitalized. The components of this costing analysis are consisted of accommodation cost and food cost of the attendant. Descriptive analysis was done to calculate out-of-pocket expenditures.

2.8. Sample size and final interviews conducted

Table 2-1 illustrates households listed and number of individual women and under-two children interviews held. Around 53 percent of women were intentionally sampled for interviews among the listed women aged 15-49.

Table 2-1: Results of the household, individual women's and under-two children interviews

Characteristics	Intervention		Comparison		Total	
	n	%	n	%	N	%
Households listed	6,804		6,641		13,445	
Women age 15-49 listed	6,944		6739		13,683	
Women sampled	2,500	36.0	2,500		5,000	
Women interviewed in households	2,213		2,303		4,516	
Women interviewed for maternal health information	697		725		1,422	
Women interviewed for child age 0-23 months information	1686		1872		3558	

SECTION 3: CHARACTERISTICS OF HOUSEHOLDS AND RESPONDENTS

This section presents information on the demographic and socioeconomic information of the survey respondents and their households. The information in this section is based on 4,502 randomly selected households.

3.1. Household population and composition

Table 3-1 shows the distribution of the household population by age and sex according to survey areas. The total population of the surveyed households was 24438 and consisted of slightly more females (51 percent) compared to that of males (49 percent). The sex composition was similar to the above in intervention and comparison areas. The proportion of children less than 2 years of age was between 16 percent in the surveyed households whereas the proportion of population over age 50 was similar across areas (10 percent) (Table 3-1).

Table 3-1. Percent distribution of household population by age and sex for the surveyed areas, Endline survey 2014

Age	Intervention			Comparison			Total		
	Male (5,884)	Female (6,334)	Total (12218)	Male (5,990)	Female (6,230)	Total (12220)	Male (11,874)	Female (12,564)	Total (24438)
< 2	16.6	14.9	15.7	17.9	15.5	16.7	17.2	15.2	16.2
2- 5	9.5	9.3	9.4	9.5	10.7	10.1	9.5	10.0	9.7
5-15	20.6	19.8	20.2	19.4	19.8	19.6	20.0	19.8	19.9
15 – 49	45.4	42.6	43.9	45.2	42.2	43.6	45.3	42.4	43.8
50+	7.9	13.4	10.8	8.1	11.8	10.0	8.0	12.6	10.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 3-2 shows the distribution of households in the survey by the number of household members. The average household size in the surveyed areas was 5.4 and similar to baseline (5.5) but higher than that of 4.6 found nationally (BDHS 2011). The household size at endline did not vary much by intervention and comparison areas.

Table 3-2: Percent distribution of households by number of household members and mean size of households according to area, Endline survey 2014

	Intervention (N=2,206)	Comparison (N=2,296)	Total (N=4,502)
Number of Household members			
2	1.3	1.0	1.2
3	11.8	15.1	13.5
4	20.4	22.9	21.7
5	24.6	21.4	23.0
6	17.0	17.2	17.1
7	10.8	10.1	10.4
8	5.7	6.2	6.0
9+	8.4	6.1	7.2
Mean size of Households (SD)	(5.5±2.1)	(5.3±2.0)	(5.4±2.0)

3.2. Household characteristics

The 2014 endline survey collected information on certain characteristics including access to electricity, type of sanitation facility, source of drinking water and main housing materials. These physical characteristics are used to assess the general well-being and socioeconomic status of the households. Table 3-3 shows that around two-fifths of the households in both intervention and comparison areas had access to electricity which has increased from 21 percent at baseline. Access to improved source of drinking water was 98 percent at endline and similar between intervention and comparison areas. Access to improved sanitation facilities has increased with the increase being more in comparison areas (63 percent at baseline vs. 78 percent at endline) compared to intervention areas (73 percent at baseline vs. 76 percent at endline).

Table 3-3: Percentage distribution of households by households characteristics according to area, Endline survey 2014

	Intervention (N=2,206)	Comparison (N=2,296)	Total (N=4,502)
Electricity	43.1	43.8	43.4
Source of Drinking water			
Improved Source	97.8	98.6	98.2
Piped water	0.1	0.8	0.5
Shallow tube well	92.6	88.0	90.2
Deep tube well	5.1	9.8	7.5
Non-improved source	2.3	1.4	1.8
Surface well/other well	0.3	1.0	0.6
Pond/Tank/Lake	0.3	0.1	0.2
River stream	0.2	0.3	0.3
Others	1.5	0.0	0.7
Toilet facility			
Improved facility	76.2	78.2	77.4
Septic tank/Modern toilet	4.2	1.7	3.0
Water sealed/Slab latrine	44.3	35.2	39.7
Pit latrine	27.7	41.3	34.7
Non-improved facility	23.8	21.7	22.7
Open/Hanging latrine	12.8	18.8	15.8
No facility/bush/field	11.0	2.9	6.9
Others	0.0	0.0	0.0
Main roof material			
Bamboo/thatch/palm leaf/wood planks/cardboard	7.4	7.2	7.3
Tin	92.4	92.6	92.5
Cement/concrete	0.1	0.2	0.2
Others	0.0	0.0	0.0
Main floor material			
Earth/sand, palm/bamboo/ wood planks	96.1	94.7	95.4
Cement/concrete, ceramic tiles/mosaic/polished wood	0.1	0.1	0.1
Others	3.8	5.2	4.5
Main wall material			
Cane/palm/trunks, bamboo with mud	0.0	0.0	0.0
Tin	25.5	40.1	32.9
Stone with lime, cement, bricks with/ without plaster	66.6	55.1	60.7
Others	7.2	4.8	6.0
	0.7	0.0	0.4

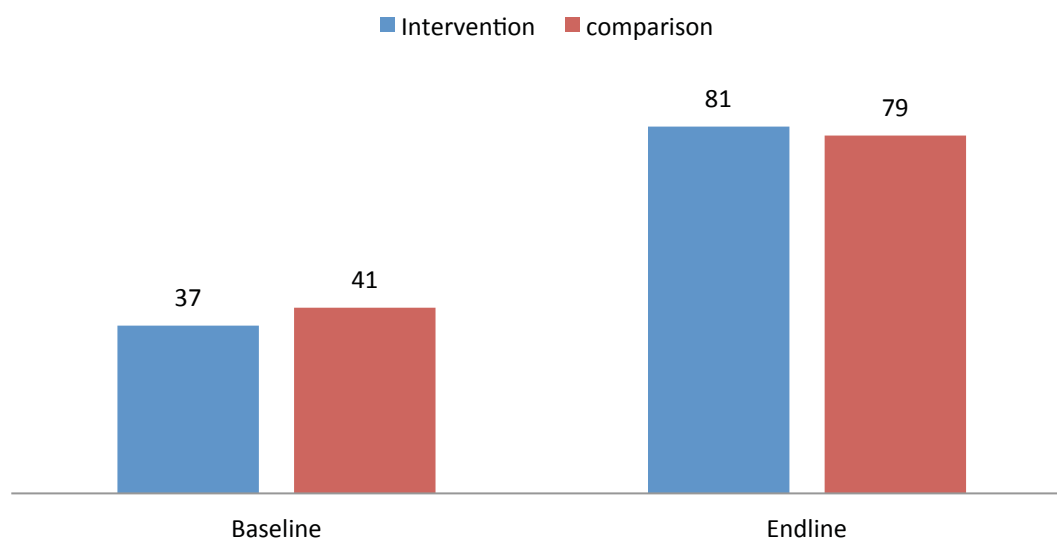
3.3. Household possessions

The 2014 endline survey collected information on household ownership of selected assets, some of which were used along with other indicators for calculating the wealth index for the survey. Table 3-4 shows the percentage of households that owned durable goods and land by intervention and comparison areas. The intervention and comparison areas were almost similar with respect to the possession of durable goods except for items such as television, electric fan, watch, quilt, mattress, kitchen cabinet, table, chair and bicycle where difference were observed between intervention and comparison areas. About 92 percent of the respondents owned land, in the form of either a homestead or other cultivable land which has increase from 80 percent at baseline. However at endline, ownership cultivable land was found to be higher in comparison areas (46 percent in intervention vs. 50 percent in comparison) and homestead (90 percent) was similar in both the areas. Figure 3-1 shows that use of mobile phones have increased substantially in both the areas.(updated)

Table 3-4: Percent distribution of households by durable goods and land ownership according to area, Endline survey 2014

Ownership	Intervention (N= 2,206)	Comparison (N=2,296)	Total (N=4,502)
Durable goods			
Radio	1.5	1.4	1.4
Television	13.7	10.8	12.2
Tape recorder	1.1	1.1	1.1
VCR/VCP/DVD player	2.6	2.2	2.4
Mobile phone	80.9	79.0	79.9
Land telephone	0.6	0.7	0.7
Electric fan	23.6	26.2	24.9
Computer	0.7	1.0	0.8
Refrigerator	2.6	2.3	2.4
Watch	18.8	30.4	24.7
Cabinet	37.3	34.3	35.8
Kitchen cabinet	70.0	21.7	45.4
Cot/bed	95.7	96.7	96.2
Table	70.0	77.8	73.9
Chair	71.7	79.4	75.6
Sofa	6.6	4.9	5.7
Blanket/Quilt	86.5	91.9	89.2
Mattress	74.9	82.1	78.6
Bicycle	25.3	14.8	19.9
Motor cycle/Scooter	4.7	3.1	3.9
Animal drawn cart	2.8	0.7	1.8
Car/Microbus	0.4	0.2	0.3
Truck/Bus	0.6	0.4	0.5
Motor-boat	0.3	0.8	0.5
Boat without motor	1.7	2.4	2.0
Rickshaw/rickshaw van	3.0	1.7	2.3
Household did not possess any of these items	0.3	0.6	0.5
Land ownership			
Homestead	89.8	90.1	90.0
Other cultivable land	45.7	50.0	47.9
Neither of the above	7.9	8.4	8.2

Figure 3-1: Percentage of households with mobile phones by study area and survey year



3.4. Wealth Index

The wealth index was constructed from the data on ownership of household durable goods, as well as dwelling characteristics, source of drinking water and sanitation facilities. Each asset was assigned a weight (factor score) generated through principle components analysis, and the resulting asset scores were standardized to a normal distribution with a mean of zero and a standard deviation of one (Gwatkin et al., 2000). Each household was then assigned a score for each asset, and the scores were summed for the household. Households were ranked according to the total score, and then divided into quintiles from the lowest (poorest) to the highest (richest). Distribution of households by wealth index and upazilas is presented in Table 3-5. Overall, the households in intervention and comparison areas were found to be similar. The proportion of households in the poorest quintile was lowest (16 percent) for Kendua and Barhatta upazila. However, among the intervention areas in Durgapur (24 percent) more households were found to be in the poorest quintile; similarly, among the comparison upazilas, Kalmakanda was found to be worse off with 25 percent of households in the lowest quintile.

Table 3-5: Percentage distribution of wealth index for all households in the surveyed upazila by area, Endline survey 2014

Characteristics	N	Wealth quintiles				
		Lowest	Second	Middle	Fourth	Highest
Total	4,502	20.0	20.0	20.0	20.0	20.0
Area						
Intervention	2,206	19.0	19.0	20.1	21.3	20.5
Comparison	2,296	20.9	20.9	19.9	18.7	19.5
Upazilas						
Barhatta	941	15.5	16.0	18.9	23.2	26.4
Durgapur	764	24.1	20.2	18.6	16.8	20.4
Kalmakanda	1,355	24.7	24.4	20.6	15.6	14.7
Kendua	1,442	16.4	18.4	20.9	23.7	20.6

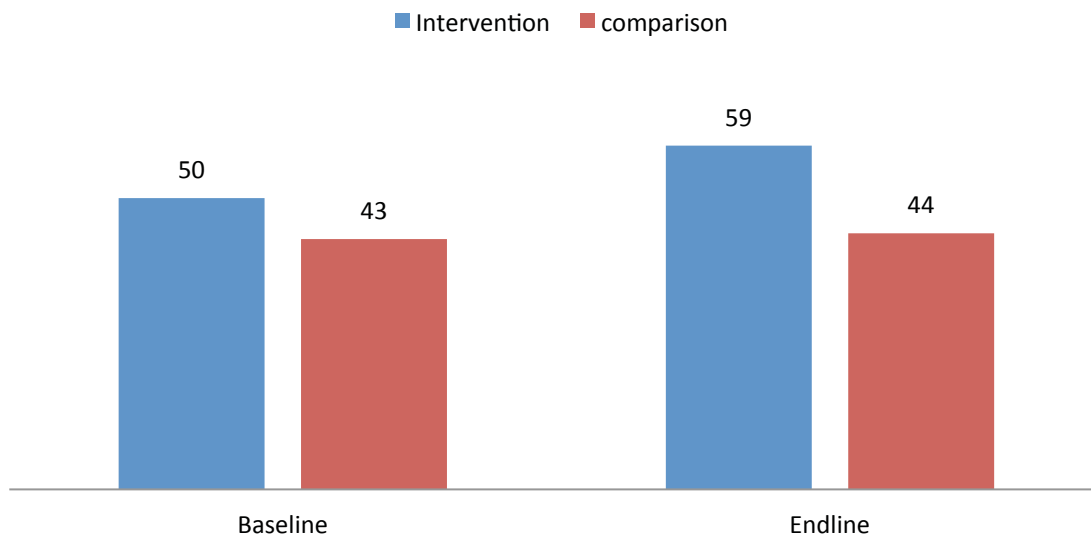
3.5. Characteristics of survey respondents

Table 3-6 provides information on the characteristics of the survey respondents (ever-married women aged 15-49 years). More than 65 percent of the respondents in both intervention and comparison areas were aged between 15-29 and the mean age were 27 years. In both the areas, almost all women were married at the time of the survey. Around one-fourth of the respondents in intervention areas and comparison areas had never been to school. Figure 3-1 shows the distribution of women who had completed primary and above years of education by area and survey year. This shows that percentage of completing primary & above education have increased from 50 percent at baseline to 59 percent at endline in intervention areas but have remained similar in comparison areas. Further details on the educational status of the women have been provided in Annex 2.1.1. In addition, among the surveyed households, a little less than 1 percent of the respondents were found to belong to other ethnic groups, mainly Garo and Hajong.

Table 3-6: Percentage distribution of characteristics of survey respondents (eligible women 15-49 years) according to area, Endline survey 2014

Characteristics	Intervention (N=2,213)	Comparison (N=2,303)	Total (N=4,516)
Age			
15-19	3.2	3.4	3.3
20-24	31.8	34.9	33.3
25-29	34.1	33.4	33.7
30-34	19.8	19.2	19.5
35-39	8.0	6.4	7.2
40-44	2.4	2.5	2.5
45-49	0.8	0.3	0.5
Mean age in years (SD)	(27.3±5.7)	(26.7±5.4)	(27.0±5.5)
Marital status			
Currently married	99.8	99.7	99.8
Divorced	0.1	0.1	0.1
Separated	0.0	0.1	0.1
Widowed	0.0	0.1	0.1
Education			
No education (0 years)	24.7	27.5	26.1
Primary incomplete (1-4 years)	16.5	28.4	22.6
Primary complete (5 years)	22.3	18.0	20.1
Secondary incomplete (6-9 years)	24.9	20.3	22.6
Secondary or higher (10+ years)	11.5	5.8	8.6
Religion			
Islam	95.7	91.5	93.6
Hinduism	3.6	8.0	5.8
Christianity	0.7	0.5	0.6
Ethnic group			
Not member of any ethnic group	99.0	99.2	99.1
Hajong	0.3	0.4	0.4
Garo	0.8	0.3	0.5
Others	0.0	0.0	0.0

Figure 3-2: Percentage of women with primary complete and above education by study area and survey year



SECTION 4: ANTENATAL CARE, DELIVERY AND POSTNATAL CARE

This section presents findings from the endline KPC survey on different aspects of maternal health such as knowledge and care-seeking behaviours regarding antenatal, delivery, postnatal care and maternal complications. These results are based on data obtained from 1422 mothers who reported live or stillbirths in the year preceding the survey. To allow for comparisons, the baseline data has been reanalyzed to report information on key indicators for all births reported in the one year preceding the survey.

4.1. Antenatal care

Antenatal care from a trained health care provider is one of the essential services needed to monitor the health and well-being of the mother and her child.

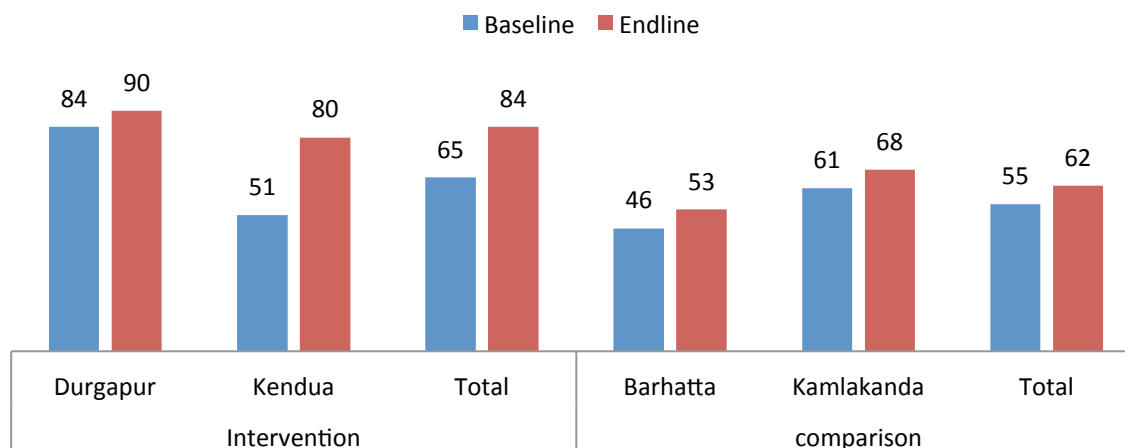
4.1.1. Mother's knowledge on antenatal care

Table 4-1 presents information on the knowledge of women regarding antenatal care and the number of visits required by a woman during pregnancy. On an average 73 percent of women were aware of the need for antenatal care during pregnancy. However, among these women only 54 percent in intervention and 41 percent in comparison areas mentioned the need for four or more antenatal care visits. Figure 4-1 shows the change in knowledge for the need of antenatal care over time. Overall, the change in knowledge was more pronounced in intervention areas (65 percent at baseline vs. 84 percent at endline) compared to comparison areas (55 percent at baseline vs. 62 percent at endline)(Figure4-1).

Table 4-1: Percentage of mothers aware on need for antenatal care and number of antenatal visits needed, Endline survey 2014

	Intervention	Comparison	Total
N	697	725	1,422
Knew about antenatal care	83.9	62.3	72.9
N (Knew about antenatal care)	585	452	1,037
3 or more antenatal visit needed	83.8	81.6	82.8
4 or more antenatal visit needed	53.5	40.5	47.8

Figure 4-1: Respondent's knowledge of the need for antenatal care by area, upazila, and survey year



4.1.2. Antenatal care coverage

Antenatal care received from medically trained providers was 48 percent in intervention and 35 percent in comparison areas (Table 4-2) at endline. Among the different upazilas more women of Durgapur (64 percent) and less women of Kalmakanda (32 percent) had received antenatal care from trained providers. The likelihood of receiving antenatal care from a medically trained provider increased with increasing education and household wealth and decreased with increasing age (Table 4-2)

Figure 4-2 shows changes in receiving at least one antenatal care from a medically trained provider over time. Overall, the increase in intervention areas is from 30 percent at baseline to 48 percent at endline whereas the increase is less in comparison areas from 25 percent at baseline to 35 percent at endline.

Figure 4-2: Percentage of women aged 15-49 with a live birth or stillbirth in the year preceding the survey who received any antenatal care from medically trained provider, by area, upazila, and survey year

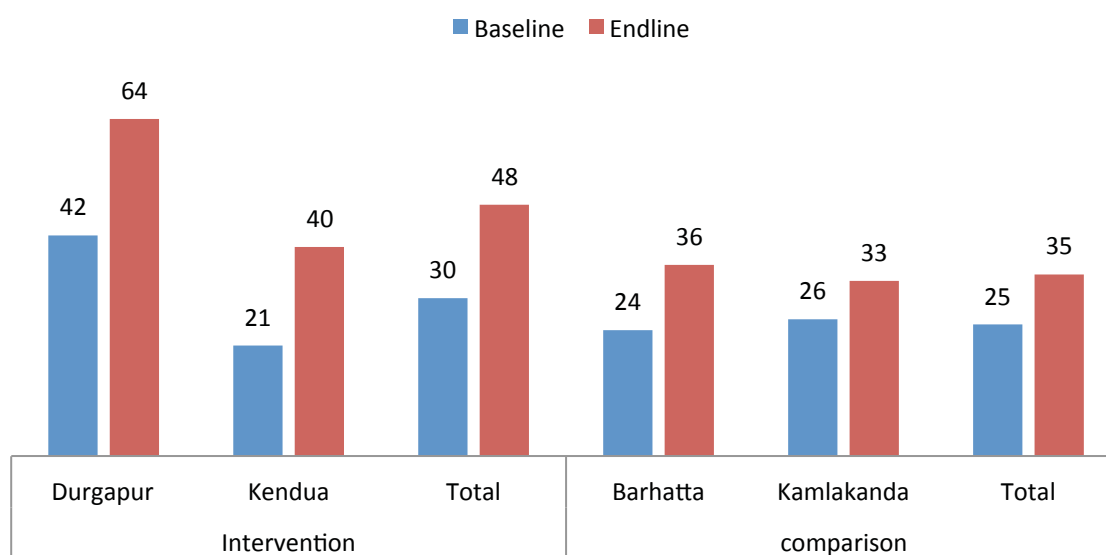


Table 4-2: Percentage distribution of women with a live birth or still birth in the year preceding the survey by source of antenatal care (ANC) during pregnancy for the most recent birth, according to area, upazila and background characteristics, Endline survey 2014

Area	N	No ANC	Received any ANC	Don't Know	Medically trained ¹					Non-Medically trained provider			
					Qualified doctor	Nurse/ Midwife	Paramedic	FWV	CSBA	HA/ FWA	Other health worker	Trained TBA	Unqualified provider
		%	%	%	%	%	%	%	%	%	%	%	%
Total	1,422	37	62.7	0.4	32.3	1.4	1.3	5.7	0.3	4.3	11.7	0.4	5.1
Study area:													
Intervention	697	31.7	67.9	0.4	37.4	2.3	0.9	6.9	0.3	3.3	11.8	0.7	4.2
Comparison	725	42.1	57.7	0.3	27.4	0.6	1.7	4.6	0.3	5.2	11.6	0.1	5.9
Mother's age													
15-19	75	28	72	0	45.3	1.3	2.7	8	1.3	1.3	6.7	1.3	4
20-24	506	34.6	65	0.4	34	1	0.6	5.9	0.2	4.3	13.2	0.4	5.1
25-29	481	39.9	59.7	0.4	31.8	2.1	2.3	4.6	0.2	4.4	10.4	0.2	3.5
30-34	251	39	60.6	0.4	28.7	0.8	0.4	6.4	0	4.4	12.7	0.8	6.4
35-39	79	35.4	64.6	0	29.1	2.5	1.3	5.1	1.3	5.1	12.7	0	6.3
40-44	26	42.3	57.7	0	19.2	0	0	11.5	0	7.7	7.7	0	11.5
45-49	4	25	75	0	25	0	0	0	0	0	0	0	50
Mother's education													
No education	369	45.5	53.4	1.1	21.1	0.5	1.1	6	0.5	3.8	11.9	0.5	7.3
Primary incomplete	305	44.6	55.4	0	23.6	0.7	1.6	7.2	0.3	3.9	11.5	0.7	5.9
Primary complete	283	35	64.7	0.4	29.7	2.8	0.4	7.4	0	6	13.1	0	4.9
Secondary incomplete	328	30.5	69.5	0	39.9	1.8	2.1	3	0.3	4.6	13.4	0.6	3.7
Secondary complete +	137	16.8	83.2	0	69.3	1.5	0.7	4.4	0	2.2	4.4	0	0.7
Wealth quintile													
Lowest	260	45.8	53.8	0.4	21.5	0.4	0.4	8.1	0.4	4.6	11.9	0.8	5.4
Second	269	44.6	55	0.4	23	0.7	0.7	7.1	0.7	4.1	12.6	0.4	5.6
Middle	295	32.9	66.8	0.3	30.2	3.1	2.7	5.8	0	4.4	14.6	0.3	5.8
Fourth	294	35	64.3	0.7	35.7	1.7	0	4.1	0.3	4.4	12.2	0.7	4.8
Highest	304	28.6	71.4	0	48.7	1	2.3	3.9	0	3.9	7.2	0	3.9
By upazila:													
Barhatta	281	49.1	50.5	0.4	33.5	0.4	1.1	1.4	0	1.8	5.7	0	6.4
Durgapur	229	15.7	84.3	0	46.3	1.7	0	16.2	0	5.7	10.9	0.4	3.1
Kalmakanda	444	37.6	62.2	0.2	23.6	0.7	2	6.5	0.5	7.4	15.3	0.2	5.6
Kendua	468	39.5	59.8	0.6	33.1	2.6	1.3	2.4	0.4	2.1	12.2	0.9	4.7

¹ If more than one provider was consulted for care during pregnancy, however only the most qualified provider was considered in this analysis.

4.1.3. Number and timing of antenatal care visits

The World Health Organization (WHO) and the Government of Bangladesh (GoB) currently recommends that a pregnant woman make a minimum of four antenatal care visits to a trained provider starting from the first trimester of the pregnancy. The percentage of women receiving at least four ANC visits from a medically trained provider was only 14 percent in the intervention and 6 percent in the comparison area (Table 4-3). Four or more ANC visits were more common in younger, more educated women and women belonging to wealthier households. Among the different upazilas, at least four ANC visits from a medically trained provider was most common in Durgapur (24 percent) and least common in Kalmakanda (5 percent).

Table 4-3: Percentage distribution of women aged 15-49 with a live birth or still birth in the year preceding the survey by number of antenatal care visits, according to area, upazila and background characteristics, Endline survey 2014

Area	N=	Number of ANC visits from medically trained providers				
		0	1	2	3	4+
		%	%	%	%	%
Total	1,422	59.4	15.8	8.5	6.8	9.6
Study area:						
Intervention	697	52.7	14.6	9.6	9.5	13.6
Comparison	725	65.8	16.8	7.4	4.1	5.8
Mother's age						
15-19	75	41.3	14.7	21.3	8.0	14.7
20-24	506	59.1	17.6	7.5	6.1	9.7
25-29	481	59.5	15.4	8.1	7.5	9.6
30-34	251	63.7	14.7	7.6	6.0	8.0
35-39	79	59.5	13.9	8.9	7.6	10.1
40-44	26	69.2	3.8	7.7	7.7	11.5
45-49	4	75.0	25.0	0.0	0.0	0.0
Mother's education						
No education	369	70.5	13.6	6.2	4.6	5.1
Primary incomplete	305	67.2	17.0	5.6	4.6	5.6
Primary complete	283	60.1	16.6	7.4	6.7	9.2
Secondary incomplete	328	53.4	15.2	11.9	8.2	11.3
Secondary+	137	24.8	18.2	15.3	13.9	27.7
Wealth quintile						
Lowest	260	69.2	16.2	5.4	4.2	5.0
Second	269	67.7	14.1	4.8	6.3	7.1
Middle	295	59.0	18.6	10.5	5.4	6.4
Fourth	294	59.2	16.0	8.5	6.8	9.5
Highest	304	44.1	13.8	12.5	10.5	19.1
Upazila						
Barhatta	281	64.1	20.6	6.4	2.5	6.4
Durgapur	229	35.8	14.8	11.4	14.4	23.6
Kalmakanda	444	66.9	14.4	8.1	5.2	5.4
Kendua	468	60.9	14.5	8.8	7.1	8.8

*Trained provider means qualified doctors, nurses, midwives, paramedics (FWVs, SACMOs, Mas) and CSBAs.

Figure 4-3 compares the changes in 4 or more ANC across areas and upazilas. Again, the increase is more pronounced in intervention areas (5 percent at baseline vs. 14 percent at endline) than the comparison areas (6 percent at both baseline and endline).

Annex 3 presents information on proportion of women who received 4 or more ANC by wealth quintile in intervention and comparison areas and also at baseline and endline. Overall, the rich to poor ratio has remained similar in intervention areas over time (from 3.0 at baseline to 3.6 at endline) but has decreased substantially in comparison areas (from 33.7 at baseline to 3.7 at endline) (Annex 3).

Figure 4-3: Percentage of women aged 15-49 who had a live birth or stillbirth in the year preceding the survey who received 4 or more ANC from a medically trained provider by area, upazila, and survey year

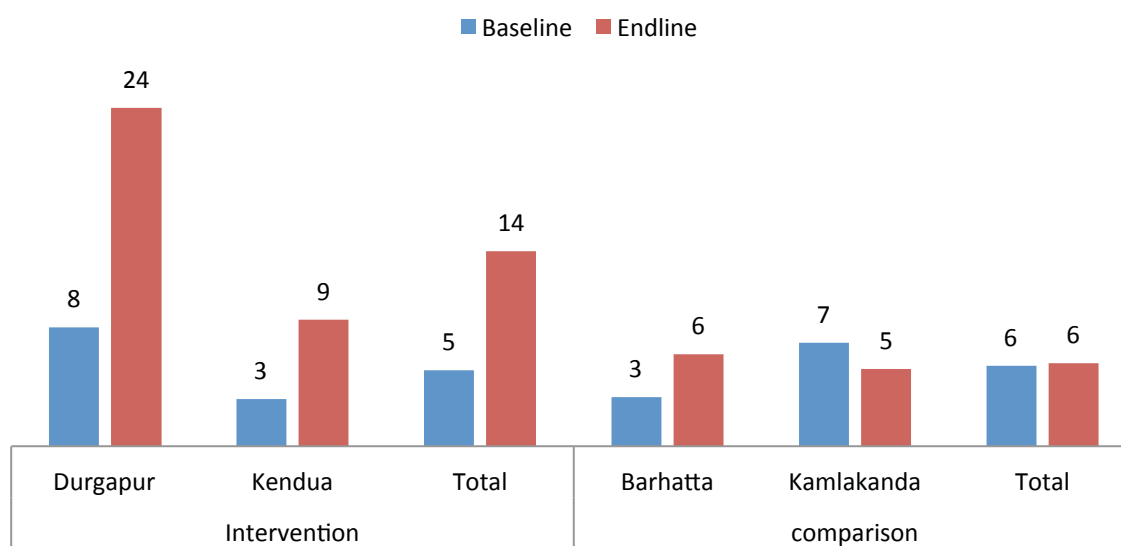


Table 4-4 presents data on the timing of first ANC visits for women who had given birth in the year preceding the survey and received an ANC from a medically trained provider. The percentage of women who made their first antenatal care visit during the first trimester was only 10 percent in the study areas (10 percent in intervention and 9 percent in comparison area) (Table 4-4) and increased with increasing education and household wealth.

Table 4-4: Percentage distribution of women aged 15-49 who had a live birth or still birth in the year preceding the survey by timing of the first antenatal care (ANC) from medically trained providers*, according to area, upazila and background characteristics, Endline survey 2014

Area	N=	No ANC %	Timing of first ANC visits from medically trained providers				ANC from untrained provider %	Don't know/mis sing %
			<4 %	4-5 %	6-7 %	8+ %		
Total	1,422	37.0	9.5	11.7	10.5	8.4	21.7	1.1
Study area:								
Intervention	697	31.7	9.9	15.9	12.9	7.7	20.2	1.6
Comparison	725	42.1	9.1	7.6	8.3	9.1	23.2	0.7
Mothers age								
15-19	75	28.0	10.7	20.0	9.3	17.3	13.3	1.3
20-24	506	34.6	10.7	10.9	10.1	8.9	23.5	1.4
25-29	481	39.9	8.7	10.6	12.7	8.5	18.9	0.6
30-34	251	39.0	8.8	12.4	8.4	6.0	24.3	1.2
35-39	79	35.4	6.3	16.5	8.9	6.3	24.1	2.5
40-44	26	42.3	15.4	3.8	11.5	0.0	26.9	0.0
45-49	4	25.0	0.0	0.0	0.0	25.0	50.0	0.0
Mothers education								
No education	369	45.5	6.0	7.0	8.1	7.3	23.8	2.2
Primary incomplete	305	44.6	6.9	9.2	9.2	7.5	22.0	0.7
Primary complete	283	35.0	7.8	11.0	13.4	7.1	24.7	1.1
Secondary incomplete	328	30.5	10.4	15.9	9.5	10.7	22.6	0.6
Secondary+	137	16.8	26.3	21.2	16.8	10.9	7.3	0.7
Wealth quintile								
Lowest	260	45.8	7.7	6.9	9.6	6.9	22.7	0.4
Second	269	44.6	7.4	8.2	9.3	7.1	22.7	0.7
Middle	295	32.9	7.8	10.5	9.5	12.2	25.1	2.0
Fourth	294	35.0	9.2	12.9	9.9	8.2	23.1	1.7
Highest	304	28.6	14.8	18.8	14.1	7.6	15.5	0.7
Upazila								
Barhatta	281	49.1	7.5	8.2	9.3	11.0	14.2	0.7
Durgapur	229	15.7	15.7	24.5	14.8	7.4	20.1	1.7
Kalmakanda	444	37.6	10.1	7.2	7.7	7.9	28.8	0.7
Kendua	468	39.5	7.1	11.8	12.0	7.9	20.3	1.5

*Trained provider means qualified doctors, nurses, midwives, paramedics (FWVs, SACMOs, Mas) and Community Skilled Birth Attendant (CSBAs).

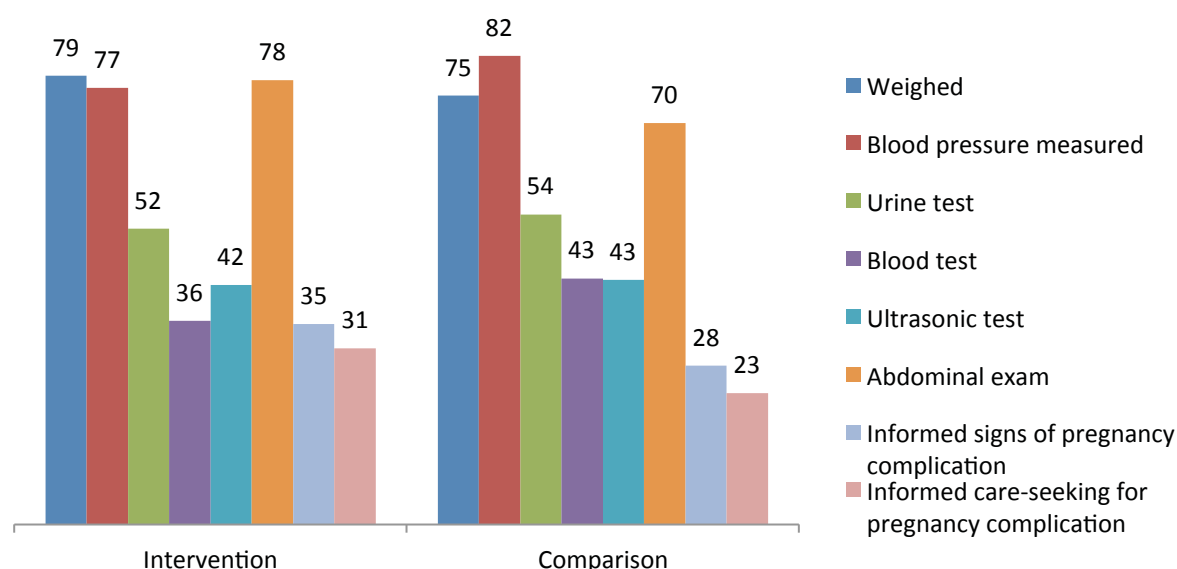
4.1.4. Specific procedures performed and services received during antenatal care visits

The government of Bangladesh provides detailed guidelines for antenatal care and recommends the following minimal clinical procedures: blood pressure measurement, urine testing for proteinuria, weight measurement, and blood testing. In addition the services also include educating women on signs of pregnancy complication and care seeking. Figure 4-4 presents information on the percentage of women who received these routine antenatal care services.

Overall, physical procedures such as abdominal examination and weight measurement and blood pressure measurement were more commonly reported by the respondents compared to other procedures that required complex equipment and laboratory tests. In addition, around one-third

respondents were also informed of the signs of pregnancy complication and its management. Detailed information on these services are provided in Annex 2.2.1

Figure 4-4: Percentage of women who received specific services received at any time during their antenatal checkup, Endline survey 2014



Overall, 64 percent of women received iron-folic acid tablets any time during their last pregnancy (69 percent in intervention vs, 58 percent in comparison areas) which has increased from baseline (44 percent in intervention vs. 37 percent in intervention). However, only 34 percent of the women in intervention areas consumed iron-folic acid tablets for at least three months compared to 31 percent in comparison areas. Again, at endline, the proportion of women who had consumed iron folate for more than 3 months were higher than baseline (18 percent in intervention vs. 15 percent in comparison areas) More details by background characteristics are presented in Annex 2.2.2

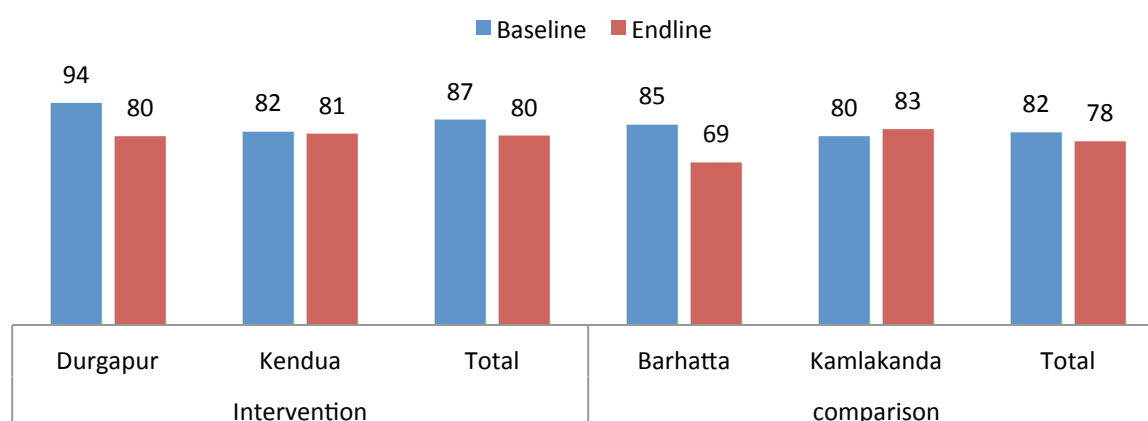
A little above 88 percent of the respondents received at least one TT vaccination before their last pregnancy outcome (Table 4-5). Two or more TT vaccinations were received before the last pregnancy outcome by 80 percent of women in intervention and 78 percent in comparison area. This percentage was highest for Kalmakanda (83 percent) and lowest for Barhatta (69 percent). The proportion who had received two doses of TT vaccination rises from 69 percent of women with no education to 87 percent for women with secondary or higher education. Similar findings are seen for women belonging to wealthier households (Table 4-5).

Table 4-5: Among women aged 15-49 who had a live birth or still birth in the year preceding the survey the percentage who received Tetanus Toxoid (TT) injections by area, upazila and background characteristics, Endline survey 2014

Background	Number of women N	Number of TT injections			
		None %	One injection %	Two or more injections %	Don't know/ Missing %
Total	1,422	10.7	8.9	79.0	1.2
Study area:					
Intervention	697	9.3	8.5	80.2	1.6
Comparison	725	12.0	9.2	77.8	0.8
Upazila:					
Barhatta	281	16.4	12.8	69.0	1.8
Durgapur	229	7.4	10.5	79.5	1.7
Kalmakanda	444	9.2	7.0	83.3	0.2
Kendua	468	10.3	7.5	80.6	1.5
Mothers education					
No education	369	15.7	13.6	69.4	0.8
Primary incomplete	305	11.1	6.6	81.0	1.3
Primary complete	283	10.6	9.2	78.4	1.1
Secondary incomplete	328	6.4	7.0	85.1	1.5
Secondary complete +	137	6.6	5.1	86.9	1.5
Wealth quintile					
Lowest	11.9	11.2	76.5	0.4	0.0
Second	10.4	8.9	79.6	0.7	0.4
Middle	12.5	9.5	75.6	1.7	0.7
Fourth	8.8	7.5	82.0	1.7	0.0
Highest	9.9	7.6	80.9	1.3	0.3

Figure 4-5 compares the changes in the coverage of TT (at least two injections). The figure shows that the proportion of women who reported have received at least 2 TT vaccinations is lower than that of the baseline. The rich to poor ratio for those who received two or more two TT vaccinations were similar in both intervention and comparison areas at baseline and endline (Annex 3).

Figure 4-5: Percentage of women aged 15-49 who had a live birth or still birth in the year preceding the survey received two or more Tetanus Toxoid (TT) injections by area, upazila, and survey year



4.1.5. Quality of antenatal care

The percentage of women receiving quality antenatal care from a skilled provider during her last pregnancy in the one year preceding the survey was only around 5 and 1 percent in the intervention and comparison areas respectively (Table 4-6). Quality antenatal care was defined as women who had received at least 4 ANC visits from medically trained providers and had received all necessary services (blood pressure measurement, urine testing for proteinuria, weight measurement, blood testing) and advices (danger sign of pregnancy complications and its management).

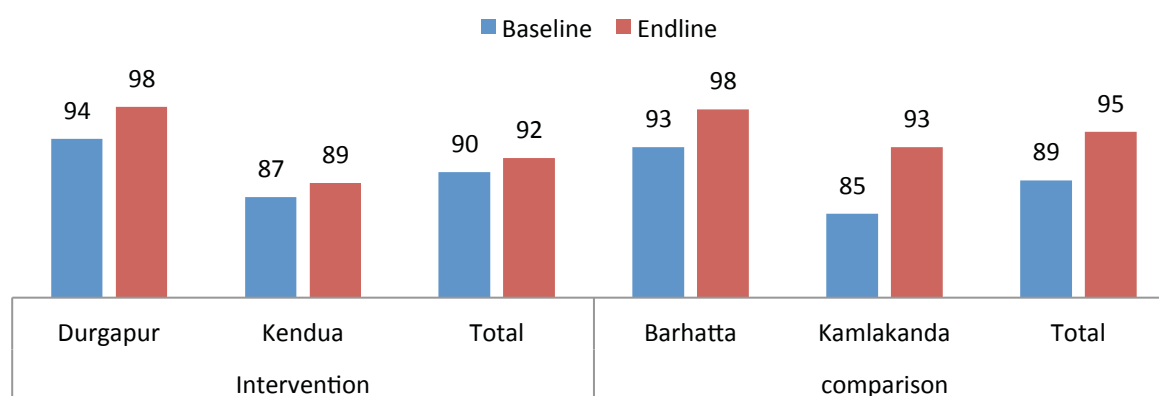
Table 4-6: Percentage of women aged 15-49 with a live or still birth in the year preceding the survey who had received quality antenatal care by area, Endline survey 2014

	Intervention	Comparison	Total
N	697	725	1,422
Received 4+ ANC visits from medically trained providers	13.6	5.8	9.6
Received necessary services			
Blood pressure measurement	76.5	82.1	79.1
Urine testing for proteinuria	51.8	54.3	53.0
Weight measurement	78.6	75.1	77.0
Blood testing	35.7	43.1	39.2
Received advices			
Danger sign of pregnancy complications	35.1	27.8	31.6
Management of pregnancy complication	30.9	23.0	27.2
Quality antenatal care	4.9	1.0	3.0

4.1.6. Birth preparedness

Women in this survey were asked what preparations they had taken for the delivery of their child. These included determining a place of and the attendant for the delivery, arranging transport and money for emergency, buying a delivery kit and arranging two pieces of cloth for wiping and wrapping the child immediately after birth. Figure 4-6 shows that 89-98 percent of women had taken at least two preparation measures before the birth of their child at endline which has increased from baseline (87-94 percent)

Figure 4-6: Among women aged 15-49 with a live or still birth in the year preceding the survey, the percentage of women with at least two birth preparations during last pregnancy, by area, upazila, and survey year



Among those women who had a birth preparedness plan, the majority had determined the place of delivery (86 percent in intervention vs. 83 percent in comparison), attendant at delivery (75 percent in intervention vs. 84 percent in comparison) (home delivery) and had arranged for two pieces of cloth for wiping and wrapping child (85 percent in intervention vs. 91 percent in comparison (Annex 2.2.3). Around half respondents had also saved money whereas arranging transport for emergency was negligible (18 percent) (Annex 2.2.3).

4.2. Delivery care

Maternal mortality continues to remain unacceptably high in Bangladesh. Proper medical attention as well as hygienic conditions during delivery time can reduce the risk of infection and complications and increase the timeliness of effective management of obstetric emergencies. Hence, it is important that deliveries be conducted in safe environment guided by skilled providers. This section discusses the place of delivery, type of assistance during delivery and the use of a clean delivery kit. The results are based on data obtained from mothers who have had a live or still birth in the year preceding the survey.

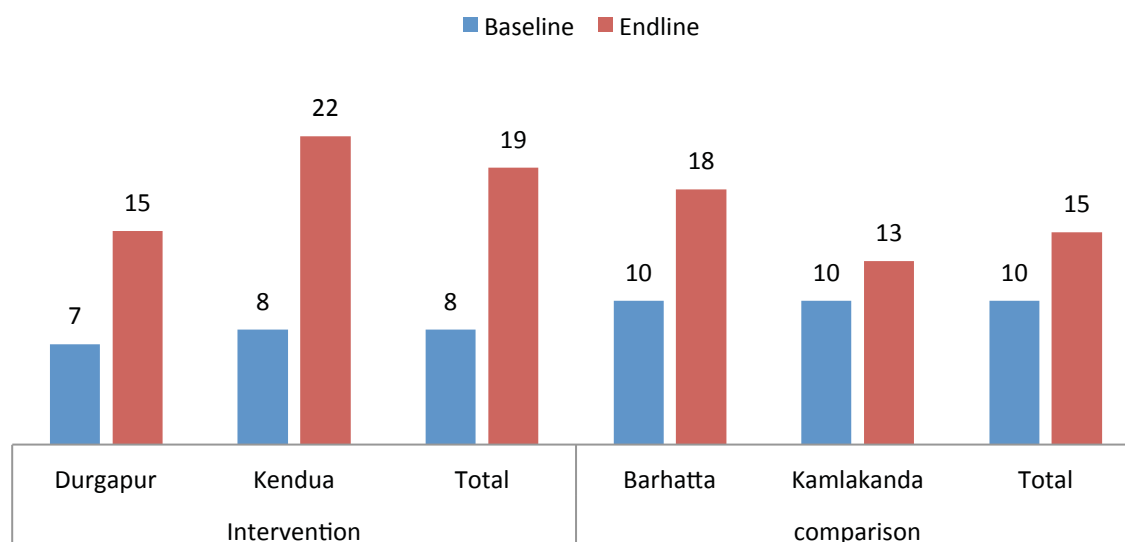
4.2.1. Place of delivery

Deliveries most commonly took place at home in both intervention (78 percent) and comparison (84 percent) areas. About 9 percent of the deliveries took place in government health facilities (hospitals, upazila health complexes, maternal and child welfare centers, or union health and family welfare centers) in both intervention and comparison areas; and about 8 percent of the deliveries occurred in private hospitals or clinics in both intervention and comparison areas (Table 4-7). Facility deliveries were highest in Kendua (22 percent) and the lowest in Kalmakanda (13 percent) (Figure 4-5). Delivery in a facility was more common among women with secondary or higher education (46 percent), and women in the wealthier households (33 percent) (Table 4-9). Overall, facility deliveries have increased from baseline, and again the increase is more than double in intervention areas whereas it is only 1.5 times in comparison areas.

Table 4-7: Percentage distribution of women aged 15-49 who had a live birth or still birth in 2 years preceding the survey by place of delivery according to area, Endline survey 2014

	Intervention	Comparison	Total
Number of births	697	725	1,422
Delivery at home	77.9	84.3	81.2
Delivery at health facility	19.3	14.8	17.0
<i>GoB</i>	11.3	7.2	9.2
<i>Private/NGO</i>	8.0	7.6	7.8
Other places	2.7	1.0	1.8

Figure 4-7: Percentage of facility deliveries in women aged 15-49 who had a live birth or still birth in the year preceding the survey by area, upazila, and survey year



4.2.2. Assistance during delivery

Table 4-8 shows the types of persons providing assistance during delivery for all live and still births in the year preceding the survey. About 76 percent of the deliveries were assisted by un-skilled providers, mostly by 'friends or relatives', which accounted for 50 and 47 percent of deliveries in the intervention and comparison areas respectively. On average only 19 percent of the deliveries were assisted by a skilled provider, and where in this case deliveries were mostly conducted by doctors, nurses and paramedics. The community skilled birth attendants (CSBAs) contributed to less than 1 percent to the pool of deliveries by skilled attendants. Skilled attendance at delivery was highest in Kendua (24 percent) and lowest in Kamlakanda (14 percent) (Figure 4-8). Higher education and socioeconomic status was associated with assistance by skilled providers during delivery (Figure 4-9).

Figure 4-8 also shows that skilled attendance at delivery has increased substantially in the intervention areas from 9 percent to 22 percent. The increase in comparison areas is from 13 to 16 percent. The rich to poor ratio in skilled attendance at delivery intervention areas has decreased substantially from 12.9 at baseline to 3.4 at endline. In comparison areas this ratio has decreased from 7.2 at baseline to 2.3 at endline (Annex 3).

Table 4-8: Among women aged 15-49 who had a live birth or still birth in the year preceding the survey the percentage distribution by attendant according to area, Endline survey 2014

	Intervention	Comparison	Total
Number of births	697	725	1,422
Delivery by			
Skilled providers	21.9	15.7	18.7
Doctor	7.0	8.1	7.6
Nurse/midwives	3.9	2.9	3.4
MA/SACMO	0.0	0.0	0.0
FWV	0.0	0.3	0.1
CSBA	0.1	0.1	0.1
Unidentified	10.9	4.3	7.5
Unskilled providers	71.9	79.6	75.9
TTBA	13.9	12.0	12.9
TBA	7.7	20.6	14.3
Family/Friends and relatives	50.2	47.0	48.6
Others	0.1	0.0	0.1
No one	5.9	4.4	5.1
Don't know/missing	0.1	0.3	0.2
Total	100.0	100.0	100.0

Figure 4-8: Among women aged 15-49 who had a live birth or still birth in the year preceding the survey the percentage of deliveries conducted by skilled attendants for birth outcomes (live /still) by area, upazila, and survey year

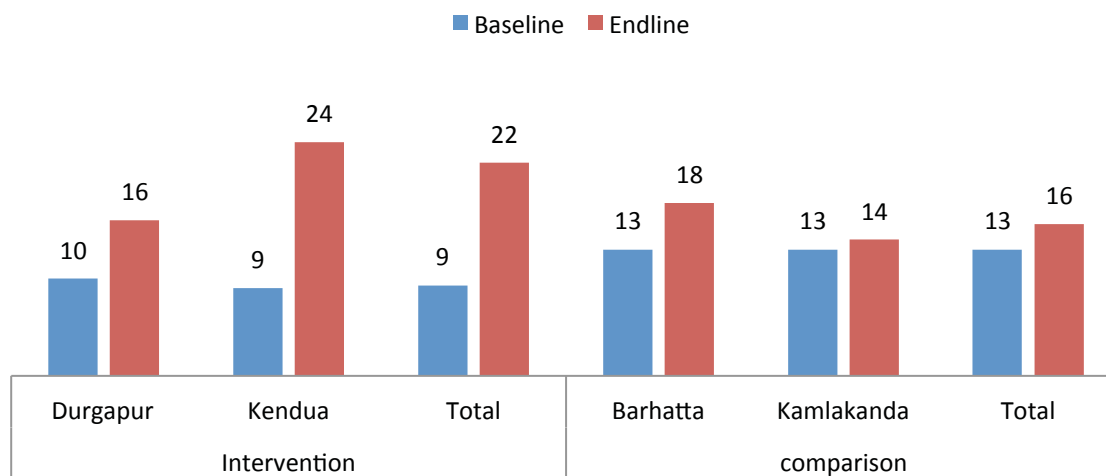
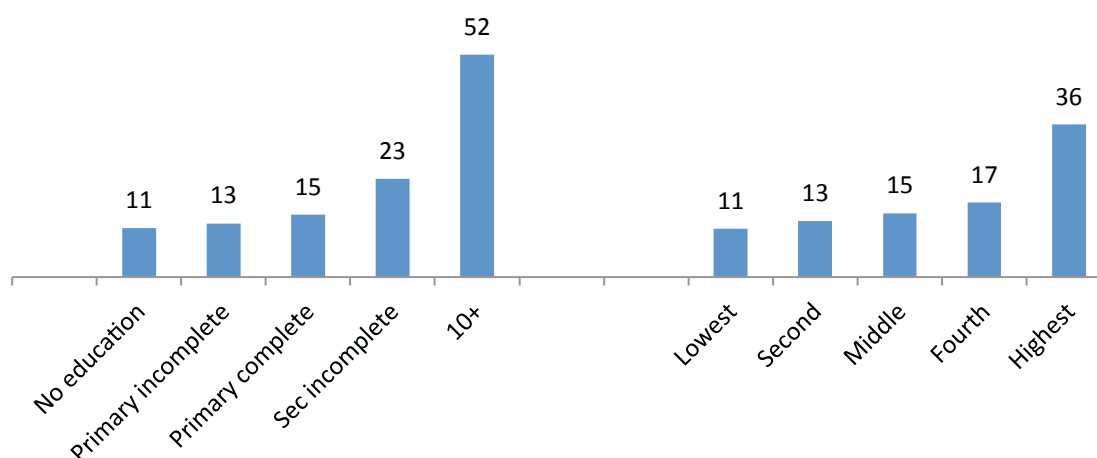


Table 4-9: Percent distribution of facility and home deliveries for the birth outcomes (live /still) in the year preceding the survey among women aged 15-49 by area, upazila and background characteristics, Endline survey 2014

Area/Upazilas	Number of births	Facility delivery			Home Deliveries			Other
		Total	GoB	Private	Total	Skilled provider	Unskilled provider	
Total	1,422	17.0	9.2	7.8	81.2	1.5	74.5	1.8
Area								
Intervention	697	19.3	11.3	8.0	77.9	2.2	70.2	2.7
Comparison	725	14.8	7.2	7.6	84.3	0.8	78.8	1.0
Upazila								
Barhatta	281	17.8	8.2	9.6	81.1	0.4	71.9	1.1
Durgapur	229	14.9	7.9	7.0	81.2	0.9	79.5	3.9
Kalmakanda	444	12.8	6.5	6.3	86.3	1.1	83.1	0.9
kendua	468	21.5	13.0	8.5	76.3	2.8	65.6	2.1
Age group								
15-19	75	28.0	17.3	10.7	70.7	1.3	62.7	1.3
20-24	506	18.2	9.7	8.5	80.4	1.6	74.7	1.4
25-29	481	15.8	8.9	6.9	81.5	1.2	74.6	2.7
30-34	251	14.8	7.2	7.6	83.7	1.6	76.5	1.6
35-39	79	12.6	6.3	6.3	86.1	1.3	79.7	1.3
40-44	26	15.3	3.8	11.5	84.6	3.8	73.1	0.0
45-49	4	50.0	50.0	0.0	50.0	0.0	50.0	0.0
Mother's education								
No education	369	9.2	5.4	3.8	88.6	1.9	78.9	2.2
Primary incomplete	305	12.1	7.5	4.6	86.9	0.3	83.9	1.0
Primary complete	283	12.3	8.1	4.2	85.5	1.8	76.7	2.1
Secondary incomplete	328	22.3	12.2	10.1	76.2	0.6	72.3	1.5
Secondary +	137	45.9	18.2	27.7	51.1	4.4	43.1	2.9
Wealth quintile								
Lowest	260	10.0	7.7	2.3	88.5	1.2	80.4	1.5
Second	269	12.2	6.3	5.9	87.0	0.7	78.8	0.7
Middle	295	12.9	7.1	5.8	85.1	1.4	79.0	2.0
Fourth	294	14.9	9.5	5.4	82.3	2.0	75.5	2.7
Highest	304	33.2	14.8	18.4	64.8	2.0	60.5	2.0

Figure 4-9: Percentage of women delivered by skilled attendants in the year preceding the survey by women education and household wealth quintile, Endline survey 2014



4.2.3. Active management of the third stage of labour (AMTSL)

The third stage of labour, after the completed delivery of the fetus till the completed delivery of the placenta, is a period where significant complications can occur leading to high morbidity and mortality. Active management of this stage includes administering a prophylactic uterotonic, gentle cord traction and uterine massage after delivery of placenta. Table 4-10 shows that AMTSL was practiced in only 4 percent of the deliveries in the intervention areas which is only a 3 percentage point increase from the baseline.

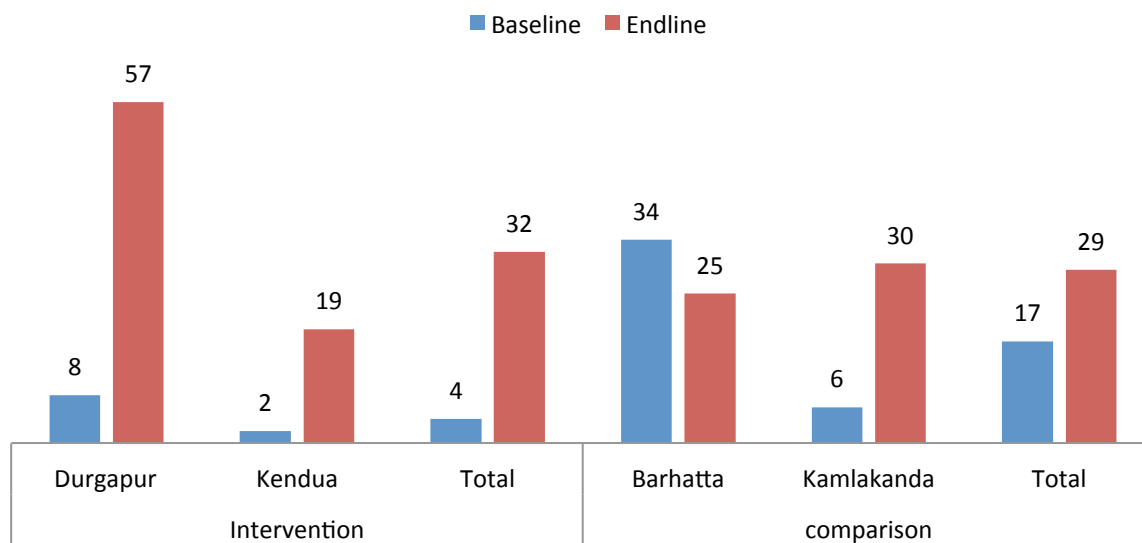
Table 4-10: Among women aged 15-49 who delivered in the year preceding the survey, the percentage with AMTSL by area, Endline survey 2014

	Intervention	Comparison	Total
Number of deliveries	697	725	1,422
AMTSL	3.6	2.3	3.0
Uterotonic drug injection	9.5	6.9	8.2
Controlled cord traction	33.4	33.8	33.6
Uterine massage after delivery of placenta	30.7	34.6	32.7

4.2.4. Use of clean delivery kit

A clean delivery kit was used in only 32 and 29 percent of home deliveries in intervention and comparison areas respectively (Figure 4-10). Usage of a clean delivery kit was highest in Durgapur (57 percent) and lowest in Kendua (19 percent) (Figure 4-10). The intervention areas increased by eight times the baseline (from 4 percent at baseline to 32 percent at endline) while the comparison areas nearly doubled(17 percent at baseline to 29 percent at endline).

Figure 4-10: Percentage of home deliveries in the year preceding the survey where a clean birth kit was used, by area, upazila and survey year



4.3. Postnatal care

Postnatal care and checkups are recognized as an essential component of maternal and newborn care. The 2014 KPC endline survey assessed the utilization of postnatal care for the most recent birth among women who had delivered in the two years preceding the survey. Interviewers asked each mother if she and her child had received a health checkup after delivery, when this check occurred and what type of health provider was used.

4.3.1. Postnatal care for mothers

Table 4-11 presents the distribution of women who received postnatal care for all live and still births after January 01, 2013. The coverage of postnatal care is still low, and only 27 percent of women (32 percent in intervention vs. 22 percent in comparison areas) received any postnatal care. The proportion of women who received postnatal care from medically trained providers was 17-23 percent in the survey areas, the majority of whom received this care within 2 days of delivery. Further details by demographic and socio-economic characteristics are presented in Annex 2.2.4. Younger, women who had completed secondary or higher studies and women from the top wealth quintile were more likely than other women to receive postnatal care from a medically trained provider within two days of delivery.

Table 4-11: Among women age 15-49 giving birth (live/still) in the past one year preceding the survey the percentage receiving postnatal care and by type of providers and timing* of visit according to area, Endline survey 2014

	Intervention	Comparison	Total
N (Number of births)	697	725	1,422
Received any postnatal care from any provider	32.4	21.5	26.9
Received postnatal care from a medically trained provider**	23.0	16.5	19.8
<u>By type of trained provider</u>			
- MBBS	9.2	5.8	7.5
- Nurse/midwife	3.0	0.8	1.9
- Paramedic/MA/SACMO	0.0	0.1	0.1
- FWV	0.1	0.1	0.1
- CSBA	0.4	0.0	0.2
- Unidentified	10.3	9.7	10.0
<u>By timing (for trained provider)</u>			
- <1day of delivery	16.2	13.8	15.0
- 1-<2 days of delivery	2.3	1.4	1.8
- 2-6 days of delivery	1.0	0.4	0.7
- 1-3 weeks of delivery	1.4	0.7	1.1
- 4-6 weeks of delivery	0.1	0.1	0.1
Other Health worker	2.4	1.7	2.0
Untrained provider	6.6	3.3	4.9
Don't know	0.3	0.0	0.1
No PNC	67.6	78.5	73.1
Total	100.0	100.0	100.0

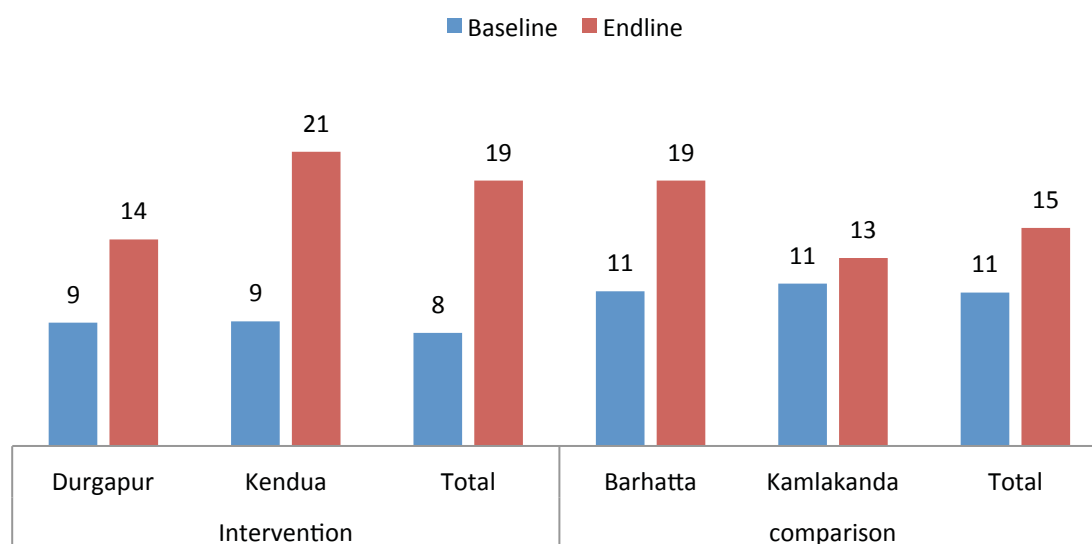
* All deliveries in health facilities are assumed to have received a postnatal care from a medically trained provider within 1 day of delivery

** Medically trained provider means Doctor, Nurse/ midwives, Paramedics, FWV or CSBA

***: If PNC received from more than provider only the most qualified provider is considered

Figure 4-11 shows that there is an increase in the proportion of women who received postnatal care from a medically trained provider within two days of delivery, and the increase is more in the intervention areas. Overall, in intervention areas the increase is nearly double of the baseline percentages. For those who received postnatal care from a medically trained provider within two days of delivery, there has been substantial decrease in rich to poor ratio in intervention areas (23.8 at baseline to 3.6 at endline) compared to comparison areas (9.1 at baseline to 2.2 at endline) (Annex 3).

Figure 4-11 Among women age 15-49 giving birth (live/still) in the past one year preceding the survey the percentage receiving postnatal care within two days of delivery from a medically trained provider by area, upazila, and survey year



4.3.2. Postnatal care for newborns

Table 4-12 shows the proportion of newborns who received postnatal care. On average 17 percent of most recent live births in the year preceding the survey received postnatal care from a medically trained provider within two days of birth. Infants of younger, women who had completed secondary or higher studies and women from the top wealth quintile were more likely to receive postnatal care from a medically trained provider within two days of delivery than infants born to other women (Annex 2.2.5).

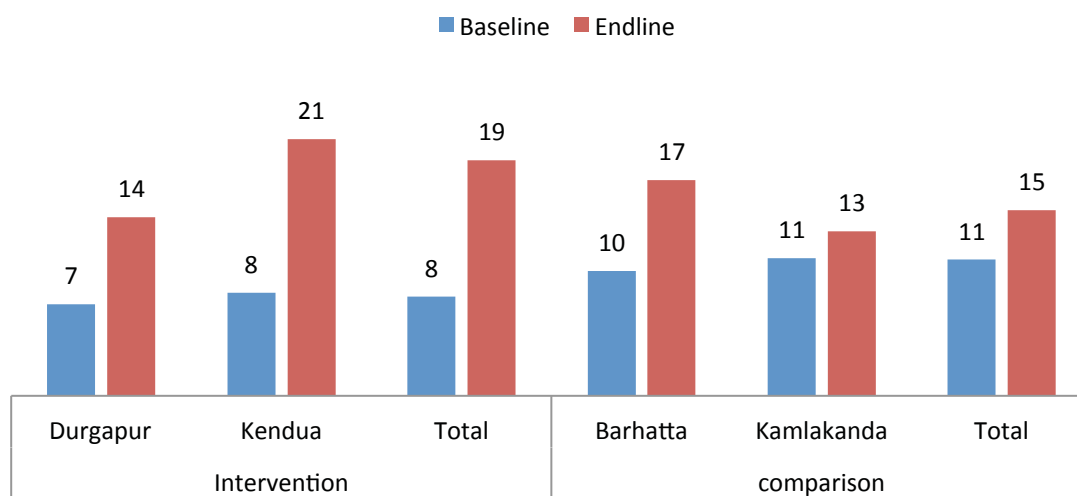
Table 4-12: Among child births in the past year preceding the survey the percentage of newborns receiving postnatal care and by type of providers and timing* of visit according to area, Endline survey 2014

	Intervention	Comparison	Total
N (Number of live births)	669	712	1,381
Newborn received postnatal care from any provider	32.1	20.5	26.1
Newborn received postnatal care from a medically trained provider**	21.9	17.0	19.5
By type of trained provider			
- MBBS	9.3	6.9	8.1
- Nurse/midwife	3.6	1.4	2.5
- Paramedic/MA/SACMO	0.0	0.1	0.1
- FWV	0.0	0.1	0.1
- CSBA	0.3	0.0	0.1
- Unidentified	8.7	8.5	8.6
By timing (for trained provider)			
- <1day of birth	15.2	12.6	13.8
- 1-<2 days of birth	3.5	2.4	2.9
- 2-6 days of birth	1.1	0.6	0.8
- 1-3 weeks of birth	0.6	0.8	0.7
- 4-6 weeks of birth	0.0	0.4	0.2
Other Health worker	3.8	1.4	2.5
Untrained provider	6.3	2.0	4.1
Don't know	0.3	0.1	0.2
No PNC	67.6	79.4	73.7

** All deliveries in health facilities are assumed to have received a postnatal care from a medically trained provider within 1 day of delivery **Trained provider means Doctor, Nurse/ midwives, Paramedics, FWV or CSBA *** If PNC received from more than provider only the most qualified provider is considered.

According to Figure 4-12, postnatal care for newborns from a medically trained provider within two days of delivery has doubled in intervention areas compared to an increase by four percentage points in comparison areas.

Figure 4-12 Among child births in the past year preceding the survey the percentage of newborns receiving postnatal care within two days of delivery from a medically trained provider by area, upazila, and survey year



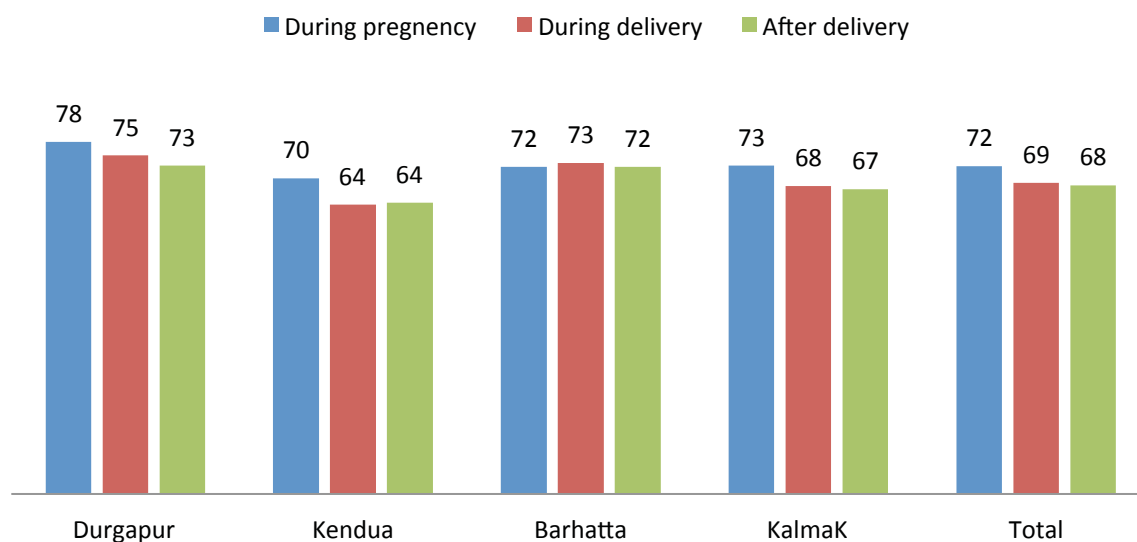
4.4. Maternal health problems and care seeking behavior

During the endline KPC survey the interviewers collected information from all mothers who had a birth in the year preceding the survey on complications during antenatal period, during delivery, and during postnatal period and related treatment-seeking behavior. This section summarizes key findings on maternal complications and care seeking.

4.4.1. Women's knowledge on maternal danger signs

The endline survey findings show that 68 percent of the respondents are aware of at least two danger signs during pregnancy, delivery or postnatal period (Figure 4-13). The awareness was highest among women of Durgapur.

Figure 4-13: Percentage of women age 15-49 who mentioned at least 2 danger signs during pregnancy, during delivery or after delivery by upazila, Endine survey 2014



4.4.2. Maternal complications faced and treatment seeking behaviour

Among the women who had live births or stillbirths, 37 percent reported at least one complication at any time during antenatal period, during delivery or after delivery. Complications were most common during the antenatal period (28 percent) and least common after delivery (10 percent) (Figure 4-14).

Figure 4-14: Percentage of women age 15-49 who reported any complication during pregnancy, during delivery and after delivery for all live or still births in the year preceding the survey, Endline survey 2014

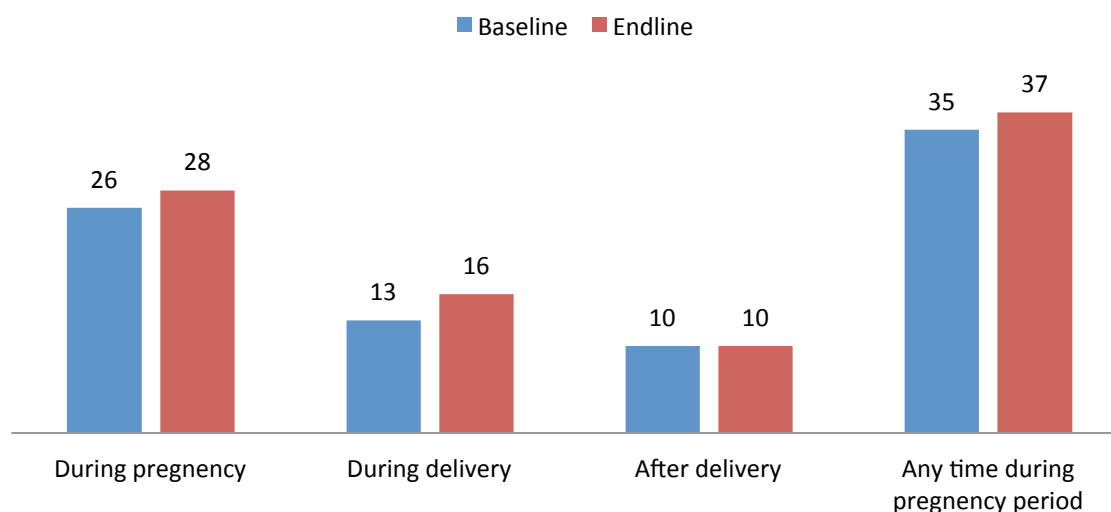


Table 4-13 presents information on the complications faced by them during antenatal, delivery and after delivery. The most commonly reported complications were blurred vision with severe headache, followed by edema, prolonged labour, convulsion, excessive vaginal bleeding, high blood pressure and premature membrane rupture. Regarding care seeking for complications, around 26-40 percent of the respondents did not seek care for the complications faced during any time (Table 4-14). However, overall care seeking from medically trained provider was highest for postnatal complications (Table 4-14). One-fifth to half of the respondents also sought care from unqualified providers for complication at any period.

Table 4-13: Percentage of women who reported complication during antenatal period, during delivery and after delivery for all live or still birth in the year preceding the survey by area, Endline survey 2014

	During pregnancy		During delivery		After delivery		At any time	
	Int	Comp	Int	Comp	Int	Comp	Int	Comp
N	697	725	697	725	697	725	697	725
Blurred vision with severe headache	18.5	15.4	2.2	2.5	4.0	3.4	21.7	18.5
Convulsion/ fits/ eclampsia	2.4	3.4	1.9	2.1	4.0	2.3	7.2	7.2
High BP	8.0	4.1	1.0	1.1	1.7	1.4	9.6	5.1
Excessive vaginal bleeding	2.0	1.2	2.4	1.2	2.6	1.8	6.2	4.0
Not delivered within 6 hours of membrane rupture	3.2	2.5	na	na	na	na	3.2	2.5
Delivery of body parts other than head	na	na	1.4	1.0	na	na	1.4	1.0
Prolonged labour	na	na	8.9	8.4	na	na	8.9	8.4
Retained placenta	na	na	1.3	1.2	0.9	0.1	2.2	1.4
Bad smelling vaginal discharge with fever	na	na	na	na	0.6	0.7	0.6	0.7
Edema	6.0	9.1	2.0	2.2	1.0	1.0	7.7	10.2

Table 4-14: Percentage distribution of care-seeking practices for reported complications among women who had a complication during antenatal period, during delivery or after delivery for all birth (live/still) in the years preceding the survey by area, Endline survey 2014

	Antenatal period		During delivery		After delivery	
	Intervention %	Comparison %	Intervention %	Comparison %	Intervention %	Comparison %
Any complication (N)	202	190	112	111	76	65
Did not seek care	37.1	40.0	38.4	33.3	26.3	27.7
Sought care from medically trained provider	37.6	27.4	40.2	22.5	43.4	23.1
Sought care from health worker	5.0	3.2	1.8	3.6	0.0	0.0
Sought care from other unqualified provider	20.3	29.5	19.6	40.5	30.3	49.2
Total	100.0	100.0	100.0	100.0	100.0	100.0

4.5. Household expenditure for maternal health

The household average out of pocket expenditure for all ANC care was Tk 1126 (Table 4-15). This expenditure was higher in the intervention area than the comparison area (Tk 1158 vs Tk 1090). Among the different upazilas, ANC cost was highest in Barhatta upazila (Tk 1522) and lowest in Kendua upazila (Tk 847) (Annex 2.2.6). Mean diagnostic cost (Tk 344) was the highest cost for ANC care followed by mean transportation & drug cost of Tk 256 (Annex 2.2.6).

For institution delivery, on average the people of this area spent Tk 11277 (Table 4-15). The mean expenditure related to institutional delivery was higher in the intervention area (Tk 11604) compare to comparison area (Tk 10832). On average the household spent Tk 4167 for delivery related hospital related cost, followed by Tk 1699 for transport cost (Annex 2.2.7). The other important cost items are drug cost and admission cost which were on average Tk 1371 and Tk 984 respectively (Annex 2.2.7).

The household also incurs a substantial amount of money for home delivery. On average the household incurs Tk 1099 for home delivery (Table 4-15). The mean expenditure related to home delivery was higher in the intervention area (Tk 1212) compare to comparison area (Tk 1002) (Annex 2.2.8).

The household average out of pocket expenditure for PNC care was Tk 679 (Table 4-15). This expenditure was almost similar in the intervention and comparison area (Tk 197 vs Tk 193). Among the different upazilas, PNC cost was highest in Kalmakanda upazila (Tk 828) and lowest in Barhatta upazila (Tk 596) (Annex 2.2.9). Mean drug cost (Tk 223) incurs the highest cost for PNC care followed by mean transportation cost of Tk 153 (Annex 2.2.9).

The household average out of pocket expenditure for care for complications was Tk 392. This expenditure was higher in the comparison area than in the intervention area (Tk 431 vs Tk 361). Among the different upazilas, cost for complications was highest in Barhatta upazila (Tk 482) and lowest in Durgapur upazila (Tk 286) (Annex 2.2.10). Mean consultation cost (Tk 114) incurs the highest cost followed by mean drug cost (Tk 80) (Annex 2.2.10).

Table 4-15: Household out-of-pocket expenditure for ANC, Delivery, PNC care and complications per area in TK, Endline survey 2014

	Intervention	Comparison	Total
For Antenatal care (N)	240	208	448
Average expense in BDT	1157.6	1090.3	1126.4
For Institutional delivery	68	50	118
Average expense in BDT	11,603.9	10,832.4	11,277.0
For home delivery	267	309	576
Average expense in BDT	1211.7	1001.7	1099.1
For postnatal care	80	52	132
Average expense in BDT	657.2	712.0	678.8
For complications	93	74	167
Average expense in BDT	361.1	431.1	392.1

Note: The cost is adjusted for the inflation rate

Section 5: NEONATAL HEALTH

5.1. Neonatal care practices

This section presents data on neonatal care practices for all live births in the year preceding the survey. Mothers were asked about drying, wrapping, first bathing, clean cord care and cord cutting practices of the newborn.

5.1.1 Drying and wrapping of newborn

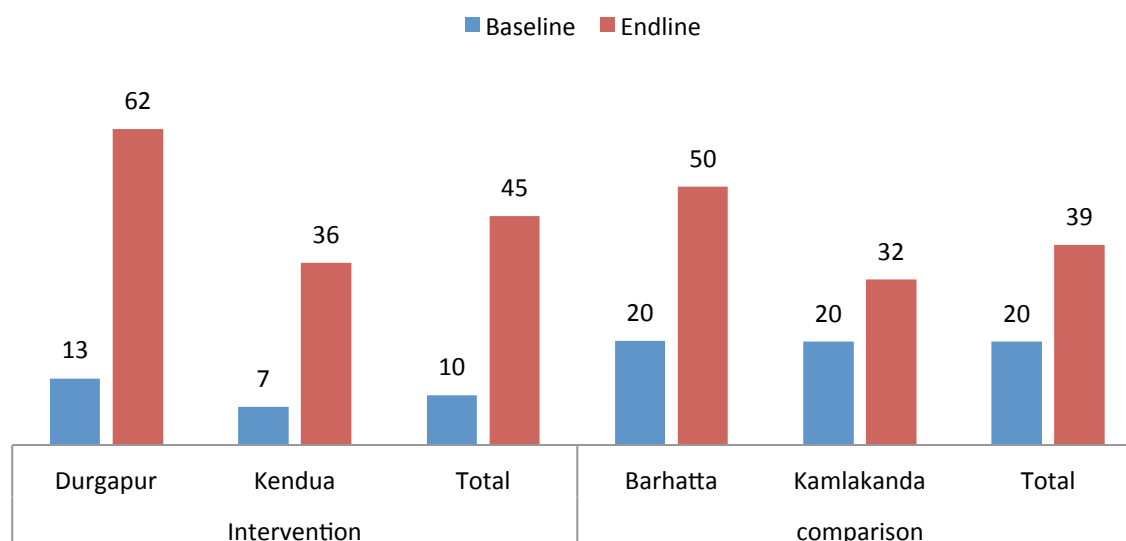
To reduce the risk of hypothermia, it is recommended that a newborn be dried and wrapped immediately after birth and before the delivery of placenta. Table 5-1 shows the percent distribution of the newborns by the timing of drying and wrapping. Mothers of children age 0-5 and 0-11 months were asked if their newborns were dried and wrapped before the delivery of the placenta or not and the possible time after birth. This analysis was restricted to those newborns who were delivered at home. The results show that among children born preceding the survey 51 percent of the newborns born in the year preceding the survey in intervention and 42 percent in comparison areas were dried before the delivery of placenta (Table 5-1).. Table 5-1 also presents information on thermal care (both drying and wrapping) of the children born in the past five months and one years preceding the survey. Results show that around 41 percent of children born in the year preceding the survey (45 percent in intervention vs. 39 percent in comparison areas) were both dried and wrapped before the delivery of placenta.

Table 5-1: Percent distribution of children age 0-5 and 0-11 months delivered at home by timing of drying and wrapping after birth according to area, Endline survey 2014

	Children aged 0-5 months			Children aged 0-11 months		
	Intervention	Comparison	Total	Intervention	Comparison	Total
N (Home delivery, live births)	246	292	538	526	604	1,130
Immediate drying	47.6	40.1	43.5	51.3	42.2	46.5
Immediate wrapping	48.0	45.2	46.5	52.5	47.8	50.0
Thermal care (Immediate drying and wrapping)	40.2	36.6	38.3	44.7	39.1	41.7

Figure 5-1 shows the changes in the proportion of newborns, born in the 1 year preceding the surveys who received thermal care as define above and shows that it has quadrupled in intervention areas (10 percent at baseline vs 40 percent at endline) and doubled in comparison areas (20 percent at baseline vs 39 percent at endline).

Figure 5-1 Percentage of children aged 0-11 months (home delivery) who received thermal cares (immediate drying and wrapping) by area, upazila, and survey year



5.1.2 First bathing of newborn

Table 5-2 presents information on timing of first bathing in newborns born past five months and one year preceding the survey. Giving the first bath to the newborn 72 hrs after birth was reported to be 46 percent in the intervention and 59 percent in the comparison area in children aged 0-11 months. Delaying the first bath of the newborn to after 72 hrs was highest in Barhatta (70 percent) and lowest in Kendua (43 percent) (Annex 2.3.2).

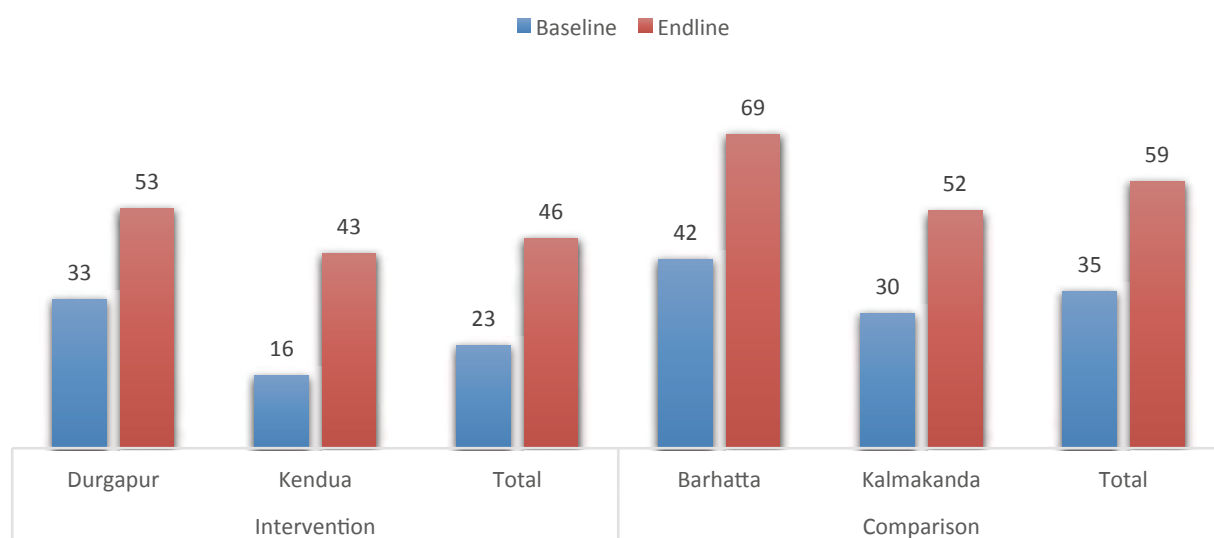
Among mothers with no education, only 51 percent of the newborns born in the one year preceding the survey were first bathed after 72 hours of birth, while this was 66 percent among women who have completed secondary or higher education (Annex 2.3.2). The practice of delaying the first bath also varied by socio-economic status of the mother. Only 52 percent of the mothers (of children born in one year preceding the survey) among the households with lowest socio-economic status first bathed the newborns after 72 hours of birth, while this was 64 percent among women in the highest socio-economic status. Annex 2.3.1 presents details information of first bathing practices in children born in 5 months preceding the survey.

The proportion of children 0-11 months with delayed bathing has increased over time. Overall, this has doubled in the intervention areas (23 percent at baseline vs. 46 percent at endline) and has increased by 1.7 times in the comparison areas (34 percent at baseline to 59 percent at endline) (Figure 5-2).

Table 5-2: Percent distribution of children aged 0-5 and 0-11 months by timing of first bathing according to area, Endline survey 2014

	Children aged 0-5 months			Children aged 0-11 months		
	Intervention	Comparison	Total	Intervention	Comparison	Total
N	307	338	645	669	712	1,381
Timing of first bathing						
- Within 24 hrs	22.1	13.9	17.8	21.4	17.6	19.4
- Within 24-48 hrs	11.7	11.8	11.8	14.6	11.5	13.0
- Within 48-72 hrs	6.8	6.8	6.8	6.6	7.2	6.9
- After 3 days / 72 hrs	48.2	61.8	55.3	46.3	58.8	52.8
- Not yet bathed	3.3	3.3	3.3	3.0	2.7	2.8
- Don't know	7.8	2.4	5.0	8.1	2.2	5.1

Figure 5-2: Percentage of children aged 0-11 months who received delayed bathing by area, upazila, and survey year



5.1.3 Cord care

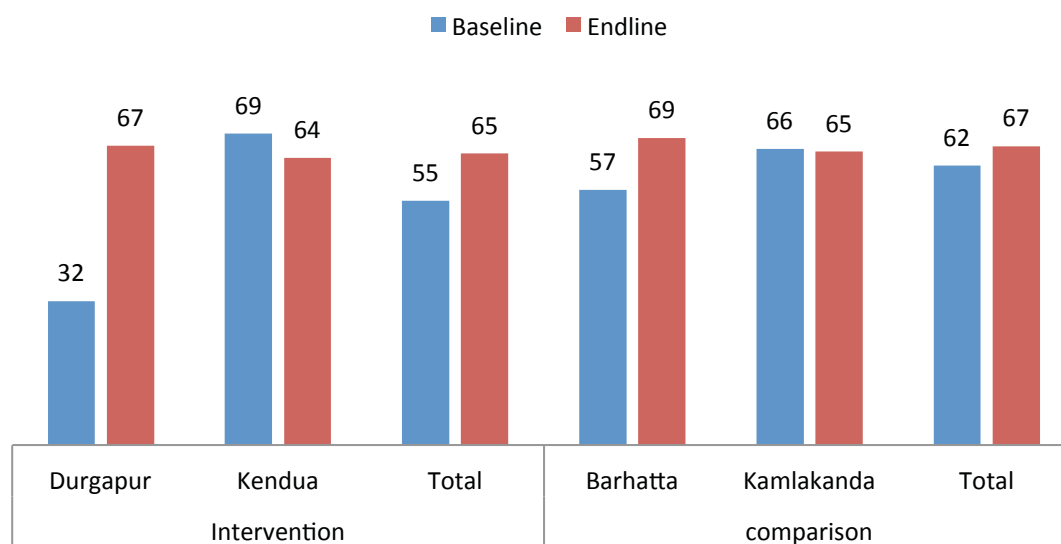
Unsterile and traditional instruments used for cord cutting and application of harmful materials on the cord are key sources of infection of the newborn. Two indicators, clean cord care and cord cutting were considered in order to understand practices of the mothers in this regard. Clean cord care was defined as the application of nothing or only antiseptic on the cord whereas clean cord cutting involved the use of boiled and sterile instruments or delivery kit blade to cut cord. The analysis of clean cord cutting was restricted to home deliveries only. Results in Table 5-3 show that more than half (65 percent) of respondents in intervention areas practiced clean cord care. This was slightly better for comparison areas (67 percent). Clean cord cutting was almost universal (96 percent) in all the areas. Variations in the indicators were not seen by education or wealth quintile.

Overall, the proportion of newborns with clean cord care increased by 10 percentage points in intervention areas (55 percent at baseline vs. 65 percent at endline) and by 5 percentage points in comparison areas (62 percent at baseline vs. 67 percent at endline) (Figure 5-3). Upazila wise the change varied (Figure 5-3).

Table 5-3: Percentage distribution of newborn with clean cord care and cord cutting (home delivery) by area, upazila and background characteristics

Background	Clean cord care		Clean cord cutting (Home delivery)	
	N	%	N	%
Total	1,381	65.8	1,130	95.5
Study area:				
Intervention	669	65.0	526	94.7
Comparison	712	66.6	604	96.2
Upazila:				
Barhatta	276	68.5	226	96.0
Durgapur	223	66.8	183	94.0
Kalmakanda	436	65.4	378	96.3
Kendua	446	64.1	343	95.0
Mothers education				
No education	359	66.0	319	95.9
Primary incomplete	298	65.8	261	95.0
Primary complete	267	69.3	235	94.5
Secondary incomplete	321	63.9	246	97.2
Secondary complete or +	136	63.2	69	92.8
Wealth quintile				
Lowest	254	71.3	226	95.6
Second	257	70.4	225	96.9
Middle	289	61.9	247	95.5
Fourth	286	67.5	238	94.1
Highest	295	59.3	194	95.4

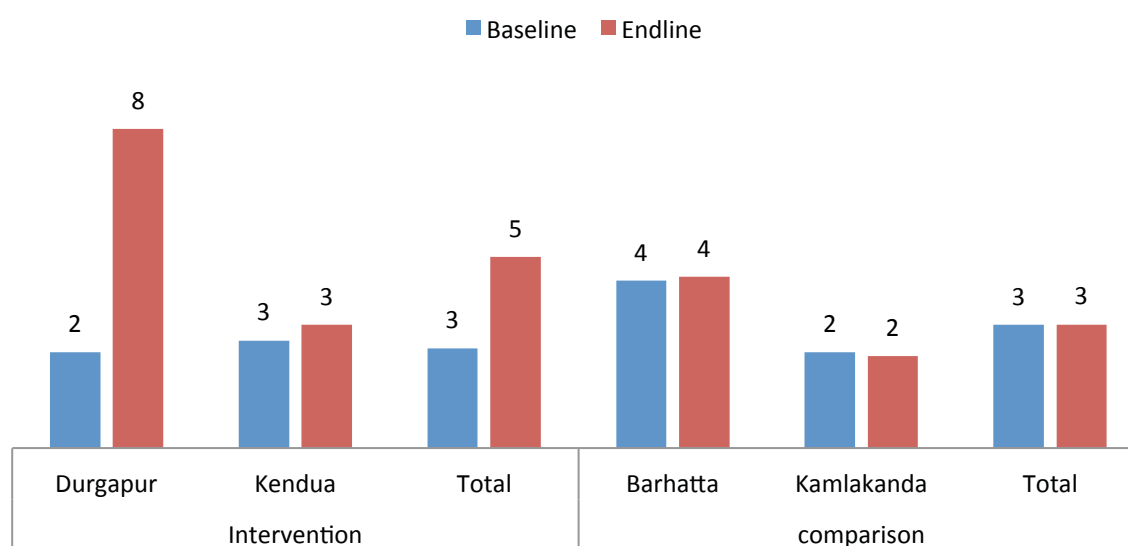
Figure 5-3 Percentage of newborns with clean cord care by area, upazila, and survey year



5.1.4 Prophylactic eye care

The KPC survey also collected information on children born in the year preceding the survey who had received appropriate preventive eye care within the first hour after birth. Results reveal that only 3-5 percent of children received preventive eye care within the first hour after birth (Figure 5-4).

Figure 5-4: Percentage of children 0-11 months who received prophylactic eye care within the first hour after birth according to area, upazila, and survey year



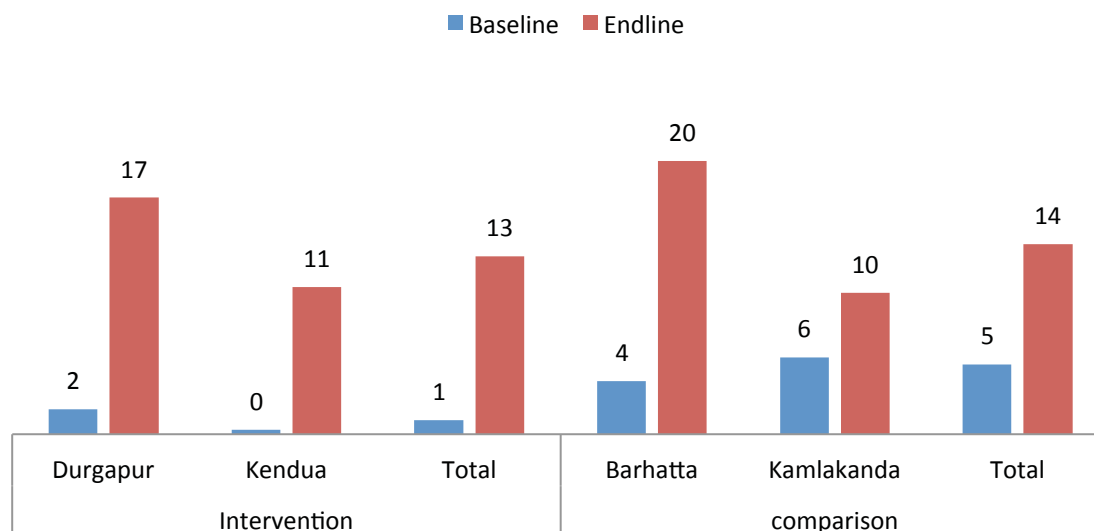
5.1.5 Essential newborn care

Table 5-4 presents information on children aged 0-5 months and children aged 0-11 months who received essential newborn care. A child is said to receive essential newborn care if s/he receives thermal protection (immediate drying and wrapping) immediately after birth, clean cord care, clean cord cutting, delayed bathing and immediate breastfeeding. This analysis was restricted to home deliveries only. In both the intervention and comparison areas, the percent of newborns born in the year preceding the survey received essential newborn care was 13 percent. The percentage increased by twelve fold from baseline in intervention areas while it increased by three fold at comparison areas.

Table 5-4: Percentage of children aged 0-5 and 0-11 months (home delivery) who received essential newborn care according to area, upazila, and survey year

Background	Essential Newborn care (Children aged 0-5 months)		Essential Newborn Care (Children aged 0-11)	
	N	%	N	%
Total (Home delivery)	538	12.3	1,130	13.2
Study area:				
Intervention	246	10.6	526	12.7
Comparison	292	13.7	604	13.6
Upazila:				
Barhatta	98	20.4	226	19.5
Durgapur	86	11.6	183	16.9
Kalmakanda	194	10.3	378	10.1
Kendua	160	10.0	343	10.5

Figure 5.5 Percentage of children aged 0-11 months who received essential newborn care by area, upazila, and survey year (Home delivery only)

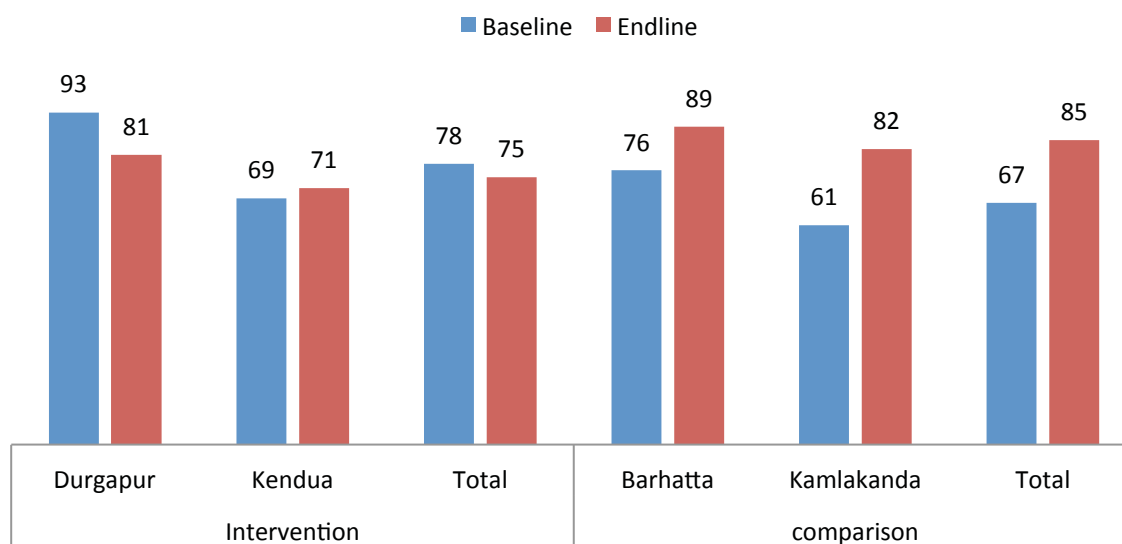


5.2. Knowledge on newborn danger signs

A newborn may experience serious problems and complications within the first month of life, which needs immediate care to save his/her life. Mothers are expected to be aware of the danger signs so that they are able to seek care when needed. These danger signs include: convulsions, the baby feeling cold or hot (fever), poor suckling or feeding, difficult or fast breathing, too small baby/premature, jaundice, swollen abdomen, unconsciousness, pus, and bleeding or discharge from the umbilical stump, eye or skin.

Annex 2.3.3 shows the distribution of the mothers of children 0-11 months that were aware of neonatal danger signs. The most commonly known neonatal danger sign was fever (54 percent in intervention and 58 percent in comparison areas). This was followed by difficult or fast breathing, baby feeling cold, jaundice, poor suckling or feeding and swollen abdomen. Seventy-five and 85 percent of mothers were aware of at least two danger signs in the intervention and comparison area respectively (Figure 5-6). Awareness on at least two danger signs have increased in comparison areas from baseline to endline. Among intervention upazilas, awareness was found to be higher in Kendua and lower in Durgapur compared to that of baseline.

Figure 5-6: Percentage of mothers of children aged 0-11 months who are aware of at least two newborn danger signs according to area, upazila, and survey year



SECTION 6: NUTRITION

This section presents information on breastfeeding status, IYCF practices and anthropometric measurement in children. Information was obtained for children born for children born since January 2012 that is two year preceding survey.

6.1. Breastfeeding and supplementation

6.1.1. Initiation of breastfeeding

WHO and UNICEF recommend that children be fed colostrums immediately after birth and continue to be exclusively breastfed even if regular breast milk has not begun flowing. Table 6-1 shows the distribution of children by initiation of breastfeeding. Overall, 77 percent of children were breastfed within one hour of birth whereas colostrum feeding was almost universal in all the areas. Prelacteal feeding (i.e., the practice of giving other liquids to a child during the first three days of life), is widely practiced in Bangladesh. However, results in table 6-1 reveal that about four-fifth of the children born in the two years preceding the survey did not receive any prelacteal feed. Further details on initiation of breastfeeding, prelacteal and colostrums by background characteristics are provided in Annex 2.4.1

Table 6-1: Percent distribution of initiation of breastfeeding, pre-lacteal and colostrums feeding among children born in the two years preceding the survey by area, Endline survey 2014

Timing of initiation of breast feeding	Intervention (N=1,686)	Comparison (N=1,872)	Total (N=3,558)
	%	%	%
Initiation of breastfeeding			
Initiated BF within 1 hour of birth	77.6	76.4	77.0
Initiated BF 1-<6 hours of birth	12.5	17.3	15.0
Initiated BF 6-<12 hours of birth	1.1	0.9	1.0
Initiated BF 12-<24 hours of birth	0.7	0.2	0.4
Initiated BF ≥24 hours of birth	4.3	4.6	4.5
Did not initiate BF	0.8	0.1	0.4
Don't know	3.1	0.5	1.7
Did not receive Pre-lacteal feed	81.6	79.5	80.5
Received colostrums	97.0	98.2	97.6

Figure 6-1 compares the percentages of children aged 0-23 months who were initiated breastfeeding within 1 hour of birth. The figure shows that overall, the increase in the percentages are similar in both intervention and comparison areas. Upazila wise the proportion varied from 73 to 81 percent. Figure 6-2 shows the changes in the percentage of children who did not receive pre-lacteal feed. Again, the results are similar and show an increasing trend, both in intervention and comparison areas. Receiving colostrums was found to universal in both baseline as well as endline.

Figure 6-1: Percentage of children aged 0-23 months who initiated breastfeeding within 1 hour of birth by area, upazila, and survey year

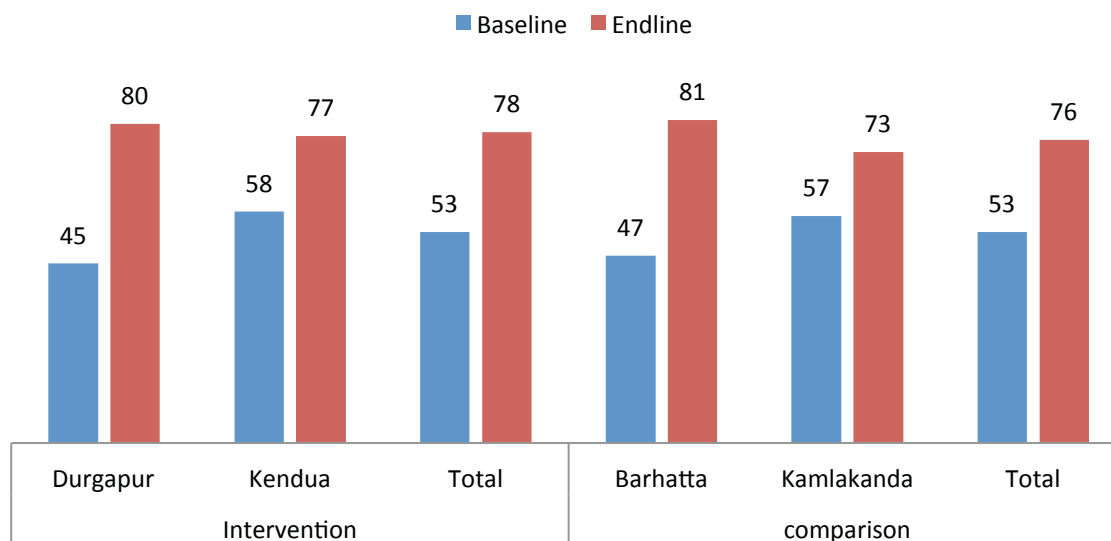
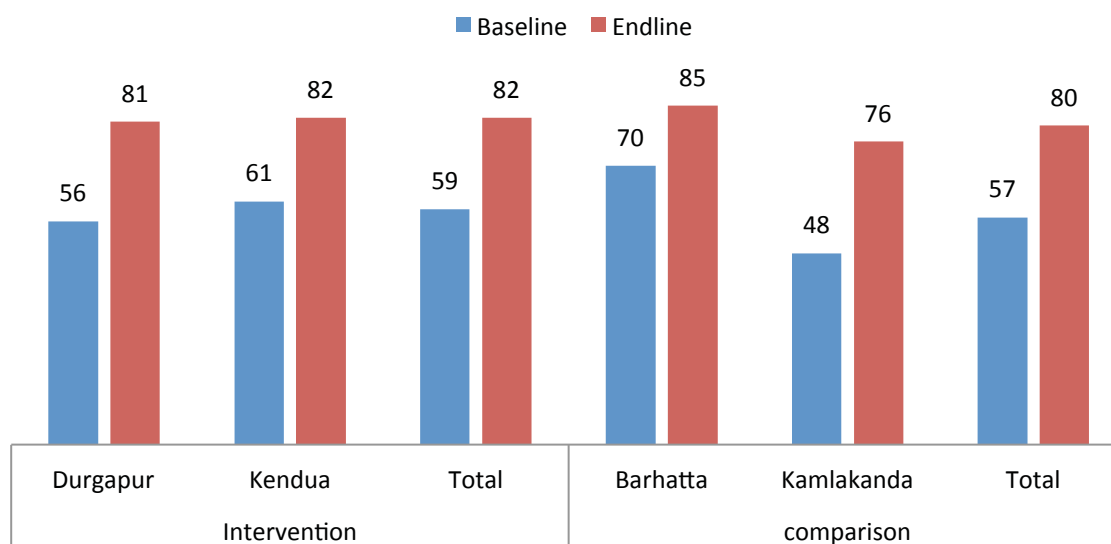


Figure 6-2: Percentage of children aged 0-23 months that did not receive prelacteal feed by area, upazila, and survey year



6.1.2. Age pattern of breastfeeding

The endline KPC survey collected data on feeding for all children born in the two years preceding the survey using a 24 hour recall period. As shown in Table 6-2 and Figure 6-3 almost all Bangladeshi children in the sample were breastfed for the first year of life. Among children aged <2 months, 70 percent were being exclusively breastfed (Table 6-2). This was 48 and 31 percent for children aged 2-3 and 4-5 months respectively. The percentage of exclusive breastfeeding in children aged less than 6 months was 53 and 42 percent (Figure 6-4) whereas the percentage of complementary feeding in children aged 6-8 months was 67 and 74 percent in intervention and comparison areas respectively (Figure 6-5). Figure 6-6 summarizes rates of exclusive breastfeeding and complementary feeding by age of infant.

Figure 6-4 and Figure 6-5 also compares the rates of exclusive breastfeeding in children 0-5 months and complimentary feeding in children 6-8 months at baseline and endline. According to Figure 6-4, the proportion of children exclusively breastfed have increased from baseline (47 percent) to endline (53 percent) but decreased in comparison areas (49 percent at baseline vs. 42 percent at endline). About 51 percent of children belonging to lowest quintile were exclusively breastfed at endline compared to 31 percent at baseline (Annex 3). The equity gap in exclusive breastfeeding is however similar between baseline and endline in both intervention and comparison areas since the increase in children being exclusively breast fed is similar across the wealth quintiles. (Annex 3). Figure 6-5 reflects poor performance in terms of the proportion of children age 6-8 who were complimentary fed and is seen to decrease in both intervention and comparison areas.

Table 6-2: Percent distribution of children under two years who are living with their mother by breastfeeding status, and the percentage currently breastfeeding, according to age in months, Endline survey 2014

Age in months	Not breast-feeding	Breastfeeding and consuming*					Total	Percentage currently breast-feeding	Number of children under two years
		Exclusively breastfed	Plain water only	Non milk liquids or juice	Other Milk	Complementary foods			
	%	%		%	%	%	%	%	N
< 2	3.0	69.6	6.8	0.4	8.7	11.4	100.0	97.0	263
2-3	1.8	47.6	10.6	0.0	8.2	31.8	100.0	98.2	170
4-5	5.4	31.4	4.3	0.0	9.9	49.0	100.0	94.6	392
6-7	4.0	17.8	4.6	0.3	4.6	68.8	100.0	96.0	349
8-9	5.8	9.9	3.8	0.0	3.1	77.4	100.0	94.2	292
10-11	5.0	9.7	1.7	0.0	2.5	81.1	100.0	95.0	238
12-15	5.1	6.8	1.6	0.0	2.3	84.2	100.0	94.9	745
16-19	8.5	3.5	0.8	0.0	1.4	85.8	100.0	91.5	626
20-23	9.3	3.1	0.4	0.0	0.8	86.3	100.0	90.7	483
Total	5.9	16.6	2.9	0.1	3.9	70.7	100.0	94.1	3,558
0-5	3.9	46.9	6.4	0.1	9.2	33.5	100.0	96.1	825
6-8	4.1	15.9	4.7	0.2	4.3	70.8	100.0	95.9	510
6-9	4.8	14.2	4.2	0.2	3.9	72.7	100.0	95.2	641

Note: Breastfeeding status is based on 24 hours recall. Hierarchical order is followed as follows exclusive breast-feeding, complimentary feeding, other milk, non-milk liquids/juice, Plain water only. For example, if a child did not take any other food/drink other than breast milk classified as exclusive breastfeeding and if a child along with breast milk consumes plain water and complimentary food (solid/ semi solid) will be classified as complimentary feeding.

Figure 6-3: Infant feeding practices by age

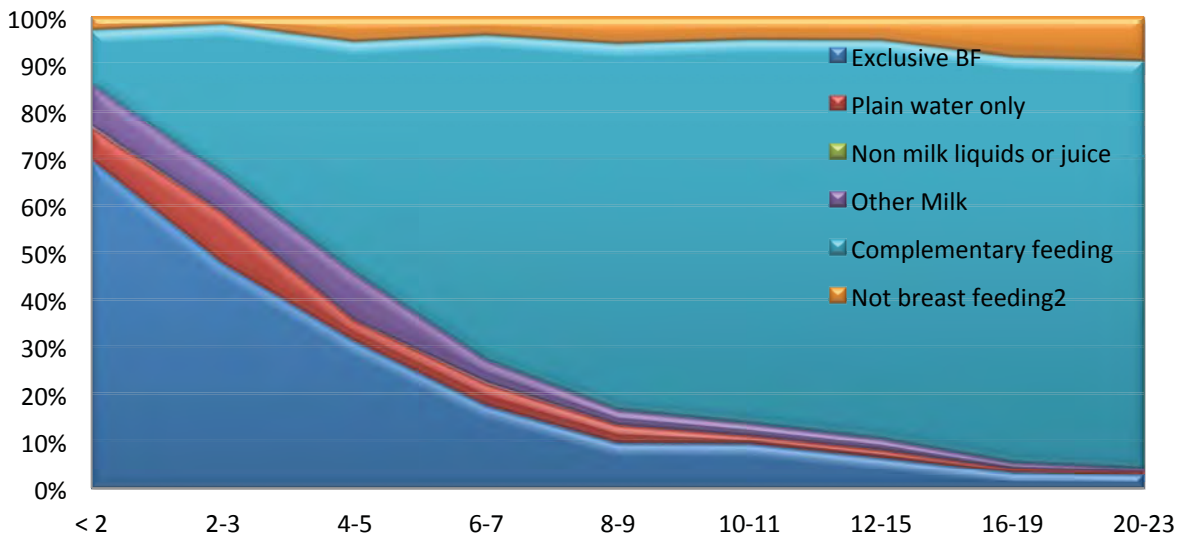


Figure 6-4: Percentage of children aged 0-5 months that were exclusively breastfed by area and survey year (24 hour recall) by area, Endline survey 2014

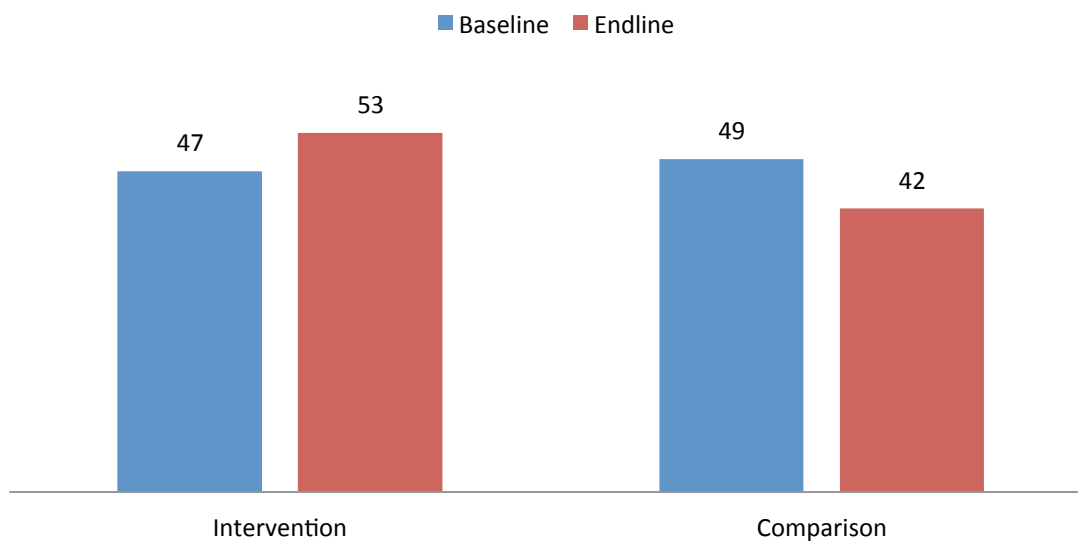


Figure 6-5: Percentage of children aged 6-8 months that were complementary fed by area and survey year (24 hour recall)

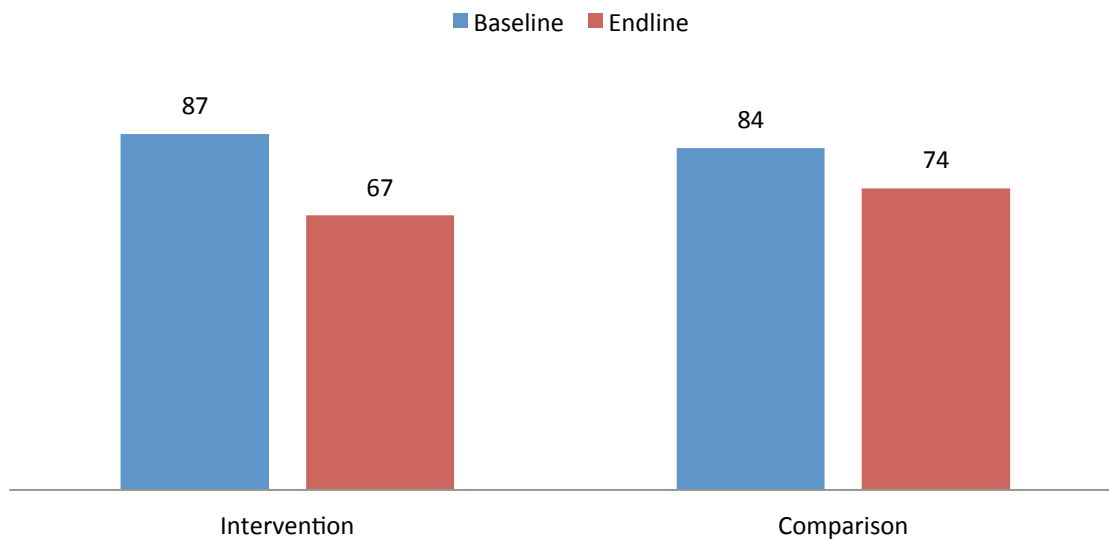
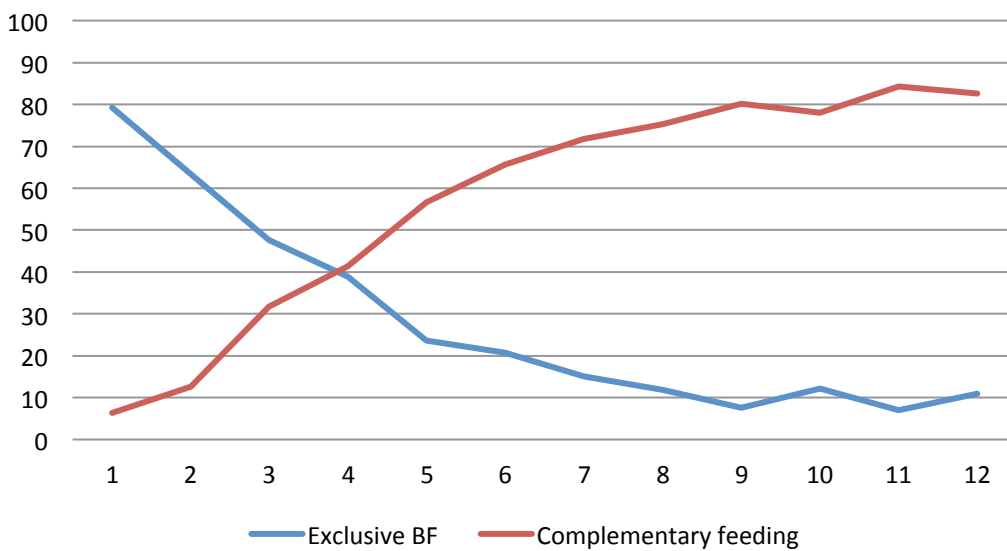


Figure 6-6: Percentage of infants exclusively breastfed and percentage receiving complementary feeding (based on last 24 hrs feeding) by age of the child



6.1.3. Infant and young child feeding

Table 6-3 presents information on Infant and Young Child Feeding Practices (IYCF) for the child age 6-23 months. The percentage of child receiving appropriate feeding has been calculated taking into account WHO guidelines on the number of food groups and the number of times a child should eat during the day or night preceding the survey. Overall, breastfed children (26 percent) were more likely to meet the recommendations for diversity in food groups and frequency of feeding compared to non-breastfed children (5 percent). Appropriate feeding practices increased with increasing age of children. Children of mothers' who had completed primary education or higher were more likely than other children to be fed according to these recommendations. Upazila-wise distribution is also shown in Table 6-3. The comparison in the key IYCF indicators between survey years is shown in Table 6-4.

Table 6-3: Percentage of children aged 6-23 months who are fed according to three IYCF feeding practices based upon number of food groups and times they are fed during the day or night preceding the survey, by breastfeeding status and background characteristics

	Among breastfed* children 6-23 months				Among non-breastfed children 6-23 months				Number of non- breastfed children 6-23 months
	3+ food groups ¹	Minimum times or more ²	Both 3+ and minimum times or more	Number of breastfed children 6- 23 months	Milk/ milk produ- cts ³	4+ food groups	4+ times or more	With 3 IYCF practices ⁴	
Total	29.2	75.1	26.0	2,554	30.2	10.6	39.7	5.0	179
Area									
Intervention	28.5	76.7	26.8	1,195	29.9	17.8	49.5	8.4	107
Comparison	29.8	73.6	25.2	1,359	30.6	0.0	25.0	0.0	72
Age									
6-8	12.3	75.5	12.1	489	33.3	0.0	42.9	0.0	21
9-11	22.5	68.0	19.6	347	31.8	9.1	31.8	4.5	22
12-17	33.3	72.4	28.9	1,007	32.3	15.4	35.4	7.7	65
18-23	38.4	82.0	34.5	711	26.8	9.9	45.1	4.2	71
Sex									
Boy	29.5	75.5	26.5	1,364	40.2	8.7	38.0	4.3	92
Girl	28.8	74.5	25.4	1,190	19.5	12.6	41.4	5.7	87
Upazila									
Barhatta	27.3	74.6	23.8	575	40.0	0.0	30.0	0.0	40
Durgapur	34.6	75.8	31.7	454	33.3	20.0	66.7	20.0	15
Kalmakanda	31.6	72.8	26.3	784	18.8	0.0	18.8	0.0	32
Kendua	24.8	77.3	23.8	741	29.3	17.4	46.7	6.5	92
Mothers educatic									
No education	23.7	70.6	20.4	667	26.3	5.3	39.5	2.6	38
Primary incomplete	23.1	75.8	20.4	550	33.3	13.9	36.1	5.6	36
Primary complete	32.5	74.3	28.7	526	18.9	13.5	29.7	5.4	37
Secondary incomplete	33.7	77.5	29.9	581	33.9	8.9	46.4	5.4	56
Secondary complete or higher	40.9	81.7	39.1	230	50.0	16.7	50.0	8.3	12
Wealth quintile									
Lowest	23.0	72.7	19.6	491	19.2	15.4	42.3	3.8	26
Second	25.3	74.1	21.8	495	41.2	11.8	35.3	2.9	34
Middle	27.3	75.5	24.5	502	11.1	8.3	36.1	2.8	36
Fourth	30.8	75.4	27.6	504	19.0	11.9	45.2	7.1	42
Highest	38.4	77.2	35.1	562	56.1	7.3	39.0	7.3	41

¹Food groups: a. Infant formula, milk other than breast milk, cheese, yoghurt or other milk product; b. Foods made from grains, roots and tubers, including porridge and fortified baby food from grains; c. Vitamin A rich fruits and vegetables; d. Other fruits and vegetables; e. Eggs f. Meat, poultry, fish; g. Legumes and nuts; h. food made with oil fat and butter. ² At least twice a day for breastfed infant 6-8 months and 3+ times for 9-23 months breastfed children. ³ Includes commercial infant formula, fresh, tinned, and powdered animal milk, and cheese and yoghurt, and other milk products. ⁴ Non-breastfed children are considered to be fed with a minimum standard of three IYCF practices if they receive other milk or milk products and are fed at least the minimum number of times per day with at least minimum number of food groups

*Breastfeeding children has been consider those who currently breastfeed and breastfed yesterday during the day or night

Table 6-4: Percentage of children aged 6-23 months who are fed according to three IYCF feeding practices based upon number of food groups and times they are fed during the day or night preceding the survey, by area and survey year

	Intervention		Comparison	
	Baseline	Endline	Baseline	Endline
Among breastfed* children 6-23 months	1,289	1,195	1268	1,359
3+ food groups ¹	33.4	28.5	39.0	29.8
Minimum times or more ²	82.5	76.7	86.5	73.6
Both 3+ and minimum times or more	32	26.8	36.8	25.2
Among non breastfed* children 6-23 months	25	107	22	72
Milk or milk products ³	24.0	29.9	40.4	30.6
4+ food groups ¹	24.0	17.8	36.4	0.0
4+ time times or more	84.0	49.5	31.8	25.0
With 3 IYCF practices ⁴	20.0	8.4	22.7	0.0

¹Food groups: a. Infant formula, milk other than breast milk, cheese, yoghurt or other milk product; b. Foods made from grains, roots and tubers, including porridge and fortified baby food from grains; c. Vitamin A rich fruits and vegetables; d. Other fruits and vegetables; e. Eggs f. Meat, poultry, fish; g. Legumes and nuts; h. food made with oil fat and butter. ²At least twice a day for breastfed infant 6-8 months and 3+ times for 9-23 months breastfed children. ³Includes commercial infant formula, fresh, tinned, and powdered animal milk, and cheese and yoghurt, and other milk products. ⁴Non-breastfed children are considered to be fed with a minimum standard of three IYCF practices if they receive other milk or milk products and are fed at least the minimum number of times per day with at least minimum number of food groups

*Breastfeeding children has been consider those who currently breastfeed and breastfed yesterday during the day or night

6.2. Nutritional status

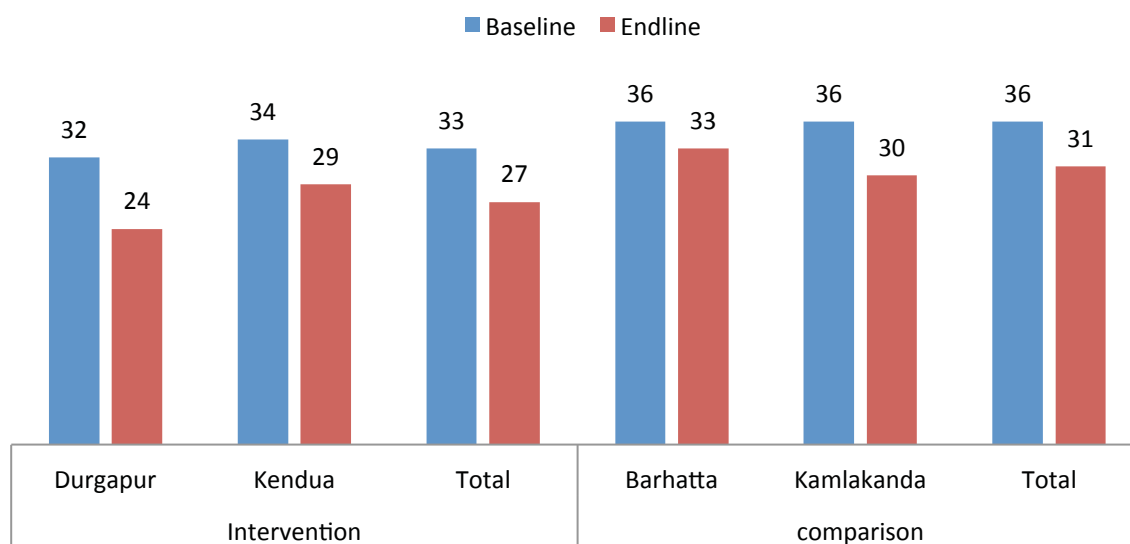
Around one-third of the children under two years were underweight (<-2z weight for age z- score) including 13 percent who were severely underweight (<-3z weight for age z- score) (Table 6-5). Being underweight was especially common among children who were 1 to 2 years old. The percentage of underweight was lowest in Durgapur (24 percent) and highest in Barhatta (33 percent). In addition, the proportion of underweight children decreased with increasing mother's education and wealth status of the household.

Figure 6-7 shows that there has been a slight decrease in the proportion of children who are underweight from baseline to endline in both the intervention (33 percent at baseline vs. 27 percent at endline) and comparison areas (36 percent at baseline vs. 31 percent at endline).

Table 6-5: Nutritional status of children- weight for age by age, sex, mother's education, wealth quintile and study area, Endline survey 2014

Background characteristics	Number of children	<-2z weight for age %	<-3z weight for age %	Mean Z-score (SD)
Total	3,530	29.5	12.7	-1.20
Study area:				
Intervention	1,665	27.3	11.7	-1.09
Comparison	1,865	31.4	13.7	-1.30
Age in months				
<6	815	19.5	10.7	-0.50
6-11	874	27.7	10.0	-1.13
12-23	1,841	34.7	14.9	-1.54
Sex				
Boy	1,884	31.2	13.6	-1.30
Girl	1,646	27.5	11.7	-1.08
Upazila:				
Barhatta	755	33.1	13.8	-1.33
Durgapur	603	23.9	9.1	-0.88
Kalmakanda	1,110	30.3	13.6	-1.28
kendua	1,062	29.2	13.1	-1.21
Mothers education				
No education	912	32.8	14.3	-1.24
Primary incomplete	767	31.2	14.1	-1.36
Primary complete	720	31.0	12.8	-1.21
Secondary incomplete	815	25.9	10.8	-1.14
Secondary complete+	316	21.5	9.8	-0.82
Wealth quintile				
Lowest	691	35.5	14.9	-1.32
Second	683	31.0	14.1	-1.30
Middle	696	30.5	13.4	-1.28
Fourth	715	25.2	10.9	-1.11
Highest	745	25.6	10.6	-1.01

Figure 6-7: Percentage of children aged 0-23 months who are underweight (-2SD for the median weight for age) by area, upazila, and survey year



6.3. Vitamin A supplementation

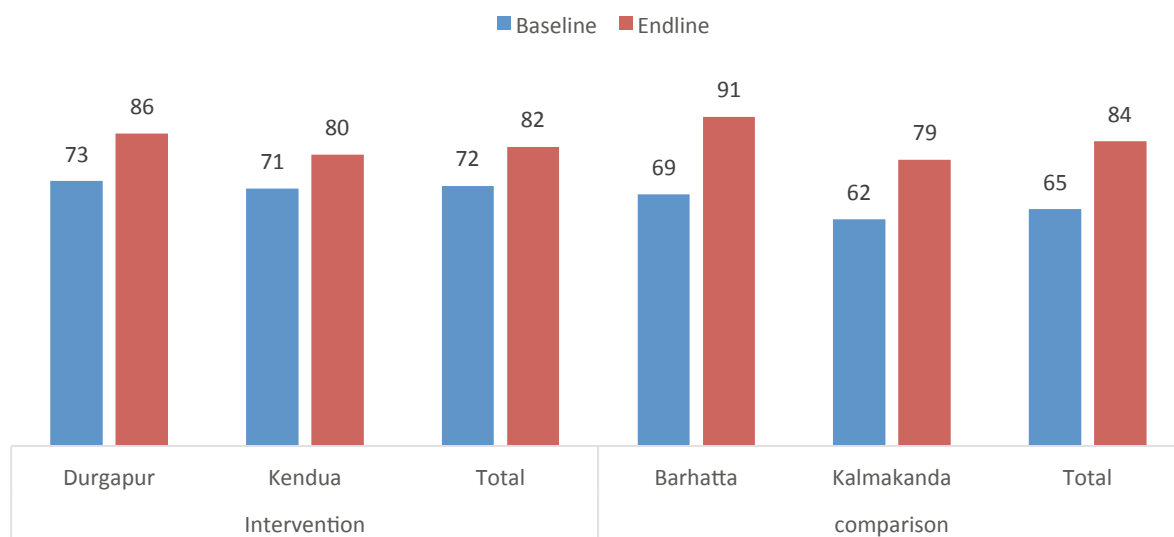
In the survey, mothers of children less than two years were asked whether the children had received Vitamin-A capsule ever and in the past six months. Table 6-6 summarizes the findings among children aged 6-23 months. Overall, coverage of vitamin-A (ever received) was high (87 percent). Around 82-84 percent of children in both intervention and comparison areas had received vitamin supplementation in the last 6 months. Large differentials in Vitamin A coverage were not seen for mother's education or wealth quintile.

Table 6-6: Percentage of children aged 6-23 months who were supplemented with Vitamin in their life-time and who received in the last 6 months, by area, upazila and background characteristics

Background characteristic	Percentage ever received Vitamin A supplement	Percentage received Vitamin A supplements in last 6 months	Number of children
	%	%	N
Total	87.3	83.2	2,733
Area	%	%	No.
Intervention	87.9	82.4	1,302
Comparison	86.8	84.0	1,431
Age in months			
6-8	77.8	72.7	510
9-11	84.0	78.0	369
12-17	89.3	85.6	1,072
18-23	92.5	89.3	782
Mother's education			
No education	84.3	80.1	705
Primary incomplete	87.5	82.9	586
Primary complete	85.8	81.7	563
Secondary incomplete	89.5	85.6	637
Secondary complete or+	93.8	90.5	242
Wealth quintile			
Lowest	83.2	79.5	517
Second	85.8	80.9	529
Middle	87.2	82.5	538
Fourth	89.4	85.2	546
Highest	90.5	87.4	603

Figure 6-8 compares the percentages of children aged 6-23 months who received vitamin A supplementation in the last 6 months. Overall the increase in the percentages were similar in both the areas from baseline (10 percentage point in intervention areas vs 19 percentage point in comparison areas).

Figure 6-8: Percentage of children aged 9-23 who received Vitamin-A supplementation in the last 6 months by area, upazila, and survey year



Section 7: CHILD HEALTH

7.1. Characteristics of children

Table 7-1 presents age and sex distribution of 3,558 children aged 0-23 months included in the survey. The boys slightly outnumber the girls in all the areas. Age distribution was almost similar in both the areas.

Table 7-1: Percentage distribution of children age 0-23 months by sex and age, according to area, Endline survey 2014

	Intervention	Comparison	Total
N	1,686	1,872	3,558
Sex			
Boy	53.0	53.8	53.4
Girl	47.0	46.2	46.6
Age in months			
<6	22.8	23.6	23.2
6-11	25.2	24.3	24.7
12-23	52.0	52.2	52.1

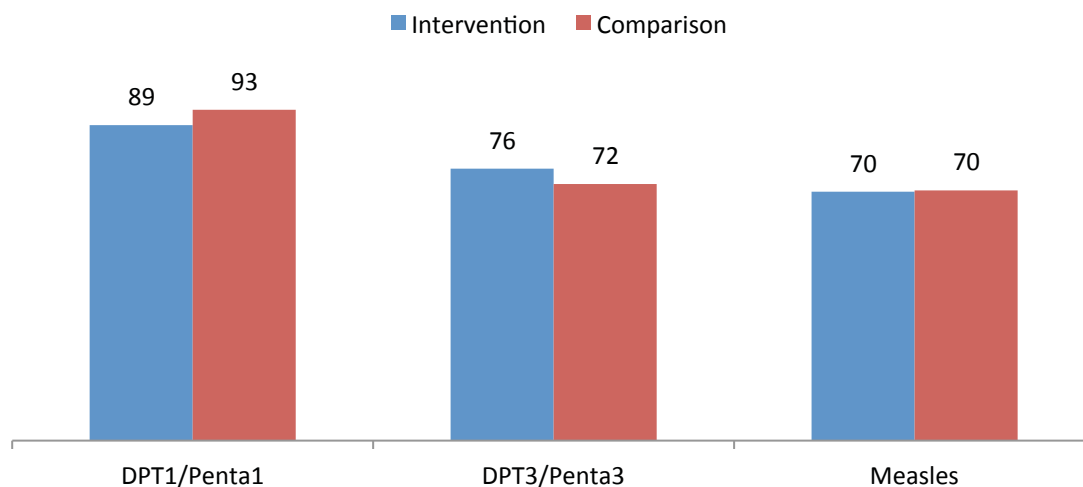
7.2. Immunization

Under the Expanded Programme on Immunization (EPI) of the Government of Bangladesh, children of under-one years of age are vaccinated against eight vaccine-preventable diseases (tuberculosis, diphtheria, pertussis, tetanus, poliomyelitis, measles, hepatitis B and hemophilus influenza B). As recommended by the World Health Organization, children are considered fully immunized, when they have received one dose of BCG against tuberculosis, three doses of the Pentavalent vaccine for diphtheria, pertussis, tetanus, hepatitis B and HiB, three doses of OPV for polio and a one dose of the measles vaccine. One dose of BCG is given at birth or at the first contact with health worker, three doses of the pentavalent vaccine and OPV are given at 6, 10 and 14 weeks of age, one dose of measles vaccine is given at nine months of age.

In this section, we present the baseline childhood immunization coverage in children aged 12-23 months for DPT1/penta1, DPT3/Penta3 and measles only. Information was obtained from either a written vaccination card or mother's recall.

The coverage of the vaccines was almost similar for the intervention area compared to the comparison areas (Figure 7-1). The coverage of DPT/Penta ranged from 89-93 percent for the first dose to 72-76 percent for the third dose for the different areas (Annex 2.5.1). The coverage for measles vaccination was 86 percent in the comparison areas and 95 percent in the intervention areas (Annex 2.5.1). However, vaccination coverage was lowest among children whose mother had no education or who were from households in the lowest wealth quintiles (Annex 2.5.1). There has been no change in rich to poor ratio in the vaccines between baseline and endline in both intervention and comparison areas (Annex 3).

Figure 7-1: Percentage of children age 12-23 who received vaccines at any time before the survey (according to vaccination card or mothers' report), Endline survey 2014



7.3. Child morbidity and care seeking

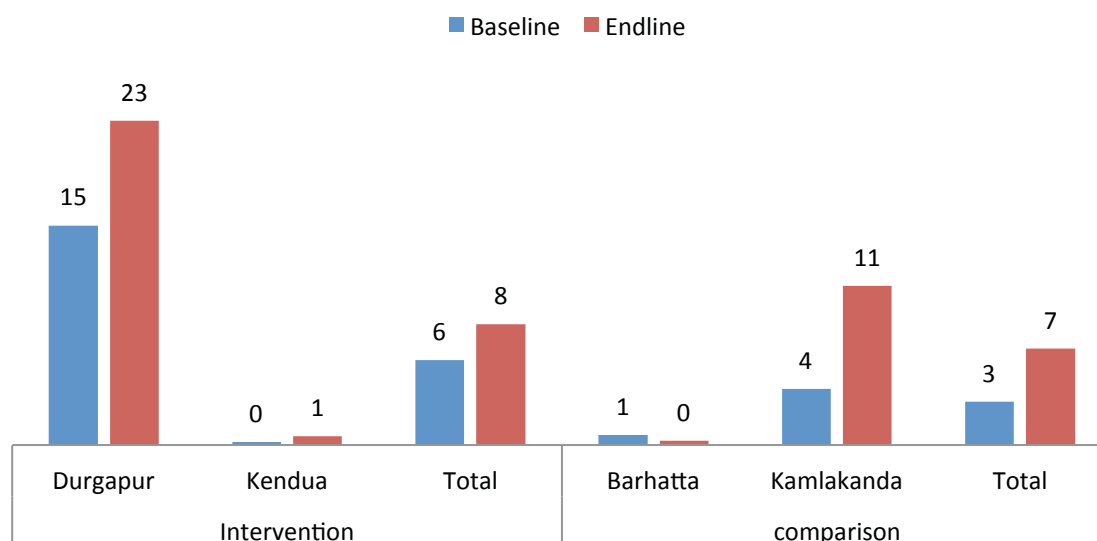
7.3.1. Use of Insecticide treated bed nets and Malaria

Around 8 percent of the children in intervention areas and 7 percent in comparison areas slept under Insecticide treated bed nets during the last night prior to the survey. However, in only 17 percent of the cases the bed nets were treated with appropriate insecticides in the past six months (Table 7-2). Poorer households were more likely to sleep under an ITN compared to richer households (Annex 3).

Table 7-2: Percentage of children aged 0-23 who used ITN, Endline survey 2014

Background characteristic	Intervention	Comparison	Total
N (All child aged 0-23m)	1,686	1,872	3,558
Child slept under ITN in the last night	8.4	6.7	7.5
N (Used ITN)	141	125	266
The bed net was dipped in liquid in the past 6 months	16.3	18.4	17.3

Figure 7-2: Percentage of children aged 0-23 months who slept under an ITN in the last night by area, upazila, and survey year



7.3.2. Diarrhoea and ORT

The two-week prevalence of diarrhoea was 8 percent in both the intervention area and comparison areas among the surveyed children (Table 7-3). The prevalence of diarrhoea was highest among children aged 11-23 months (9 percent) and lowest among children below 6 months (5 percent). Diarrhoea prevalence was same for boys than girls (8 percent). The prevalence of diarrhoea varied by upazila and was highest in Durgapur (11 percent) (Annex 2.5.2).

Table 7-3: Two-week prevalence of diarrhoea among under-two children and care seeking behavior

Background characteristic	Intervention	Comparison	Total
N (children aged 0-23m)	1,686	1,872	3,558
Diarrhoea in last 2 weeks	7.9	7.6	7.7
N (Child with Diarrhoea)	133	142	275
<u>Use of ORS/Homemade fluid during diarrhoea</u>			
- ORS	80.5	81.0	80.7
- Homemade solution	9.0	7.7	8.4
- Rice saline	2.3	0.0	1.1
- Rice water, chira pani or clean water	2.3	1.4	1.8
- ORT (ORS/Homemade solution/rice saline/recommended home fluid)	85.0	85.9	85.5
- Zinc (tablet or syrup)	16.5	27.5	22.2
<u>Received ORS packet from</u>			
- Health facility	4.7	4.3	4.5
- from community based health worker	3.7	3.5	3.6
- Allopath/drug shop	82.2	88.7	85.6
- Community member (NNP/Susoma worker)	0.0	0.9	0.5

Eighty one percent of the children with diarrhoea received ORS, whilst 8 percent reported receiving homemade solution and 22 percent reported receiving Zinc supplementation (Table 7-3). Male children

were, however, more likely to receive ORS than female children (84 vs. 77 percent) (Annex 2.5.2). Usage of ORS was similar in both the areas. However, the use of Zinc was found to be more in comparison areas (17 percent in intervention vs. 28 percent in comparison).

Use of ORT (ORS and/or homemade solution) among different wealth groups did not follow any pattern and was 81 percent in the lowest wealth quintile and 89 percent among the highest wealth quintile (Figure 7-2).ORS use rate was lowest in Kalmakanda sub-district (Annex 2.5.2). Figure 7-3 shows, that the change in use of ORT has been more in the comparison areas. The use of ORT was similar across wealth quintiles at endline but more in lowest quintile compared to the richest in comparison areas. Overall, the equity gap has narrowed from baseline to endline in intervention areas but increased in comparison areas for use of ORT in children aged 0-23 and suffering from diarrhoea.

Figure 7-2: Percentage of children age 0-23 months who received ORT among those who suffered from diarrhoea by wealth quintile

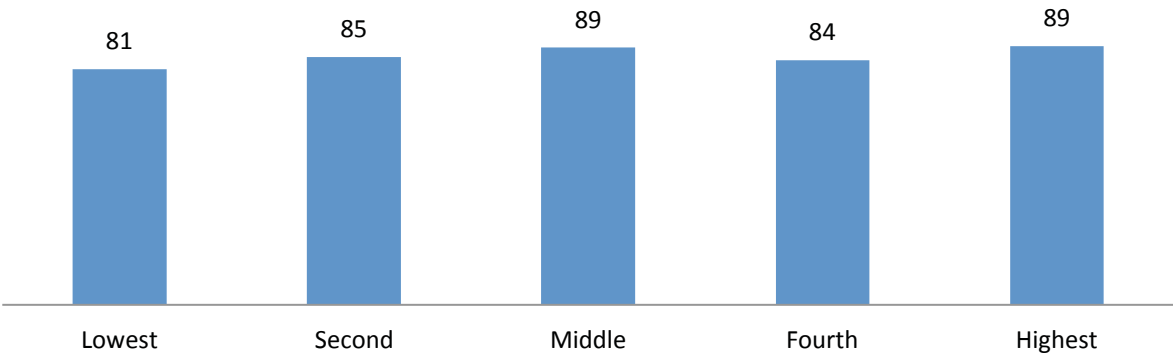
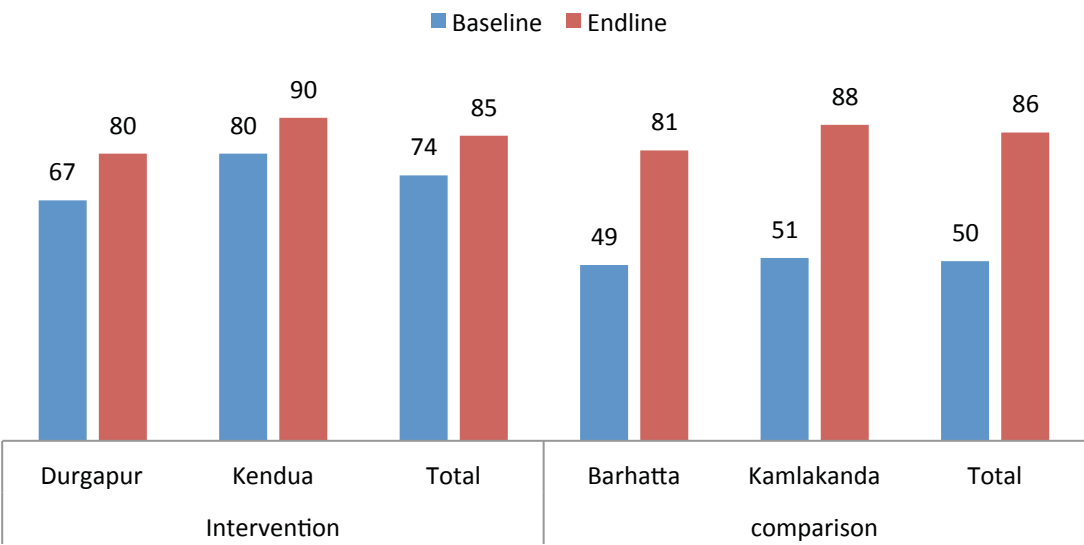


Figure 7-3: Percentage of children aged 0-23 with diarrhoea in the last 2 weeks who received ORS and/or recommended home fluids by area, upazila, and survey year



7.3.3. Suspected pneumonia and care seeking

Around 7 percent of the under-two children were reported by the mothers as suffering from suspected pneumonia (cough or difficult breathing, accompanied by rapid breathing which was chest-related) in the previous two weeks of the survey (Table 7-4). About four-fifth of children with suspected pneumonia sought care from any provider. Children with pneumonia were more likely to seek care from village doctors. Care-seeking for pneumonia from medically trained providers has doubled in the intervention areas than comparison areas (33 percent in intervention vs. 17 percent in comparison).

Table 7-4: Two-week prevalence of suspected pneumonia, care seeking behaviour by area

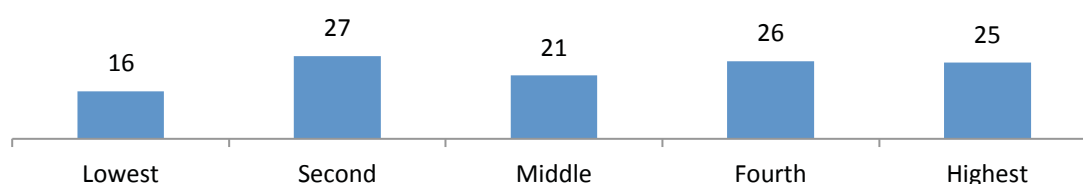
Background characteristic	Intervention	Comparison	Total
N (under-two children)	1,686	1,872	3,558
Suspected pneumonia in last 2 weeks	5.6	8.9	7.4
N (Child with Suspected pneumonia)	95	167	262
- Care sought from any provider	87.4	81.4	83.6
- Care sought from medically trained provider*	32.6	16.8	22.5
- Care sought from village doctor	45.8	55.1	51.6
- Care sought from unskilled providers	100.0	100.0	100.0

* Medically trained provider include: MBBS Doctor, paramedics, nurse, FWV, health worker (HA/FWA)

Care seeking from medically trained providers was only 16 percent in the lowest quintile and increased to 25 percent for those in the highest quintile (Figure 7-3). The rich to poor ratio has remained similar between baseline and endline in intervention areas (1.7 at baseline vs. 1.9 at endline) but has decreased in comparison areas (2.2 at baseline vs. 1.1 at endline) for care-seeking from medically trained providers among those who are suffering from pneumonia. Overall care-seeking was similar across all age groups but younger children were more likely to get treatment from medically trained providers (Annex 2.5.3). Boys were more likely to seek care for pneumonia (85 vs. 82 percent) and from medically trained providers (24 vs. 20 percent) (Annex 2.5.3).

Care-seeking from medically trained providers have increased from 22 percent at baseline to 33 percent at endline in intervention areas but remained similar in comparison areas (19 percent at baseline vs. 17 percent at endline).

Figure 7-4: Percentage of children age 0-23 months who received care from medically trained providers among those who suffered from pneumonia by wealth quintile



7.3.4. Other morbidity and care-seeking

Mothers of all children under 2 years of age were asked about any illness other than diarrhoea and ARI in the two weeks preceding the interview. About 6-8 percent of the children in the intervention and comparison areas respectively had an illness other than ARI and diarrhoea during the previous 2 weeks (Table 7-5). We investigated care-seeking behaviour related to these illness episodes, since this was a key pathway to child survival. Care seeking from any provider was high, 73 percent (Table 7-5), but only 17 percent sought care from medically trained providers. Care seeking from medically trained health workers was higher for boys (21 percent) than girls (13 percent) (Annex 2.5.4). Care-seeking from medically trained providers was lowest in Kendua upazilla (11 percent) (Annex 2.5.4).

Table 7-5: Prevalence of two weeks morbidity of Under 2 children and care -seeking by study area,

Background characteristic	Intervention	Comparison	Total
N (under-two children)	1,686	1,872	3,558
Any illness in last 2 weeks	5.7	7.7	6.7
N (Child with any illness)	96	144	240
- Care sought from any provider	76.0	70.8	72.9
o Care sought from medically trained provider	20.8	14.6	17.1
o Care sought from village doctor	26.0	37.3	32.6
o Care sought from unskilled providers	37.5	31.3	33.8

* Medically trained provider include: MBBS Doctor, paramedics, nurse, FWV, health worker (HA/FWA)

7.3.5. Household Expenditure for Child Illness

To estimate total out of pocket expenditure for household level cost for childhood illness, information was collected on both medical and non-medical expenditures incurred by households through the household survey questionnaire. Medical costs included: consultation fees, travel costs and drug costs from private sources, pharmacies or traditional healers. Non-medical costs included: transportation and food costs.

Costing data was collected from a total of 1834 sick under-two children from 4 upazilas. Average costs were calculated per child for illness episodes in the past two weeks preceding the survey. The average out of pocket expenditure for treating under-five children ranges from tk 125 to tk 184. Total cost for care-seeking have increased four fold at endline in intervention areas whereas the increase in cost was three times in comparison areas. The largest contribution to the total household costs was the drug cost which equals Tk 61. The families of the sick under-five children spent Tk 34 per episode for transport only.

Table 7-6: Household out of pocket expenditure per child care for sickness per upazila in TK, Endline survey 2014

Dist	Upazila	Transport cost	Hotel cost	Consultation cost	Diagnostic cost	Drug cost	Total cost
Intervention	Durgapur (394)	38.7	21.3	49.0	13.3	61.9	184.2
	Kendua (505)	34.2	4.9	23.0	10.3	52.5	124.9
	Intervention (899)	36.2	12.1	34.4	11.6	56.6	150.9
Comparison	Barhatta (361)	24.6	12.8	16.1	8.8	62.4	124.7

	Kalmakanda (574)	37.4	6.2	24.2	5.1	68.1	141.1
	Comparison (935)	32.5	8.7	21.1	6.5	65.9	134.8
Total	1,834	34.3	10.4	27.6	9.0	61.4	142.7

Note: The cost is adjusted for the inflation rate

Section 8: KNOWLEDGE ABOUT AND SERVICES RECEIVED FROM THE PEOPLE'S INSTITUTION GROUP

This section presents data on the extent of community involvement in maternal, neonatal and child health services in the survey areas. Findings in Table 8-1 reveal that 51 percent of respondents in intervention areas and only 8 percent in comparison areas were aware of any community groups that work for maternal, neonatal and child health. Membership status was also higher in intervention areas (10 percent in intervention vs. 1 percent in comparison areas. Awareness and membership regarding community groups have increased substantially since baseline. Membership has increased from 3 percent at baseline to 10 percent at endline. Membership in any community action group was similar in both lowest (10.2 percent) and highest (10.5 percent) quintile at endline (data not shown).

Table 8-1: Percent distribution of respondent's awareness and membership in community action groups by study area, Endline survey 2014

	Intervention N=2,150		Comparison N=2,295		Total N=4,445	
	%	n	%	n	%	n
Aware of any community action group that works for maternal, newborn and child health	51.4	1,138	8.4	193	29.5	1,331
Member of any maternal newborn and child health community action group	10.4	230	0.9	20	5.5	250
N (Members of community action group)		230		20		250
Mean duration of involvement in the group (months)*	14.3		27.5		15.1	
N (Knows about community action group)		1,138		193		1,331
Type of activities of the group						
Mother's health	86.6	986	77.2	149	85.3	1,135
Baby's health	86.6	986	73.1	141	84.7	1,127
Family planning	35.9	409	16.6	32	33.1	441
Education	4.3	49	4.7	9	4.4	58
Transporting sick mother and babies	6.4	73	4.7	9	6.2	82
Financing sick mother and babies	6.2	70	2.1	4	5.6	74
Others	1.0	11	0.0	0	0.8	11
Don't know	7.0	80	5.7	11	6.8	91
Received help from this group						
Financial support	0.4	5	0.0	0	0.4	5
Ensured visit of Health worker	1.6	18	2.6	5	1.7	23
Ensured service from/linkage with health facility	2.4	27	2.6	5	2.4	32
Other help	4.1	47	1.6	3	3.8	50
N (Received help)		81		13		94
Considered the help as beneficial	93.8	76	92.3	12	93.6	88

Section 9: KNOWLEDGE ON HIV/AIDS

This section presents information on current levels of knowledge regarding HIV/AIDS transmission including mother to child transmission in mothers of children aged 0-23 months. The endline KPC survey asked women if they had heard of an illness called AIDS. Table 9-1 shows that around 61 percent of respondents are aware of AIDS. Awareness was found to be higher in Intervention areas (66 percent) compared to comparison areas (58 percent). Awareness of HIV/AIDS varied by education, wealth quintile and upazila. Nearly all women (94 percent) who had complete secondary or higher education had heard of AIDS compared to only 42 percent with no education. AIDS knowledge also rose from 49 percent in the lowest quintile to 78 percent in the highest quintile (Table 9-1).

Table 9-1: Percent distribution of respondents on knowledge on means of transmission of HIV/AIDS by study area and background characteristics, Endline survey 2014

	Heard of HIV/ AIDS	Knows about method of transmission for HIV/AIDs					Number of women
		Knows about Sexual mean of transmission	Knows about non-sexual mean of transmission			Knows any two non sexual transmission	
			Unsterilized syringe or needle	Unsafe blood transfusion	Mother to child transmi ssion		
Total	61.6	25.4	24.0	9.9	6.8	10.7	3,558
Study area:							
Intervention	65.5	31.6	26.2	11.9	10.9	13.5	1,686
Comparison	58.1	19.9	22.1	8	3.2	8.2	1,872
Mother's age							
15-19	65.2	29.7	31.2	14.5	10.1	17.4	138
20-24	64.5	26.1	26.7	10.2	6.8	11.5	1,220
25-29	63.9	27.9	24.9	11.5	7.3	11.6	1,201
30-34	56.8	23.5	20.4	7.6	6.7	8.9	672
35-39	51.5	16.9	14.3	4.6	5.1	5.5	237
40-44	43.8	8.2	11	2.7	0	2.7	73
45-49	70.6	35.3	47.1	23.5	5.9	23.5	17
Mother's education							
No education	41.8	9.8	7.1	2.9	2.7	3.2	919
Primary incomplete	51.2	15.4	14.5	3.8	3.5	3.8	772
Primary complete	60.1	19.8	21.6	9.6	7.2	11.3	727
Secondary incomplete	82.3	39.5	36.8	15.2	9.5	15.6	821
Secondary+	94.4	71.5	68.7	31.3	19.1	35.7	319
Wealth quintile							
Lowest	49.4	13.9	13.3	4.6	5	5.9	697
Second	54.3	17.5	15.6	6.3	6.8	7.6	687
Middle	57.4	22.2	19.9	6.6	4.7	7.3	702
Fourth	67.6	29.2	25.9	10.7	6.5	10.8	722
Highest	78	42.8	43.7	20.4	10.8	21.3	750
Upazila							
Barhatta	52	20	19.7	7.5	1.2	6.8	761
Durgapur	77.1	30.2	31.8	18.3	18	18.8	606
Kalmakanda	62.3	19.8	23.7	8.4	4.5	9.2	1,111
Kendua	59.1	32.4	23.1	8.3	6.9	10.6	1,080

To ascertain whether respondents knew of the means of transmission, the survey asked about the possible means of HIV/AIDS transmission. Overall, one-fourth of the respondents (32 percent in intervention vs. 20 percent in comparison) were aware of transmission through unprotected sex (Table 9-1). Among the non-sexual means of transmission more mothers (24 percent) reported the use of unsterilized syringe or needles followed by unsafe blood transfusion (10 percent). This knowledge is also higher in women who are more educated and belong to the highest quintile (Table 9-1).

Figure 9-1 and Figure 9-2 provides information on knowledge of mothers of children aged 0-23 months on mother to child transmission (MTCT) of HIV/AIDS during pregnancy, delivery and breastfeeding and availability of drugs that is given during pregnancy to reduce mother to child transmission of HIV (PMTCT). Respondents were specifically asked if they knew of the above issues. The knowledge varied by upazila. Overall, awareness on MTCT decreased from baseline to endline in both the areas but respondents in comparison areas (21 percent) were found to be more aware about MTCT than intervention areas (16 percent). On the other hand, there was an overall increase in awareness on PMTCT from baseline to endline in both the areas while the increase was similar in both the areas (22 percentage point at intervention compared to 20 percentage point at comparison areas). Overall, awareness increased with increasing education and wealth status in both the areas (Annex 2.6.1).

Figure 9-1: Percentage of respondents on knowledge on M TCT (all three means-during pregnancy, delivery and breastfeeding) of HIV/AIDS by study area, upazila, and survey year

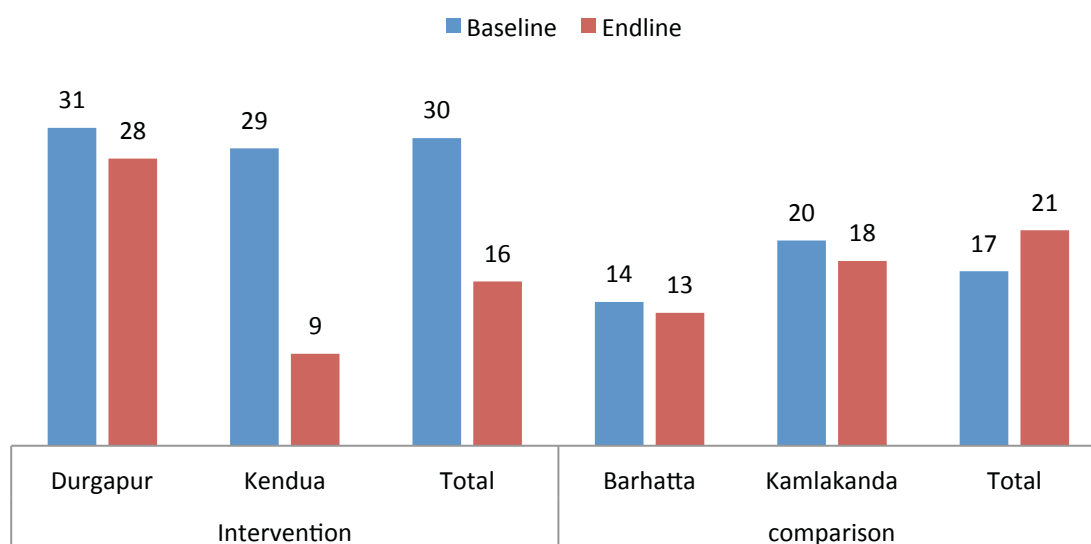
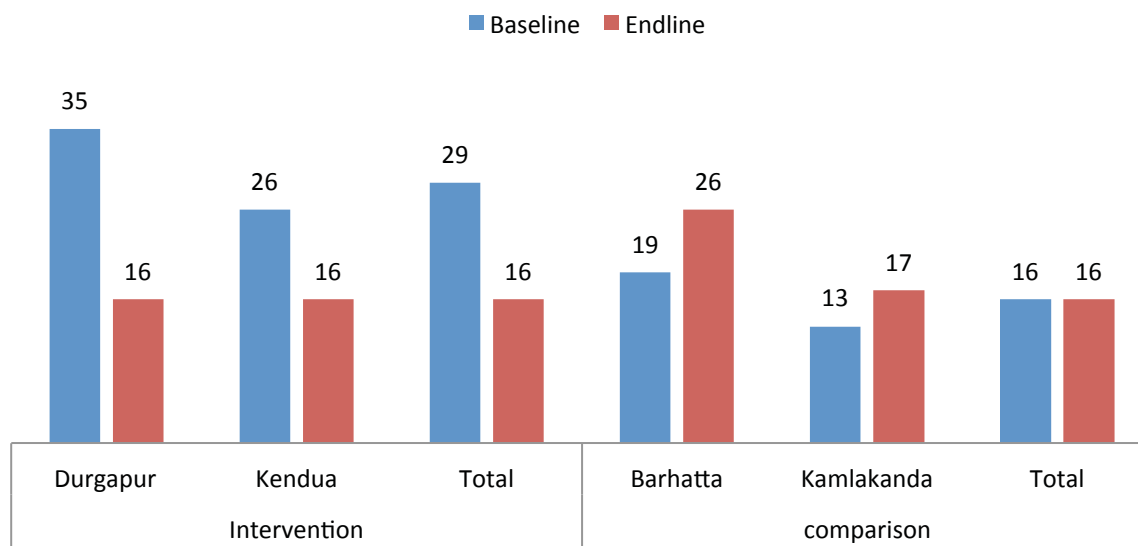


Figure 9-2: Percentage of respondents on knowledge on PM TCT of HIV/AIDS by study area, upazila, and survey year



Section 10: CONTRACEPTION AND BIRTH SPACING

10.1. Current use of contraception

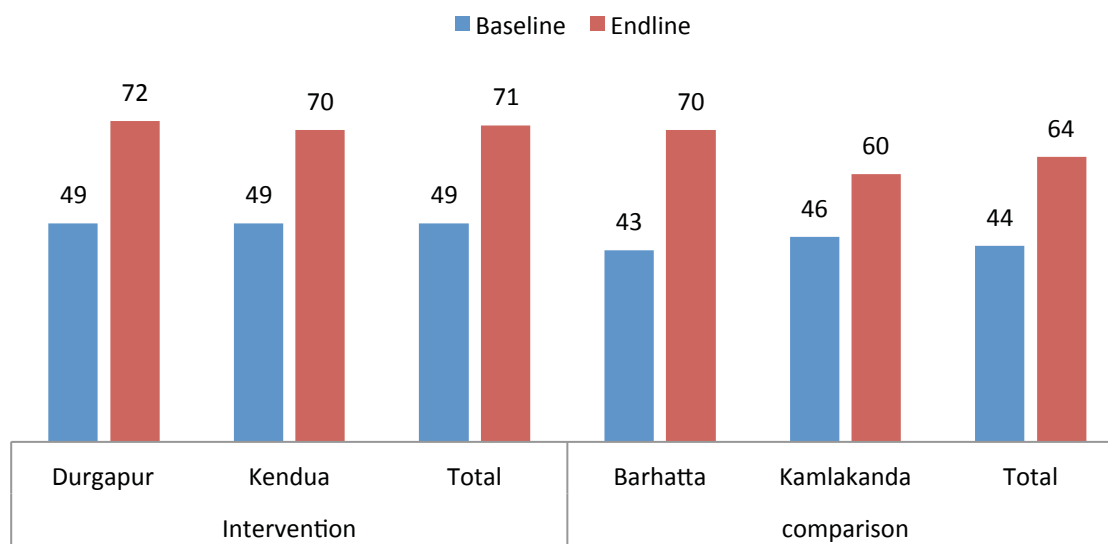
In this survey, current use of contraception has been defined as the proportion of currently married women who report that they were currently using a family planning method during the time of the survey. Overall, 68 percent of currently married women in the surveyed areas (72 percent in intervention Vs. 64 percent in comparison) were using a family planning method. The majority reported that they were using a modern method (67 percent). The pill was by far the most widely used method (54 percent) followed by injectables (11 percent) (Table 10-1). Current use of contraception increased with increasing mother's education and wealth quintile and was highest among the age group 45-49 (Annex 2.7.1). In addition, the coverage of modern methods was highest in Durgapur upazila (72percent) and lowest in Kalmakanda (60 percent) (Annex 2.7.1).

Figure 10-1 shows that the use of modern methods has increased over time in both intervention and comparison areas. Use of modern methods has increased both in intervention (49 percent at baseline to 71 percent at endline) and comparison areas (44 percent at baseline to 64 percent at endline). The rich to poor ratio in use of modern methods of contraception has remained similar in intervention areas (1.3 at baseline vs. 1.2 at endline) but has decreased in comparison areas (2.0 at baseline vs. 1.2 at endline).

Table 10-1: Percent distribution of currently married women age 15-49 and mother of children age 0-23 by contraceptive method currently used, according to area, Endline survey 2014

	Intervention (N=1,670)	Comparison (N=1,845)	Total (N=3,515)
Any Method	72.0	64.3	68.0
Any modern method	71.0	64.1	67.4
Female sterilization	1.1	1.1	1.1
Male sterilization	0.4	0.0	0.2
Pill	56.2	51.1	53.5
IUD	0.3	0.2	0.3
Injectables	11.0	10.2	10.6
Implants	0.8	0.0	0.4
Condom	1.3	1.4	1.3
Any traditional method	1.1	0.2	0.6
Periodic abstinence	0.2	0.0	0.1
LAM	0.0	0.0	0.0
Other	0.8	0.2	0.5
Missing	0.1	0.0	0.1
No method	27.8	35.7	31.9

Figure 10-1: Percentage of mothers of children aged 0-23 months who are using a modern contraceptive method by study area, upazila, and survey year



10.2. Knowledge on Healthy timing and spacing and risks associated with less birth to pregnancy intervals

Mothers of children aged 0-23 months in this survey were asked about how long one should wait after the birth of one child before trying to become pregnant again. The results are shown on Table 10-2. About half (54 percent) of the women responded that one should wait for 2-5 years after the birth of a child before trying to get pregnant again. In addition, 47-49 percent of respondents in intervention and in comparison areas mentioned that they were aware of at least two risks associated with a birth interval of less than 24 months. More details are also provided in Table 10-2.

Table 10-2: Percent distribution of mother of children age 0-23 by knowledge on healthy timing and spacing and risks associated with birth interval of less than 24 months, according to area, upazila and background characteristics, Endline survey 2014

T	Aware of healthy spacing and timing	Aware of risk of birth to pregnancy interval less than 24 months					Aware of at least two risks	Number of women
		LBW	Premature/preterm baby	Maternal death	Miscarriage	Anemia in mother		
Total	54.2	26.3	14.1	32.7	18.3	41.3	48.1	3,558
Study area:								
Intervention	48.1	21.7	11.6	40.0	15.5	46.4	49.4	1,686
Comparison	59.7	30.4	16.2	26.2	20.8	36.7	46.9	1,872
Mother's age								
15-19	49.3	29.0	8.0	34.8	17.4	44.2	49.3	138
20-24	56.2	26.0	13.5	31.2	17.5	41.6	46.3	1,220
25-29	53.6	28.6	14.9	33.7	19.1	40.8	51.8	1,201
30-34	54.9	23.8	14.1	33.8	19.5	40.8	47.6	672
35-39	50.2	21.5	12.2	34.2	15.2	43.5	40.9	237
40-44	47.9	27.4	21.9	20.5	20.5	32.9	39.7	73
45-49	47.1	29.4	29.4	47.1	23.5	58.8	58.8	17
Mother's education								
No education	47.8	21.1	15.5	30.0	15.7	31.4	40.0	919
Primary incomplete	56.0	24.7	13.5	28.5	17.9	42.0	44.6	772
Primary complete	61.1	27.4	13.8	32.3	18.2	38.9	48.3	727
Secondary incomplete	55.1	28.7	13.5	35.1	19.5	47.6	53.5	821
Secondary+	50.8	36.4	13.5	45.8	24.5	57.4	65.5	319
Wealth quintile								
Lowest	51.4	23.4	10.2	29.6	15.1	36.7	38.9	697
Second	52.7	26.1	12.8	29.4	16.2	37.8	41.9	687
Middle	55.4	27.6	15.8	35.2	16.7	40.0	50.1	702
Fourth	55.8	24.1	14.3	30.3	20.2	44.5	49.0	722
Highest	55.6	30.1	16.9	38.8	23.1	46.9	59.5	750
Upazila								
Barhatta	69.1	20.8	18.0	30.5	25.0	39.0	51.0	761
Durgapur	46.4	15.8	7.6	50.7	14.9	43.2	48.8	606
Kalmakanda	53.3	37.1	15.0	23.3	18.0	35.1	44.1	1,111
Kendua	49.1	25.0	13.9	34.0	15.9	48.2	49.7	1,080

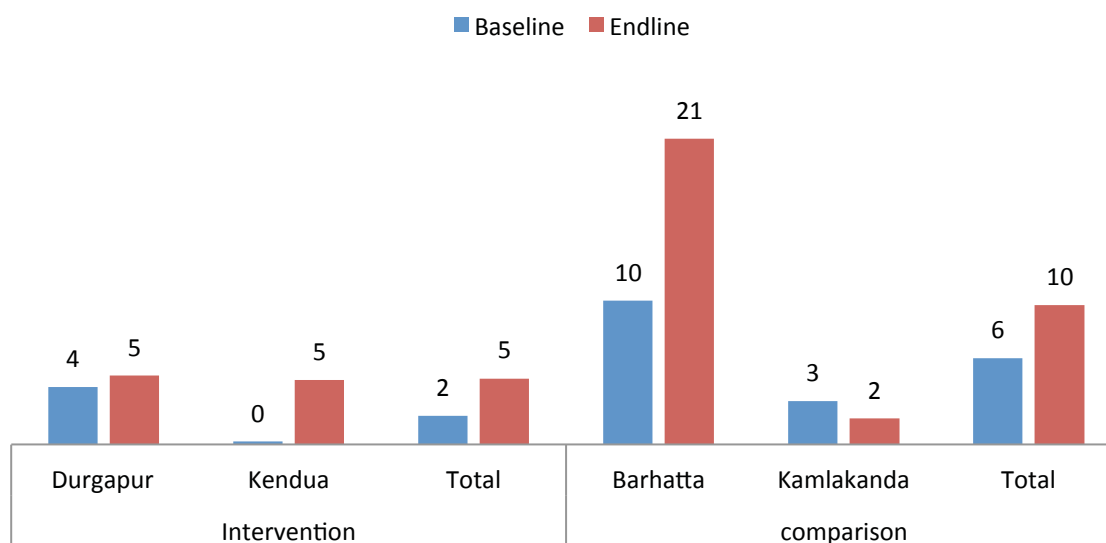
Section 11: WATER AND SANITATION

Safe drinking water and appropriate hand washing practices are basic necessities for good health and can reduce many diseases particularly in children. The endline KPC survey collected information on household water treatment methods and availability of soap at the place for hand washing.

11.1. Household water treatment

Figure 11-1 presents information on appropriate water treatment facilities used in the households. Effective water treatment methods included boiling, adding bleach or chlorine, using a water filter and solar disinfection. Only 5 percent mothers of children age 0-23 reported that their households treat water in intervention areas. This was slightly higher in comparison areas (10 percent), mainly due to Barhatta where 21 percent of women reported treating their water effectively. Usage of water treatment had increased minimally in intervention areas.

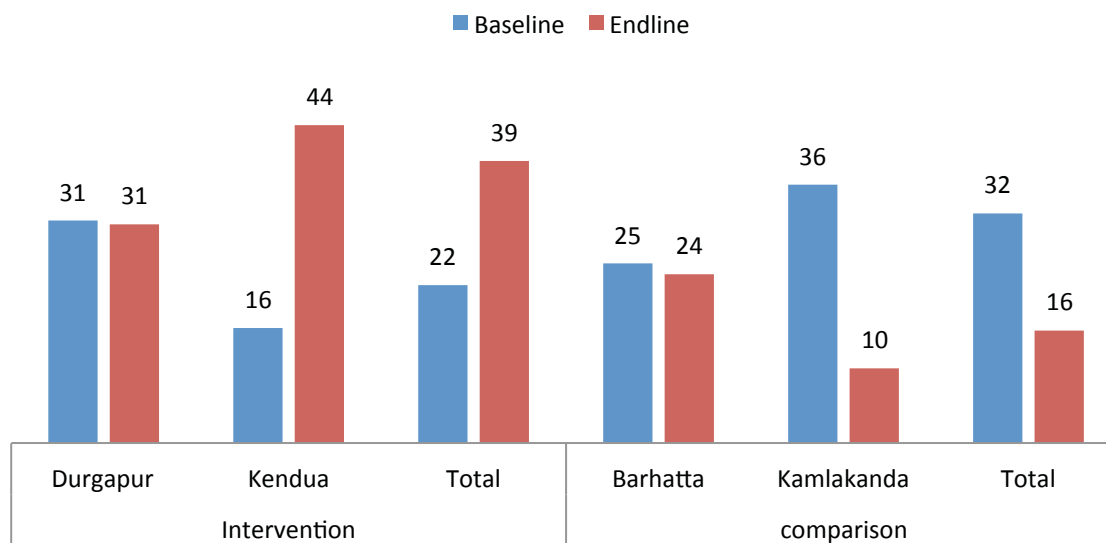
Figure 11-1: Percentage of households of children age 0-23 months that treat water effectively by area and upazila and survey year



11.2. Appropriate hand washing practices

Figure 11-2 indicates that 39 and only 16 percent of mothers of children age 0-23 months lived in households with soap at the place for hand washing in intervention and comparison areas respectively (Figure 11-2). The proportion of households with soap at the place of hand washing was lowest in Kalmakanda (10 percent) and highest in Kendua (44 percent). The changes in the indicator varied in the different upazilas. However, overall there has been an increase in the intervention areas (22 percent at baseline vs. 39 percent at endline) but a decrease in comparison areas (32 percent at baseline vs. 16 percent at endline).

Figure 11-2: Percentage of mothers of children age 0-23 months who live in households with soap at the place for hand washing by area and upazila and survey year



Section 12: SUMMARY AND RECOMMENDATIONS

The findings from the endline KPC survey provide a comprehensive portrayal of different aspects of maternal, neonatal and child health in the four upazilas of Netrokona district. These results depict the endline situation in the intervention and comparison upazilas after the implementation of SUSOMA intervention programme in the intervention area, against which progress of the project can be measured. These findings have been compared to the baseline figures for the same upazilas to give us an understanding of the change. These results depict that there has been an increase in the key coverage indicators in intervention upzilas which might be due to the implementation of SUSOMA intervention programme in those areas. Overall, there has been substantial improvement in maternal and newborn indicators such as antenatal, delivery and postnatal care, drying and wrapping, early initiation and exclusive breastfeeding. Other indicators where improvements have been similar in intervention and comparison areas are the practice of birth preparedness, overall quality of antenatal care, AMTSL, clean cord care, proper care-seeking and management for diarrhea and pneumonia, use of contraception. The findings provide critical insights into areas that need careful attention by the project for future scale up.

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Annexure

Annex 1

Sample estimates within each union/cluster for comparing intervention and comparison areas

Indicator	Denominator (target)	Recall period	Proportion in the comparison/baseline	Proportion in the intervention/endline	Sample required for specific category per union/cluster (assuming 20% refusal)	# of HHs required per union/cluster to provide the required sample
% of newborn dried & wrapped by warm cloth immediately (time-0-4 min)	Ch 0-5 months	last birth	4%	20%	4	76
% of newborn boys & girls received delayed bathing by 72 hours	Ch 0-5 months	last birth	16%	25%	25	529
Exclusive breastfeeding	Ch 0-5 months	Previous day	57%	71%	18	378
% of pregnant women who received at least 4 ANC services	Mothers of children age 0-11 months	last birth	5%	20%	5	48
% of pregnant women received at least two valid doses of Tetanus Toxoid (TT)	Mothers of children age 0-11 months	last birth	70%	80%	29	287
Skilled attendant at delivery?	Mothers of children age 0-11 months	last birth	13%	20%	35	346
% of mothers and newborns who received postnatal care from a trained provider within 2 days of delivery	Mothers of children age 0-11 months	last birth	15%	25%	20	203
Vitamin A supplementation	9-23m	6m	66%	85%	8	66
Measles vaccine coverage	Ch 12-23 months		50%	75%	6	57
ORS for diarrhoea	Ch 0-23m with diarrhoea last 2 wk	2 wks	64%	85%	80 under-2 children (7 children with diarrhoea)	378
% of children 0-23 months with suspected pneumonia taken for treatment to health facility/ medically trained provider	Ch 0-23m with fast breathing last 2 wk	2 wks	25%	50%	96 under-2 children (5 child with suspected pneumonia)	454

Indicator	Denominator (target)	Recall period	<i>Proportion in the comparison/baseline</i>	<i>Proportion in the intervention/endline</i>	Sample required for specific category per union/cluster (assuming 20% refusal)	# of HHs required per union/cluster to provide the required sample
Recommended homemade fluid for diarrhoea	Ch 0-23m with diarrhoea last 2 wk	2 wks	12%	40%	27	126
% of <5 years old children <-2 z weight for age	Ch 0-23m		31%	25%	83	391
Current contraceptive use among mother of young children	Mothers of children age 0-23 months		48%	57%	44	210
Access to Immunization service (% of children aged 12-23 months received DPT1)	Ch 12-23 months		92%	97%	38	363
Health System Performance regarding Immunization Service (% of children aged 12-23 months received DPT3)	Ch 12-23 months		80%	88%	34	318
% of HH of children Ch 0-23m that treat water effectively	Ch 0-23m		1%	3%	44	210

Annex 2: Findings in details

Annex2.1: Socio-demographic characteristics

Annex 2.1.1: Percentage of women by educational status according to upazila, Endline survey 2014

Characteristics	Women Education					Total %	Number of women N
	No educat ion %	Primary incompl ete %	Primary complet e %	Secondary incomplet e %	Secondary complete/ higher %		
Upazilas							
Barhatta	26.7	27.7	16.4	23.1	6.0	100.0	943
Durgapur	24.8	18.7	25.8	20.3	10.5	100.0	765
Kalmakanda	28.1	29.0	19.0	18.3	5.6	100.0	1,360
Kendua	24.6	15.4	20.5	27.4	12.1	100.0	1,448

Annex 2.2: Antenatal care, delivery and postnatal care

Annex 2.2.1: Among women aged 15-49 who had a live or still birth in the two years preceding the survey and received ANC, the percent distribution who received selected services by area, upazila and background characteristics, Endline survey 2014

Among women who received ANC, the percentage who received selected services									
	N	Informed signs of pregnancy complication %	Informed care-seeking for signs of pregnancy complication %	Abdominal exam %	Blood pressure measured %	Blood test %	Weight taken %	Urine test %	Ultrasound test %
Total	891	31.6	27.2	74.3	79.1	39.2	77.0	53.0	42.3
Study area:									
Intervention	473	35.1	30.9	77.8	76.5	35.7	78.6	51.8	41.9
Comparison	418	27.8	23.0	70.3	82.1	43.1	75.1	54.3	42.8
Mothers age									
15-19	54	33.3	27.8	83.3	87.0	44.4	74.1	55.6	48.1
20-24	329	31.0	26.4	73.6	78.7	41.0	79.3	54.1	42.6
25-29	287	30.7	26.1	71.8	81.5	39.0	77.0	52.6	43.9
30-34	152	32.9	28.3	79.6	76.3	35.5	75.0	56.6	41.4
35-39	51	37.3	35.3	66.7	64.7	39.2	72.5	41.2	35.3
40-44	15	26.7	26.7	80.0	86.7	26.7	73.3	33.3	20.0
45-49	3	33.3	0.0	66.7	100.0	0.0	66.7	33.3	33.3
Mothers education									
No education	197	27.9	23.4	72.1	71.1	27.9	71.1	47.2	27.9
Primary incomplete	169	27.8	22.5	69.2	75.1	29.6	74.0	42.6	31.4
Primary complete	183	32.2	26.8	74.3	80.3	36.6	77.6	50.8	36.6
Secondary incomplete	228	33.8	28.9	76.3	82.0	44.3	75.9	56.1	49.6
Secondary+	114	38.6	37.7	81.6	91.2	66.7	93.0	75.4	78.1
Wealth quintile									
Lowest	140	25.7	22.1	70.7	69.3	26.4	73.6	41.4	27.9
Second	148	31.8	26.4	70.3	77.7	35.8	72.3	47.3	26.4
Middle	197	32.0	25.4	71.6	77.2	29.4	73.1	50.3	37.6
Fourth	189	31.7	28.6	78.3	79.4	40.7	79.9	54.0	47.1
Highest	217	35.0	31.3	78.3	88.0	57.1	83.4	65.9	62.7
Upazila									
Barhatta	142	35.2	26.8	75.4	75.4	49.3	73.9	62.7	61.3
Durgapur	193	33.7	28.0	91.7	78.8	29.0	93.3	53.9	23.8
Kalmakanda	276	23.9	21.0	67.8	85.5	39.9	75.7	50.0	33.3
Kendua	280	36.1	32.9	68.2	75.0	40.4	68.6	50.4	54.3

Annex 2.2.2: Percentage of women aged 15-49 with a live birth or still birth in 2 years preceding the survey who consumed iron-folate supplementation by area, upazila and background characteristics, Endline survey 2014

Characteristics	Number of women	Consumed Iron-folic acid tablet	Consumed Iron-folic acid for 3 or more months
		%	%
Total	1,422	63.5	32.3
Study area:			
Intervention	697	69.2	33.7
Comparison	725	58.1	31.0
Upazila:			
Barhatta	281	48.4	32.7
Durgapur	229	80.3	29.3
Kalmakanda	444	64.2	30.0
Kendua	468	63.7	35.9
Mothers age			
15-19	75	68.0	38.7
20-24	506	64.6	35.2
25-29	481	61.5	31.6
30-34	251	63.3	24.7
35-39	79	67.1	35.4
40-44	26	53.8	34.6
45-49	4	75.0	50.0
Mothers education			
No education	369	51.8	20.9
Primary incomplete	305	59.3	31.8
Primary complete	283	65.0	28.3
Secondary incomplete	328	72.3	40.5
Secondary complete or higher	137	80.3	53.3
Wealth quintile			
Lowest	260	57.3	25.4
Second	269	58.4	23.8
Middle	295	63.7	31.9
Fourth	294	66.7	35.4
Highest	304	70.1	43.4

Annex2.2.3: Among women aged 15-49 who had a live birth or still birth in 2 years preceding the survey, the percentage with specific birth preparedness plan , by area, Endline survey 2014

Birth preparedness	Intervention	Comparison	Total
N	697	725	1,422
Women planned place of delivery	86.2	82.9	84.6
Arrange transport for emergency	17.2	18.8	18.0
Save money for emergency	48.1	45.2	46.6
Determine attendant for home delivery	75.3	84.3	79.9
Buy/arrange delivery kit for home delivery	32.1	25.2	28.6
Arranged two pieces of cloth for wiping and wrapping child immediately after birth	85.1	90.9	88.0
N (Planned for home delivery)	532	554	1,086
Determine attendant for home delivery	82.1	89.9	86.1
Buy/arrange delivery kit for home delivery	32.0	26.2	29.0
Arranged two pieces of cloth for wiping and wrapping child immediately after birth	87.2	94.2	90.8

Annex 2.2.4: Among women age 15-49 giving birth (live/still) in the two years preceding the survey, the percentage receiving postnatal care, the type of providers and timing* of visit by area, upazila and background characteristics, Endline survey 2014

Characteristics	N=	No PNC %	Received from medically trained provider					Other HW %	Untrained %	Don't know %
			<1day	1-<2 days	2-6 days	1-3 weeks	4-6 weeks			
			%	%	%	%	%			
Total	1,422	73.1	15.0	1.8	0.7	1.1	0.1	2.0	4.9	0.1
Upazila:										
Barhatta	281	74.0	17.8	0.7	0.4	1.4	0.0	1.8	3.9	0.0
Durgapur	229	69.9	13.1	1.3	1.3	3.9	0.4	1.7	6.6	0.4
Kalmakanda	444	81.3	11.3	1.8	0.5	0.2	0.2	1.6	2.9	0.0
kendua	468	66.5	17.7	2.8	0.9	0.2	0.0	2.8	6.6	0.2
Mothers age										
15-19	75	61.3	25.3	4.0	1.3	0.0	0.0	2.7	5.3	0.0
20-24	506	73.7	15.4	2.4	0.6	0.8	0.0	1.8	4.2	0.2
25-29	481	72.6	13.1	1.7	0.8	1.9	0.2	1.9	6.2	0.2
30-34	251	76.9	14.7	0.4	0.4	0.4	0.4	2.8	3.2	0.0
35-39	79	78.5	11.4	1.3	1.3	0.0	0.0	1.3	5.1	0.0
40-44	26	57.7	19.2	3.8	0.0	3.8	0.0	3.8	11.5	0.0
45-49	4	50.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mothers education										
No education	369	79.1	9.2	1.1	0.5	0.8	0.0	1.9	6.8	0.3
Primary incomplete	305	78.7	10.5	1.3	1.0	1.0	0.0	2.6	4.9	0.0
Primary complete	283	78.8	10.6	0.4	0.7	1.1	0.4	1.4	4.9	0.4
Secondary incomplete	328	69.2	18.0	3.7	0.9	1.5	0.0	2.7	2.7	0.0
Secondary complete or higher	137	42.3	42.3	3.6	0.0	0.7	0.7	0.7	5.1	0.0
Wealth quintile										
Lowest	260	82.3	8.8	1.2	0.4	1.2	0.0	1.2	4.2	0.4
Second	269	78.4	11.5	1.5	0.4	1.1	0.0	1.5	5.6	0.0
Middle	295	77.3	10.8	1.7	0.3	0.3	0.0	2.7	5.8	0.3
Fourth	294	73.5	13.6	1.7	0.3	1.4	0.0	2.0	5.8	0.0
Highest	304	56.3	28.6	3.0	2.0	1.3	0.7	2.6	3.3	0.0

* All deliveries in health facilities are assumed to have received a postnatal care from a medically trained provider within 1 day of delivery

**Trained provider means Doctor, Nurse/ midwives, Paramedics, FWV or CSBA

Annex 2.2.5: Among women age 15-49 having a live birth in the two years preceding the survey, the percentage of newborns receiving postnatal care, the type of providers and timing* of postnatal care by upazila and background characteristics, Endline survey 2014

Area	N=	No PNC	Received from medically trained provider					Other HW	Untrained	Don't know
			<1day	1-<2 days	2-6 days	1-3 weeks	4-6 weeks			
			%	%	%	%	%			
Total	1,381	73.3	13.8	2.9	0.8	0.7	0.2	2.5	4.1	0.2
Upazila:										
Barhatta	276	74.3	14.9	2.5	0.7	1.4	0.4	1.8	2.9	0.4
Durgapur	223	74.0	12.6	1.8	1.3	1.3	0.0	4.5	3.6	0.0
Kalmakanda	436	82.1	11.0	2.3	0.5	0.5	0.5	1.1	1.4	0.0
kendua	446	63.7	16.4	4.3	0.9	0.2	0.0	3.4	7.6	0.4
Mothers age										
15-19	73	63.0	28.8	1.4	1.4	0.0	0.0	2.7	2.7	0.0
20-24	487	72.1	13.8	3.9	1.0	0.8	0.2	2.7	4.5	0.0
25-29	472	73.7	12.9	3.0	0.4	1.1	0.2	2.1	4.0	0.6
30-34	244	77.0	13.1	0.8	1.2	0.4	0.4	2.9	3.3	0.0
35-39	76	80.3	6.6	2.6	0.0	0.0	0.0	2.6	2.6	0.0
40-44	25	64.0	8.0	8.0	0.0	0.0	0.0	4.0	12.0	0.0
45-49	4	50.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mothers education										
No education	359	81.6	8.4	1.4	0.6	0.3	0.3	1.9	4.2	0.3
Primary incomplete	298	77.9	10.1	2.3	1.0	0.7	0.0	2.7	4.7	0.0
Primary complete	267	81.3	9.0	1.9	0.4	0.4	0.4	1.9	3.7	0.0
Secondary incomplete	321	66.7	17.1	3.7	0.6	1.2	0.3	4.4	3.4	0.0
Secondary complete or higher	136	41.2	37.5	8.1	2.2	1.5	0.0	0.7	4.4	1.5
Wealth quintile										
Lowest	254	83.1	7.9	2.0	1.2	0.8	0.0	1.2	3.1	0.0
Second	257	78.6	10.1	1.2	0.4	0.4	0.0	2.3	4.3	0.4
Middle	289	77.9	9.3	3.5	0.7	0.0	0.3	2.8	4.5	0.0
Fourth	286	73.4	13.3	2.1	0.3	1.0	0.0	2.4	5.6	0.3
Highest	295	55.6	26.8	5.4	1.4	1.4	0.7	3.7	2.7	0.3

* All deliveries in health facilities are assumed to have received a postnatal care from a medically trained provider within 1 day of delivery

**Trained provider means Doctor, Nurse/ midwives, Paramedics, FWV or CSBA

Table 2.2.6.: Household out-of-pocket expenditure for ANC care per person by upazila in TK, Endline survey 2014

Area	Upazila (N)	Transport cost (BDT)	Hotel cost (BDT)	Consultation cost (BDT)	Diagnostic cost (BDT)	Drug cost (BDT)	Total cost (BDT)
Intervention	Durgapur (111)	262.8	148.1	145.8	184.4	296.2	1037.3
	Kendua (129)	283.8	113.9	223.5	438.4	201.6	1261.1
	Intervention (240)	274.1	129.7	187.6	320.9	245.3	1157.6
Comparison	Barhatta (75)	228.6	42.6	267.4	603.2	380.0	1521.7
	Kalmakanda (133)	239.7	29.5	132.0	240.1	205.7	847.0
	Comparison (208)	235.7	34.2	180.8	371.0	268.5	1090.3
Total	448	256.3	85.4	184.4	344.2	256.1	1126.4

Note: The cost is adjusted for the inflation rate

Table 2.2.7: Household out-of-pocket expenditure per Institution delivery by upazila in TK, Endline survey 2014

Dist	Upzilla	Transport cost	Admission fee	Diagnosis cost	Delivery cost	Drug cost	Tips	Attendant cost	Others	Total cost
Intervention	Durgapur (20)	2679.2	1204.2	708.1	4318.0	1517.0	887.6	525.4	1321.5	13161.1
	Kendua (48)	1866.2	819.4	676.3	4410.8	853.6	578.6	915.8	834.2	10955.0
	Intervention (68)	2105.3	932.6	685.7	4383.5	1048.8	669.5	801.0	977.5	11603.9
Comparison	Barhatta (23)	604.8	741.3	499.2	3844.1	2186.0	963.7	216.6	975.8	10031.5
	Kalmakanda (27)	1609.6	1317.9	576.0	3897.5	1489.7	559.3	1217.8	846.7	11514.6
	Comparison (50)	1147.4	1052.7	540.7	3872.9	1810.0	745.3	757.3	906.1	10832.4
Total	118	1699.4	983.5	624.2	4167.2	1371.3	701.6	782.5	947.2	11277.0

Note: The cost is adjusted for the inflation rate

Table 2.2.8: Household out-of-pocket expenditure per home delivery by upazila in TK, Endline survey 2014

Dist	Upazila	Health provider & attendant cost	Drug cost	Others	Total cost
Intervention	Durgapur (102)	319.3	277.2	682.8	1279.3
	Kendua (165)	417.9	262.4	489.6	1169.9
	Intervention (267)	380.2	268.1	563.4	1211.7
Comparison	Barhatta (119)	328.8	169.7	708.5	1207.0
	Kalmakanda (190)	273.7	149.3	450.2	873.2
	Comparison (309)	294.9	157.2	549.7	1001.7
Total	576	334.4	208.6	556.1	1099.1

Note: The cost is adjusted for the inflation rate

Table 2.2.9.: Household out-of-pocket expenditure for PNC care per person by upazila in TK, Endline survey 2014

Dist	Upzilla	Transport cost	Hotel cost	Consultation cost	Diagnostic cost	Drug cost	Total cost
Intervention	Durgapur (30)	153.8	33.6	166.3	47.6	279.6	680.9
	Kendua (50)	118.3	213.6	195.5	32.0	83.5	643.0
	Intervention (80)	131.6	146.1	184.6	37.8	157.1	657.2
Comparison	Barhatta (26)	38.3	0.0	95.6	16.1	446.4	596.3
	Kalmakanda (26)	333.2	210.1	79.8	0.0	204.6	827.7
	Comparison (52)	185.8	105.1	87.7	8.0	325.5	712.0
Total	132	152.9	130.0	146.4	26.1	223.4	678.8

Note: The cost is adjusted for the inflation rate

Table 2.2.10: Household out-of-pocket expenditure for complication care per person by upazila in TK, Endline survey 2014

Dist	Upzilla	Transport cost	Hotel cost	Consultation cost	Diagnostic cost	Drug cost	Total cost
Intervention	Durgapur (51)	72.0	41.3	88.7	50.9	32.8	285.8
	Kendua (42)	79.8	37.3	229.5	83.7	22.4	452.6
	Intervention (93)	75.5	39.5	152.3	65.7	28.1	361.1
Comparison	Barhatta (32)	57.0	59.2	65.0	105.5	195.3	481.9
	Kalmakanda (42)	82.3	62.8	67.0	71.6	108.7	392.4
	Comparison (74)	71.4	61.2	66.2	86.2	146.1	431.1

Total	167	73.7	49.1	114.1	74.8	80.4	392.1

Note: The cost is adjusted for the inflation rate

Annex 2.3: Newborn care

Annex 2.3.1 Among children age 0-5 months, the percentage of newborns reporting timing of their first bathing after birth, by area, upazila and background characteristics, Endline survey 2014

Characteristics	First bathed within 24 hrs	First bathed after 24-48 hrs	First bathed after 48-72 hrs	First bathed after 3 days / 72 hrs	Not yet bathed	Don't know	Number of births
	%	%	%	%	%		N
Total	17.8	11.8	6.8	55.3	3.3	5.0	645
Upazila:							
Barhatta	14.7	7.8	7.8	65.5	3.4	0.9	116
Durgapur	14.4	13.5	4.8	50.0	8.7	8.7	104
Kalmakanda	13.5	14.0	6.3	59.9	3.2	3.2	222
Kendua	26.1	10.8	7.9	47.3	0.5	7.4	203
Mothers education							
No education	19.7	8.9	9.6	52.9	6.4	2.5	157
Primary incomplete	18.4	15.1	3.9	54.6	3.9	3.9	152
Primary complete	22.6	12.1	7.3	46.0	2.4	9.7	124
Secondary	13.9	11.9	7.9	62.3	0.0	4.0	151
Secondary complete or higher	11.5	9.8	3.3	65.6	3.3	6.6	61
Wealth quintile							
Lowest	19.8	11.5	7.6	51.9	4.6	4.6	131
Second	17.4	14.9	8.3	50.4	2.5	6.6	121
Middle	24.5	12.9	6.5	47.5	3.6	5.0	139
Fourth	14.9	12.8	7.1	57.4	3.5	4.3	141
Highest	11.5	6.2	4.4	71.7	1.8	4.4	113

Annex 2.3.2 Among children age 0-11 months, percentage of newborns reported timing of their first bathing after birth by study upazila and background characteristics, Endline survey 2014

Characteristics	First bathed within 24 hrs	First bathed after 24-48 hrs	First bathed after 48-72 hrs	First bathed after 3 days / 72 hrs	Not yet bathed	Don't know	Number of births
	%	%	%	%	%	%	N
Total	19.4	13.0	6.9	52.8	2.8	5.1	1,381
Upazila:							
Barhatta	12.7	7.2	7.6	69.2	2.2	1.1	276
Durgapur	13.0	14.3	5.4	52.9	6.3	8.1	223
Kalmakanda	20.6	14.2	6.9	52.3	3.0	3.0	436
Kendua	25.6	14.8	7.2	43.0	1.3	8.1	446
Mothers education							
No education	21.2	11.7	8.4	51.3	4.2	3.3	359
Primary incomplete	20.8	15.8	6.7	49.7	2.7	4.4	298
Primary complete	21.3	14.6	6.7	48.3	1.9	7.1	267
Secondary incomplete	18.4	12.1	6.2	55.5	2.2	5.6	321
Secondary complete or higher	10.3	9.6	5.1	66.2	2.9	5.9	136
Wealth quintile							
Lowest	20.9	12.2	5.9	52.0	3.5	5.5	254
Second	17.5	17.1	10.1	48.2	1.9	5.1	257
Middle	21.8	15.9	7.6	47.4	3.1	4.2	289
Fourth	18.9	12.9	7.7	51.0	3.1	6.3	286
Highest	18.0	7.5	3.4	64.4	2.4	4.4	295

Annex 2.3.3 Percentage of mothers of children age 0-11 aware of specific danger signs / complications in newborn by area, Endline survey 2014

Newborn danger signs or complications for which care should be sought immediately	Intervention (N=669)	Comparison (N=712)	Total (N=1,381)
convulsions	32.7	24.9	28.7
Baby feels hot (fever)	53.7	57.9	55.8
poor suckling or feeding	17.5	17.7	17.6
difficult or fast breathing	27.7	32.3	30.1
Baby feels cold	27.1	41.2	34.3
too small baby/premature	3.1	7.2	5.2
jaundice	19.6	15.7	17.6
Swollen abdomen	14.1	21.8	18.0
unconsciousness	4.2	5.5	4.9
Pus, bleeding, or discharge from around the umbilical cord, eye or skin	9.3	3.5	6.3
Others	9.4	6.3	7.8
Don't know	8.1	4.6	6.3

Annex 2.4: Nutrition

Annex 2.4.1: Percent distribution of ever breast feeding, initiation of breastfeeding, pre-lacteal and colostrums feeding among children born in the two years preceding the survey by area, upazila and background characteristics, Endline survey 2014

Background characteristics	Breastfeeding among children born in the past two years		Among children ever breastfed				
	Ever breastfed	Number of children	Started breastfeeding within 1 hour of birth	Started breastfeeding within 1 day of birth ¹	Who did not receive pre-lacteal feed ²	Who received colostrums	Number of children
Total	99.6	3,558	77.3	93.8	80.7	97.9	3,544
Study area:							
Intervention	99.2	1,686	78.2	92.6	81.9	97.4	1,673
Comparison	99.9	1,872	76.4	94.9	79.6	98.2	1,871
Age in months							
<6	99.8	825	74.0	93.0	79.5	98.8	823
6-11	99.3	879	74.9	92.4	82.0	97.7	873
12-23	99.7	1,854	79.8	94.8	80.6	97.5	1,848
Sex							
Boy	99.6	1,901	77.6	93.3	80.1	97.8	1,894
Girl	99.6	1,657	76.8	94.3	81.3	97.9	1,650
Upazila:							
Barhatta	100.0	761	80.8	96.6	85.0	98.2	761
Durgapur	99.7	606	80.1	93.9	81.0	97.7	604
Kalmakanda	99.9	1,111	73.4	93.7	75.9	98.3	1,110
kendua	99.0	1,080	77.1	91.9	82.4	97.3	1,069
Mothers education							
No education	99.8	919	75.7	90.8	80.7	96.4	917
Primary incomplete	99.6	772	78.0	95.7	80.6	98.2	769
Primary complete	99.7	727	79.0	95.9	80.0	99.0	725
Secondary incomplete	99.5	821	76.4	93.9	82.0	98.0	817
Secondary complete or higher	99.1	319	78.2	92.7	78.8	98.1	316
Wealth quintile							
Lowest	99.6	697	74.6	92.7	77.7	97.1	694
Second	99.6	687	77.2	94.3	81.3	97.7	684
Middle	99.7	702	77.6	94.0	80.0	98.4	700
Fourth	99.9	722	76.0	93.6	80.3	97.9	721
Highest	99.3	750	80.7	94.4	83.9	98.1	745

¹ Includes children who started breastfeeding within one hour of birth

² Children not given something other than breast milk within 3 days of birth

Annex 2.5: Child health

Annex 2.5.1 Percent distribution of children age 12-23 who received specific vaccines at any time before the survey (according to vaccination card or mothers' report) by area, upazila and background characteristics, Endline survey 2014

	DPT1/Penta1 %	DPT3/Penta3 %	Measles %	Number of children 12-23m N
Total	90.9	74.1	70.1	1,854
Study area:				
Intervention	88.6	76.3	69.8	877
Comparison	92.9	72.1	70.3	977
Sex				
Male	90.9	73.6	70.7	1,015
Female	90.8	74.6	69.2	839
Mother's education				
No education	88.6	70.6	68.4	472
Primary incomplete	92.9	74.3	68.4	408
Primary complete	90.6	72.5	66.8	385
Secondary incomplete	90.2	77.1	76.4	428
Secondary+	95.0	79.5	70.2	161
Wealth quintile				
Lowest	86.9	68.1	61.9	367
Second	90.0	70.8	66.2	370
Middle	91.6	75.9	72.6	369
Fourth	91.6	78.3	76.9	359
Highest	94.1	77.1	72.8	389
Upazila				
Barhatta	94.1	70.0	74.1	424
Durgapur	92.3	78.5	72.1	326
Kalmakanda	92.0	73.6	67.5	553
kendua	86.4	75.0	68.4	551

Annex 2.5.2: Percent distribution of children age 0-23 months with diarrhoea and percentage of them who received ORS and other fluids by area, upazila and background characteristics, Endline survey 2014

Sick children with diarrhea and who								
Total	No of children 0-23	Have diarrhea	Received ORS	Homemade solution	ORT (ORS/Homemade/r ecommended home fluid)	Rice saline	Zinc	Number of children with diarrhea
Total	3,558	7.7	80.7	8.4	85.5	1.1	22.2	275
Sex								
Male	1,901	7.8	83.9	6.0	87.9	1.3	21.5	149
Female	1,657	7.6	77.0	11.1	82.5	0.8	23.0	126
Age								
<6	825	4.5	62.2	2.7	64.9	0.0	18.9	37
6-11	879	8.0	88.6	2.9	88.6	2.9	28.6	70
12-23	1,854	9.1	81.5	11.9	88.7	0.6	20.2	168
Upazila								
Barhatta	761	4.7	69.4	11.1	80.6	0.0	27.8	36
Durgapur	606	10.9	75.8	7.6	80.3	1.5	12.1	66
Kalmakanda	1,111	9.5	84.9	6.6	87.7	0.0	27.4	106
Kendua	1,080	6.2	85.1	10.4	89.6	3.0	20.9	67
Mother's education								
No education	919	8.9	80.5	4.9	82.9	1.2	19.5	82
Primary incomplete	772	7.1	76.4	10.9	83.6	0.0	21.8	55
Primary complete	727	9.1	83.3	9.1	89.4	1.5	19.7	66
Secondary incomplete	821	6.6	81.5	11.1	87.0	1.9	25.9	54
Secondary+	319	5.6	83.3	5.6	83.3	0.0	33.3	18
Wealth quintile								
Lowest	697	9.9	76.8	7.2	81.2	1.4	21.7	69
Second	687	8.9	73.8	11.5	85.2	1.6	23.0	61
Middle	702	8.7	86.9	4.9	88.5	0.0	19.7	61
Fourth	722	5.3	78.9	13.2	84.2	2.6	23.7	38
Highest	750	6.1	89.1	6.5	89.1	0.0	23.9	46

Annex 2.5.3: Percent distribution of children age 0-23 who suffered from pneumonia and sought care from medically trained providers by area, upazila and background characteristics, Endline survey 2014

	No of children 0-23	Have pneumonia	Have pneumonia and who		Number of children with pneumonia
			Sought care	Sought care from medically trained provider	
Total	3,558	7.4	83.6	22.5	262
Sex					
Male	1,901	8.5	84.5	24.2	161
Female	1,657	6.1	82.2	19.8	101
Age					
<6	825	9.1	86.7	24.0	75
6-11	879	7.8	79.7	21.7	69
12-23	1,854	6.4	83.9	22.0	118
Upazila					
Barhatta	761	5.9	86.7	28.9	45
Durgapur	606	8.3	84.0	28.0	50
Kalmakanda	1,111	11.0	79.5	12.3	122
Kendua	1,080	4.2	91.1	37.8	45
Mother's education					
No education	919	7.8	80.6	19.4	72
Primary incomplete	772	8.4	84.6	16.9	65
Primary complete	727	8.7	85.7	22.2	63
Secondary incomplete	821	5.2	83.7	32.6	43
Secondary complete or higher	319	6.0	84.2	31.6	19
Wealth quintile					
Lowest	697	9.2	73.4	15.6	64
Second	687	8.0	85.5	27.3	55
Middle	702	6.8	87.5	20.8	48
Fourth	722	7.6	81.8	25.5	55
Highest	750	5.3	95.0	25.0	40

Annex 2.5.4: Percent distribution of children age 0-23 months who suffered from any illness other than pneumonia and diarrhoea in the two weeks preceding the survey and treatment sought from medically trained providers, by area, upazila and background characteristics, Endline survey 2014

	No of children 0-23	Have other illness	Have other illness and who		Number of children with other illness
			Sought care	Sought care from medically trained provider	
Total	3,558	6.7	72.9	17.1	240
Sex					
Male	1,901	6.6	77.0	20.6	126
Female	1,657	6.9	68.4	13.2	114
Age					
<6	825	7.2	78.0	15.3	59
6-11	879	6.6	77.6	19.0	58
12-23	1,854	6.6	68.3	17.1	123
Upazila					
Barhatta	761	10.4	68.4	15.2	79
Durgapur	606	6.9	78.6	33.3	42
Kalmakanda	1,111	5.9	73.8	13.8	65
Kendua	1,080	5.0	74.1	11.1	54
Mother's education					
No education	919	6.5	66.7	11.7	60
Primary incomplete	772	8.0	64.5	14.5	62
Primary complete	727	5.8	71.4	16.7	42
Secondary incomplete	821	7.3	85.0	21.7	60
Secondary complete or higher	319	5.0	87.5	31.3	16
Wealth quintile					
Lowest	697	5.9	65.9	12.2	41
Second	687	6.6	73.3	17.8	45
Middle	702	6.4	57.8	13.3	45
Fourth	722	7.8	82.1	14.3	56
Highest	750	7.1	81.1	26.4	53

Annex 2.6: HIV/AIDS

Annex 2.6.1: Percentage of respondents aware of M TCT and PM TCT of HIV/AIDS by study area, upazila and background characteristics, Endline survey 2014

	Knowledge on Mother to child transmission (MTCT)				PMTCT	Number of women
	During pregnancy	During delivery	By breastfeeding	All three		
Total	28.3	19.4	44.7	15.9	18.5	3,558
Study area:						
Intervention	25.9	19.2	40.0	16.0	16.0	1,686
Comparison	30.5	19.6	48.9	15.8	20.7	1,872
Mother's age						
15-19	26.8	19.6	46.4	15.2	21.0	138
20-24	31.2	20.4	47.2	17.0	21.6	1,220
25-29	29.5	19.7	46.2	16.2	18.6	1,201
30-34	24.6	17.6	41.7	14.3	14.3	672
35-39	21.9	19.4	32.1	14.8	15.2	237
40-44	15.1	12.3	39.7	6.8	8.2	73
45-49	47.1	35.3	64.7	35.3	23.5	17
Mother's education						
No education	16.9	11.1	29.4	8.5	13.4	919
Primary incomplete	24.7	15.8	41.3	12.3	16.5	772
Primary complete	25.2	16.8	42.0	14.3	16.4	727
Secondary incomplete	37.6	25.5	55.9	20.8	23.3	821
Secondary complete or higher	53.3	42.6	74.6	36.7	30.4	319
Wealth quintile						
Lowest	22.4	17.2	37.2	14.2	14.9	697
Second	26.3	16.2	39.9	13.7	15.1	687
Middle	23.5	16.2	41.0	12.1	16.1	702
Fourth	28.5	19.8	45.7	16.1	18.8	722
Highest	40.0	27.1	58.7	22.8	26.7	750
Upazila						
Barhatta	23.0	14.2	42.0	12.9	26.1	761
Durgapur	40.1	32.0	58.7	28.2	16.3	606
Kalmakanda	35.6	23.3	53.6	17.7	16.9	1,111
Kendua	18.0	12.0	29.5	9.2	15.8	1,080

Annex 2.7: Contraception and birth spacing

Annex 2.7.1: Percent distribution of currently married women age 15-49 and mother of children age 0-23 by contraceptive method currently used, according to background characteristics, Endline survey 2014

	Any method	Any modern method	Modern Method							Traditional method				No method	Missing	Total	Number of women
			Female sterilization	Male sterilization	Pill	IUD	Injectables	Implants	Condom	Any traditional method	Periodic abstinence	LAM	Other				
Total	68.0	67.4	1.1	0.2	53.5	0.3	10.6	0.4	1.3	0.6	0.1	0.0	0.5	31.9	0.1	100	3,515
Study area:																	
Intervention	72.0	71.0	1.1	0.4	56.2	0.3	11.0	0.8	1.3	1.1	0.2	0.0	0.8	27.8	0.1	100	1,670
Comparison	64.3	64.1	1.1	0.0	51.1	0.2	10.2	0.0	1.4	0.2	0.0	0.0	0.2	35.7	0.0	100	1,845
Mother's age																	
15-19	69.9	69.9	0.0	0.0	56.6	0.0	11.8	0.7	0.7	0.0	0.0	0.0	0.0	30.1	0.0	100	136
20-24	70.4	69.8	0.3	0.1	58.6	0.2	8.6	0.2	1.7	0.7	0.1	0.0	0.6	29.5	0.1	100	1,204
25-29	70.4	69.9	1.1	0.3	55.4	0.3	11.3	0.4	1.3	0.4	0.1	0.0	0.3	29.6	0.0	100	1,188
30-34	62.3	61.4	2.0	0.3	44.7	0.6	12.5	0.5	0.9	0.9	0.3	0.0	0.6	37.7	0.0	100	665
35-39	59.6	58.7	2.6	0.0	44.3	0.0	10.2	0.4	1.3	0.9	0.0	0.0	0.9	40.4	0.0	100	235
40-44	61.1	61.1	4.2	0.0	43.1	0.0	12.5	0.0	1.4	0.0	0.0	0.0	0.0	37.5	1.4	100	72
45-49	86.7	80.0	0.0	0.0	53.3	0.0	26.7	0.0	0.0	6.7	0.0	0.0	6.7	13.3	0.0	100	15
Mother's education																	
No education	58.1	57.4	1.2	0.1	42.6	0.3	12.6	0.4	0.0	0.8	0.0	0.0	0.8	41.7	0.1	100	903
Primary incomplete	69.2	68.6	1.3	0.3	55.6	0.3	9.5	0.5	1.2	0.5	0.1	0.0	0.4	30.8	0.0	100	765
Primary complete	69.3	68.8	1.5	0.3	54.4	0.1	11.2	0.3	1.0	0.6	0.0	0.0	0.6	30.7	0.0	100	717
Secondary incomplete	74.7	74.3	0.5	0.0	61.2	0.4	10.3	0.2	1.7	0.4	0.1	0.0	0.2	25.2	0.1	100	814
Secondary complete or higher	73.1	71.8	0.9	0.3	57.9	0.0	7.0	0.3	5.4	1.3	0.6	0.0	0.6	26.9	0.0	100	316
Wealth quintile																	
Lowest	60.6	60.3	0.4	0.1	46.0	0.3	12.7	0.1	0.6	0.3	0.0	0.0	0.3	39.4	0.0	100	685
Second	67.5	67.1	0.9	0.3	51.6	0.0	12.6	0.6	1.0	0.4	0.0	0.0	0.4	32.3	0.1	100	674
Middle	67.0	66.3	1.3	0.3	53.3	0.6	9.8	0.4	0.6	0.7	0.1	0.0	0.6	33.0	0.0	100	694
Fourth	69.4	68.4	1.5	0.0	55.0	0.3	10.0	0.1	1.4	1.0	0.1	0.0	0.8	30.5	0.1	100	718
Highest	74.9	74.2	1.3	0.1	60.9	0.1	8.2	0.5	3.0	0.7	0.3	0.0	0.4	25.1	0.0	100	744
Upazila																	
Barhatta	70.6	70.3	0.7	0.0	58.0	0.4	9.8	0.0	1.5	0.3	0.0	0.0	0.3	29.4	0.0	100	758
Durgapur	73.0	72.2	1.0	0.5	52.5	0.2	16.2	0.3	1.5	0.8	0.0	0.0	0.8	27.0	0.0	100	604
Kalmakan	60.0	59.8	1.5	0.0	46.3	0.1	10.6	0.0	1.4	0.2	0.0	0.0	0.2	40.0	0.0	100	1,087
Kendua	71.5	70.3	1.1	0.3	58.3	0.4	8.1	1.0	1.1	1.2	0.4	0.0	0.8	28.3	0.2	100	1,066

Annex 3: Results on Rapid Catch Indicators by wealth quintile according to area and survey year

	Indicators		Intervention						Comparison						Intervention	Comparison
SI			Lowest	Second	Middle	Fourth	Highest		Lowest	Second	Middle	Fourth	Highest		Rich to poor ratio	
Antenatal Care																
1	Percentage of mothers of children age 0-11 months who had four or more antenatal visits when they were pregnant with the youngest child	Baseline	3.3	4.9	3.3	4.7	9.7		0.6	0.8	1.4	4.9	20.6		3.0	33.7
		Endline	7.1	11.2	7.6	14.0	25.7		3.4	3.5	5.3	3.9	12.5		3.6	3.7
Tetanus Toxoid																
2	Percentage of mothers with children age 0-11 months who received at least two Tetanus toxoid vaccinations before the birth of their youngest child	Baseline	79.5	88.5	85.5	87.3	91.5		71.3	80.5	83.9	85.9	91.1		1.2	1.3
		Endline	75.0	84.0	77.1	81.1	82.9		77.7	75.7	74.2	83.1	79.0		1.1	1.0
Skilled Birth Attendant																
3	Percentage of children age 0-11 months whose births were attended by skilled personnel	Baseline	1.6	4.2	6.6	10.7	21.2		4.3	5.3	11.2	14.1	30.8		12.9	7.2
		Endline	12.5	15.2	13.9	22.0	42.1		10.1	11.1	15.9	11.5	29.0		3.4	2.9
Institutional delivery																
4	Percentage of children age 0-11 months whose births took place at institution/health facility	Baseline	0.8	3.0	4.6	10.1	19.4		1.8	3.8	7.7	12.0	24.7		23.6	13.5
		Endline	10.7	15.2	11.1	17.7	38.8		9.5	9.7	14.6	11.5	27.6		3.6	2.9
Post-Partum Visit																
5	Percentage newborn of age 0-11 who received a post-partum visit from an appropriate trained health worker within two days after birth (LB)	Baseline	0.8	3.7	3.4	10.3	19.8		3.1	3.9	8.6	10.9	27.9		23.8	9.1
		Endline	7.6	12.7	11.4	17.7	38.8		11.5	10.1	14.1	12.5	25.7		5.1	2.2
6	Percentage of mother of children age 0-11 months who received a post-natal visit from an appropriate trained health worker within two days after the birth of their youngest child	Baseline	0.8	3.6	5.9	10.7	20.0		2.4	4.5	9.1	12.7	27.4		24.4	11.2
		Endline	9.8	15.2	11.1	18.3	34.9		10.1	11.1	13.9	11.5	28.3		3.6	2.8

Current Contraceptive Use Among Mothers of Young Children																
7	Percentage of mothers of children age 0-23 months who are using a modern contraceptive method	Baseline	42.9	45.5	48.4	50.9	55.4		30.2	44.5	41.6	48.4	59.5		1.3	2.0
		Endline														
		64.9	71.9	68.6	70.7	77.5		56.9	62.9	64.0	66.0	71.0		1.2	1.2	
Exclusive breastfeeding																
8	Percentage of children age 0-5 months who were exclusively breastfed	Baseline	31.4	29.5	30.4	30.1	29.6		32.3	28.5	30.9	30.4	27.1		0.9	0.8
		Endline														
		50.9	46.6	48.5	52.5	58.3		44.2	41.9	38.0	43.1	38.5		1.1	0.9	
Nutrition: Infant and Young Child Feeding																
9	Percent of infants and young children age 6-23 months fed according to a minimum of appropriate feeding practices	Baseline	4.1	4.9	4.7	7.5	11.1		4.3	6.2	5.8	5.8	15.0		2.7	3.5
		Endline														
		20.4	21.5	22.3	27.3	32.5		17.5	19.8	23.7	24.7	33.9		1.6	1.9	
Vitamin A Supplementation in the last 6 months																
10	Percentage of children age 6-23 months who received a dose of Vitamin A in the last 6 months: card verified or mother’s recall	Baseline	33.3	40.3	26.1	28.8	49.3		25.8	28.9	24.1	25.9	37.7		1.5	1.5
		Endline														
		79.1	78.5	83.0	83.0	86.6		79.8	82.6	81.8	87.3	88.3		1.1	1.1	
Immunization																
11	Percentage of children age 12-23 months who received a measles vaccination	Baseline	76.5	80.7	78.9	80.2	81.5		70.7	75.6	78.3	81.2	85.7		1.1	1.2
		Endline														
		62.9	68.5	72.2	74.6	70.2		61.0	64.1	73.0	79.1	75.3		1.1	1.2	
12	Percentage of children aged 12-23 months who received DPT1/Penta1 according to the vaccination card or mother’s recall by the time of the survey	Baseline	80.6	86.3	85.7	85.2	87.0		80.0	83.6	88.3	87.7	92.4		1.1	1.2
		Endline														
		84.4	88.5	89.4	88.1	92.0		89.0	90.8	93.7	95.1	96.0		1.1	1.1	
13	Percentage of children aged 12-23 months who received DPT3/Penta3 according to the vaccination card or mother’s recall by the time of the survey	Baseline	76.5	79.9	79.7	79.4	81.3		70.0	75.1	79.8	80.9	84.1		1.1	1.2
		Endline														1.2
		72.5	72.1	78.9	76.8	80.3		64.5	69.4	73.0	79.7	74.3		1.1		

Treatment of Fever in Malarious Zones															
14	Percentage of children age 0-23 months with a febrile episode during the last two weeks who were treated with an effective anti-malarial drug within 24 hours after the fever began	Baseline	0.0	0.0	0.0	3.2	0.7		0.0	0.7	0.0	0.0	0.0	#DIV/0!	#DIV/0!
		Endline													
ORT use															
15	Percentage of children age 0-23 months with diarrhea in the last two weeks who received oral rehydration solution (ORS) and/or recommended home fluids	Baseline	60.0	80.0	74.2	73.9	80.0		52.8	41.7	54.2	54.5	44.8	1.3	0.8
		Endline													
Appropriate Care Seeking for Pneumonia															
16	Percentage of children age 0-23 months with chest-related cough and fast and/ or difficult breathing in the last two weeks who were taken to an appropriate health provider	Baseline	18.2	15.4	17.4	26.9	30.3		7	25.8	21.2	26.5	15.6	1.7	2.2
		Endline													
Point of Use (POU)															
17	Percentage of households of children age 0-23 months that treat water effectively	Baseline	1.4	1.1	2.3	1.8	2.0		3.7	5.1	5.1	6.7	8.2	1.4	2.2
		Endline	4.1	4.8	3.8	5.2	5.1		5.2	5.3	9.1	11.6	17.7	1.3	3.4
Appropriate Hand washing Practices															
18	Percentage of mothers of children age 0-23 months who live in households with soap at the place for hand washing	Baseline	16.3	15.9	17.7	18.7	36.9		19.5	26.6	26.5	37.2	52.1	2.3	2.7
		Endline													
Child sleeps under an insecticide-treated bednet															
19	Percentage of children age 0-23 months who slept under an insecticide-treated bed net (in	Baseline													

	malaria risk areas, where bed net use is effective) the previous night	Endline	9.8	13.5	8.2	6.8	4.6		7.7	9.6	6.1	5.9	4.0		0.5	0.5
Underweight																
20	Percentage of children 0-23 months who are underweight (- 2 SD for the median weight for age, according to WHO/NCHS reference population)	Baseline	41.8	40.8	36.2	28.5	21.9		41.4	39.8	41.2	32.6	23.3		0.5	0.6
		Endline	35.9	24.5	29.5	23.7	24.3		35.2	36.5	31.4	26.7	26.9		0.7	0.8

2010

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SUSOMA

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List of Abbreviations

ANC	Antenatal Care
BDHS	Bangladesh Demographic and Health Survey
CBO	Community Based Organization
CHV	Community Health Volunteers
CRWRC	Christian Reformed World Relief Committee
CSBA	Community Skilled Birth Attendant
DGHS	Directorate General of Health Services
DGFP	Directorate General of Family Planning
FWA	Family Welfare Assistant
FWC	Family Welfare Centre
FWV	Family Welfare Visitor
GoB	Government of Bangladesh
HA	Health Assistant
HIV/AIDS	Human Immunodeficiency Virus/ Acquired Immune Deficiency Syndrome
ICDDR,B	International Centre for Diarrhoeal Disease Research, Bangladesh
IMCI	Integrated Management of Childhood Illness
ITN	Insecticide Treated Net
KPC	Knowledge, Practice and Coverage
MA	Medical Assistant
MCE-IMCI	Multi-Country Evaluation of Integrated Management of Childhood Illness
MDG	Millennium Development Goals
MOHFW	Ministry of Health and Family Welfare
MMR	Maternal Mortality Ratio
MNCH	Maternal, Neonatal and Child Health
MTCT	Mother To Child Transmission
NGO	Non-Government Organizations
OR	Operations Research
PI	Peoples' Institution
PMTCT	Preventing Mother-to-Child Transmission
PPS	Probability Proportionate to Size
PHSD	Public Health Sciences Division
SACMO	Sub-Assistant Community Medical Officer
TT	Tetanus Toxoid
TTBA	Trained Traditional Birth Attendant
UNICEF	United Nations Children's Fund
USAID	US Agency for International Development
WHO	World Health Organization

Executive Summary

The Christian Reformed World Relief Committee (CRWRC), a faith-based and nongovernmental organization established in 1962, is implementing a five-year child survival project in Durgapur and Kendua sub-district of Netrokona district in Bangladesh, with financial assistance from USAID. CRWRC has developed an innovative “People’s Institution” model that helps communities form independent, self-sustaining community-based organizations (CBOs). The goal of the CRWRC project is to reduce mortality among the most marginalized mothers and newborns by building sustainable public-private partnerships with the community organizations (People’s Institutions) that can mobilize poor families to access quality maternal, newborn and child health services. The project provides community-based services and health promotion delivered at the household level by trained traditional birth attendants (TTBAs) and unpaid Community Health Volunteers (CHVs).

ICDDR,B, an internationally recognized health and population research institution based in Bangladesh, is partnering with CRWRC in conducting operations research (OR) to evaluate the effectiveness of the People’s Institution model to deliver maternal, newborn and child health interventions to poor and vulnerable populations and strengthening health systems in Bangladesh. This evaluation by ICDDR,B will contribute to the national and global evidence base on the potential of community mobilization approaches to improve maternal, neonatal and child health. A quasi-experimental study design has been developed for the OR and a total of forty clusters have been selected. Twenty clusters were from the two CRWRC/USAID intervention upazilas – Durgapur and Kendua, while the other 20 clusters were selected from two nearby upazilas, Barhatta and Kalmakanda with usual GoB services as comparison areas. As a part of the evaluation large household Knowledge, Practice, and Coverage (KPC) survey have been carried out in the selected intervention and comparison areas. The baseline KPC survey was conducted in 2009. Data collection commenced from 17 February 2010 till 06 May 2010. The respondents for the survey were women who had a birth (live/still) in the two years preceding the survey and mothers of children aged 0-11 months. A total of 4,088 households were surveyed.

Key findings:

Demographic and socioeconomic characteristics of the respondents:

The intervention and comparison areas were comparable in terms of proportion of the population that was male (51 percent) and female (49 percent), proportion aged less than two years (17, 19 percent), average household size (5.4 to 5.6). Access to improved source of drinking water was slightly better in the intervention areas but access to improved sanitation facility was markedly better in intervention areas (73 percent vs. 63 percent). Also, ownership of land was more common in intervention areas compared to comparison areas. In terms of wealth index, the households in intervention areas were better off as a lesser proportion of them were in the poorest quintile compared to comparison areas (17 percent vs. 24 percent).

Care during antenatal, delivery and after delivery:

Antenatal care (ANC) received from medically trained providers was 30 percent in intervention and 25 percent in comparison areas. Women of Durgapur were most likely (42 percent) and women of Kendua were least likely (21 percent) to have received antenatal care from trained providers. The likelihood of receiving antenatal care from a medically trained provider increased with increasing education and household wealth and decreased with increasing age. The percentage of women receiving at least four ANC visits from a medically trained provider was only 5 percent in the intervention and 6 percent in the

comparison area and was more common in younger, more educated women and women belonging to wealthier households.

Deliveries most commonly took place at home in both intervention (92 percent) and comparison (90 percent) areas. About 6 percent of the deliveries took place in government health facilities in both intervention and comparison areas; and about 2-4 percent of the deliveries occurred in private hospitals or clinics in both intervention and comparison areas. Facility deliveries were highest in Barhatta (10 percent) and the lowest in Durgapur (7 percent). Only 9 and 13 percent of the deliveries were assisted by a skilled provider in the intervention and comparison areas respectively. Skilled attendance at delivery was highest in Barhatta (13 percent) and lowest in Kendua (9 percent). Higher education and socioeconomic status was associated with assistance by skilled providers during delivery. A clean delivery kit was used in only 4 and 17 percent of home deliveries in intervention and comparison areas respectively whereas active management of third stage of labor was practiced in only 1 percent of the deliveries

The coverage of postnatal care was low, and only 12 percent of women received any postnatal care. The proportion of women who received postnatal care from medically trained providers was 9-12 percent in the survey areas, the majority of whom received this care within 2 days of delivery. On average 11-17 percent of newborns born in the one year preceding the survey received postnatal care from a medically trained provider within two days of birth. Mothers and infants of younger women, women who had completed secondary or higher studies and women from the top wealth quintile were more likely to receive postnatal care from a medically trained provider within two days of delivery.

Among the women who had live births or stillbirths, 35 percent reported at least one complication at any time during antenatal period, during delivery or after delivery. Complications were most common during the antenatal period (26 percent) and least common during the postnatal period (10 percent). One-third to half of the respondents did not seek care for the complications faced during any time of the pregnancy. Care seeking was highest for postnatal complications and care seeking from medically trained providers was highest for delivery related complications. One-fourth to 35 percent of the respondents also sought care from unqualified providers.

The household average out of pocket expenditure for all ANC care per person was Tk 1029. This expenditure was higher in the comparison area than the intervention area (Tk 1112 in comparison vs Tk 953 in intervention). For institutional delivery, on average the people of this area spent Tk 6391. The mean expenditure related to institutional delivery was higher in the intervention area (Tk 8897) compared to comparison area (Tk 4636). On average the household incurs Tk 893 for home delivery. The household average out of pocket expenditure for PNC care per person was Tk 761 and was higher in comparison areas (Tk 840 vs. Tk 629).

Neonatal health

Only 10 percent of the babies born in the year preceding the survey in intervention and 20 percent in comparison areas were dried and wrapped before the delivery of placenta. Giving the first bath to the newborn after 72 hrs of birth was reported to be 23 percent in the intervention and 36 percent in the comparison area. Delaying the first bath of the newborn to after 72 hrs was highest in Barhatta (42 percent) and lowest in Kendua (16 percent). Around half (55 percent) of respondents in intervention areas and 62 percent in comparison areas practiced clean cord care. Clean cord cutting was almost universal (97 percent) in all the areas. Two and seven percent of newborns received essential newborn

care in intervention and comparison areas respectively. Use of prophylactics for preventive eye care within the first hour after birth was only 3percent.

Nutrition

Overall, 53 percent of children were breastfed within one hour of birth whereas colostrum feeding was almost universal in all the areas. A little more 55 percent of the children born in the two years preceding the survey did not receive any prelacteal feed. The percentage of exclusive breastfeeding in children aged less than 6 months was 47 and 49 percent in intervention and comparison areas respectively. Overall, breastfed children (34 percent) were more likely to meet the recommendations for diversity in food groups and frequency of feeding compared to non-breastfed children (21 percent). Around one-third of the children (36 percent in intervention and 33 percent in comparison) under two years were underweight (<-2z weight for age z- score) including 11 percent who were severely underweight (<-3z weight for age z- score) (Table 6-4). Being underweight was especially common among children who were 1 to 2 years old and among boys (36 vs. 33 percent). The percentage of underweight was lowest in Durgapur (32 percent) and highest in Kalmakanda (36 percent). The proportion of underweight children decreased with increasing mother's education and wealth status of the household. Sixty-four and 59 percent of children in intervention and comparison areas respectively had received vitamin-A supplementation in the last 6 months

Child Health

The coverage of DPT1/Penta1 was 95 percent in intervention and 91 percent in comparison areas whereas the coverage of DPT3/Penta3 ranged from 84-91 percent for the different areas. The coverage for measles vaccination was 86 percent in the comparison area and 95 percent in the intervention area. Vaccination coverage was lowest among children whose mother had no education or who were from households in the lowest wealth quintiles. Six percent of the children in intervention areas and 3 percent in comparison areas slept under Insecticide treated bed nets during the last night prior to the survey. In only one-fifth of the cases the bed nets were treated with appropriate insecticides in the past six months. The two-week prevalence of diarrhoea was 6 percent in the intervention area and 8 percent in the comparison area among the surveyed children and was highest in Barhatta (13 percent) and lowest in Kalmakanda (4 percent). Around 8 percent of the under-two children were reported by the mothers as suffering from suspected pneumonia in the previous two weeks of the survey. Care-seeking for pneumonia from medically trained providers was higher in the intervention areas than comparison areas (22 percent vs. 19 percent). About 7 percent of the children in the intervention and comparison areas respectively had an illness other than ARI and diarrhoea during the previous 2 weeks. Care seeking from any provider was high, 75 percent, but only 14 percent sought care from medically trained providers. Care-seeking from medically trained providers was lowest in Kendua upazila (11 percent).

The average out of pocket expenditure for treating under-five children ranged from Tk 94 to Tk 156. The largest contribution to the total household costs was the drug cost which equals Tk 102.

Knowledge on HIV/AIDS

Around 60 percent of respondents were aware of HIV/AIDS. Among the different upazilas, awareness of AIDS ranged from 49 percent in Barhatta to 79 percent in Durgapur. Overall, one-fourth of the respondents (27 percent in intervention vs. 22 percent in comparison) were aware of HIV transmission through unprotected sex. Among the non-sexual means of transmission more mothers (15 percent) reported the use of unsterilized syringe or needles followed by unsafe blood transfusion (9 percent).

Thirty and 17 percent of respondents in intervention and control areas were aware of MTCT of HIV/AIDs. The percentage was similar for PMTCT.

Contraception and birth spacing

Forty-eight percent of currently married women in the surveyed areas (50 percent in intervention Vs. 46 percent in comparison) were using a family planning method with majority using a modern method (47 percent). The pill was the most widely used method (36 percent). More than half (55 percent) of the women responded that one should wait for 2-5 years after the birth of a child before trying to get pregnant again. Thirty-seven percent of respondents in intervention and only 17 percent in comparison areas mentioned that they were aware of at least two risks associated with a birth interval of less than 24 months.

Water and Sanitation

Only 2 percent mothers of children age 0-23 reported that their households treat water in intervention areas. This was slightly higher in comparison areas (6 percent). Among the different upazilas less than one percent of the households treated water effectively in Kendua whereas 10 percent (highest) of households in Barhatta treated water effectively. Twenty-two and 32 percent of mothers of children age 0-23 months lived in households with soap at the place for hand washing in intervention and comparison areas respectively.

Conclusion

The findings from the baseline KPC survey provide a comprehensive picture of different aspects of maternal, neonatal and child health in the two intervention and two comparison upazilas of Netrokona district before the implementation of the intervention programme against which the progress of the programme can be measured. In general, the baseline survey indicates that the SUSOMA programme plans to reach and provide care to a population with health indicators that are worse off than national rates. In addition, the findings provide critical insights into areas that need careful attention by the project such as increasing awareness and motivation for care-seeking, and ensuring adequate availability and access to medically trained/skilled providers for care of the mother and child. Education of mothers and families on danger signs and early detection of maternal, newborn and child health problems will need to be combined with approaches to make care seeking for complications convenient and rewarding.

Section 1: INTRODUCTION

1.1. Background

Bangladesh is one of the few countries in the world on track to meet Millennium Development Goal 4; a reduction of childhood mortality by two-thirds. From 1994 to 2007 there has been a dramatic decline in the rates of infant and under-five mortality (BDHS 2007). However, rates of maternal and neonatal mortality have remained unchanged. Bangladesh has a neonatal mortality rate of 37 per 1,000 live births, which accounts for almost half of all under-five deaths. In Bangladesh, the Maternal Mortality Ratio (MMR) is high (322/100,000 live births) (BMMS 2001). It is estimated that for each maternal death, fourteen neonatal deaths occur, while 75% of the babies born to women who die also die within the first year of life (BMMS 2001). The Bangladesh Demographic and Health Survey (BDHS) 2007 data on antenatal care, skilled attendance at birth, and postnatal care strongly indicate gross disparity in service coverage for different economic quintiles.

The Christian Reformed World Relief Committee (CRWRC), a faith-based and nongovernmental organization established in 1962, is implementing a five-year child survival project in Durgapur and Kendua sub-district of Netrokona district in Bangladesh, with financial assistance from USAID. CRWRC has developed an innovative “People’s Institution” model that will help communities form independent, self-sustaining community-based organizations (CBOs). The goal of the CRWRC project is to reduce mortality among the most marginalized mothers and newborns by building sustainable public-private partnerships with the community organizations (People’s Institutions) that can mobilize poor families to access quality maternal, newborn and child health services. CRWRC has focused all its efforts on a maternal and newborn intervention package, using the government’s integrated strategy for childhood illness (Community IMCI) that has been expanded to include mothers, newborns and children. The project provides community-based services and health promotion delivered at the household level by trained traditional birth attendants (TTBAs) and unpaid Community Health Volunteers (CHVs).

Description of People’s Institution (PI) model:

CRWRC has 18 years of experience using a “People’s Institution (PI) Model” in Bangladesh. This innovative model is unique because it reaches the poorest members of the community. The formed CBOs are well positioned to interact and collaborate with the informal health care system (village doctors) and the public health sector (clinics) in ways that lead to stronger, more sustainable health systems.

A People’s Institution is a community-based organization (CBO) composed of several smaller women’s and men’s groups, or **Primary Groups**. The PI model organizes and mobilizes communities for health and social change and the goal is to become an independent self-sustaining organization in order to have a lasting impact on the health of their members and the broader community.

This innovative model emphasizes the GoB national policies and strategies such as targeting high poverty areas; using the informal health sector and community-based service providers to expand access to MNC services; mobilizing women, families, and opinion leaders; and establishing linkages between the public health sector and the community. Key elements of the PI model are:

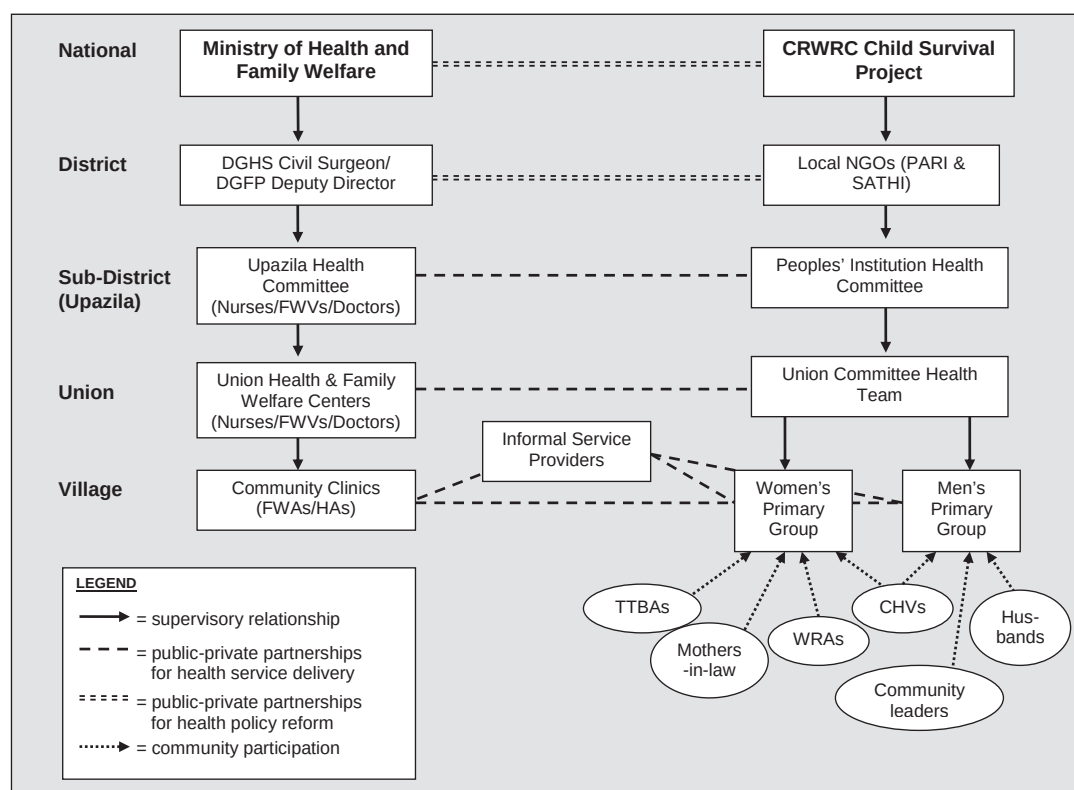
- Building **local capacity** to identify and address community needs;
- Helping to empower the **poorest and most marginalized populations** to make decisions;
- Mobilizing **local resources** for health and establishing resource management systems;

- Motivating communities to **advocate for policy changes** to respond to their needs; and
- Establishing and strengthening **linkages between communities and health facilities** to improve quality, availability, and access to health services.

The People's Institution model has a three-tiered structure: Village level women's and men's Primary Groups at the bottom level, Union Committees at the mid level, and the People's Institutions at the top or sub-district/upazila) level (Figure 1-1).

Financial area is considered as one of the areas for capacity building. Therefore, PIs are encouraged to establish emergency health funds through savings and different income generating projects. The community can then draw upon these funds to finance the necessary treatment for mothers and U-5 children by themselves. The fund is used as an interest free loan and managed by a health Fund Management committee, comprising of 5 members; 3 from PI health sub team, 1 is PI chairperson and 1 is the Community Health Volunteer (CHV). Figure 1-1 describes the community mobilization strategy by CRWRC through the PI model..

Figure 1-1: PI model



ICDDR,B, an internationally recognized health and population research institution based in Bangladesh, and in partnership with CRWRC is involved in conducting operations research (OR) to evaluate the effectiveness of the People's Institution model to deliver maternal, newborn and child health interventions to poor and vulnerable populations and strengthening health systems in Bangladesh. Since the People's Institution (PI) model is an innovative approach to promote public-private partnerships for providing maternal and neonatal care and in strengthening the overall health system at both the national and local level, the evaluation by ICDDR,B will contribute to the national and global evidence

base on the potential of community mobilization approaches to improve maternal, neonatal and child health.

As mentioned earlier measuring the effectiveness of interventions and equity of project coverage is the primary objective of the research conducted by ICDDR,B. In regards to that household Knowledge, Practice, and Coverage (KPC) surveys will be carried out in the selected study population. As a part of this design the baseline KPC survey was conducted in 2009 to better understand the baseline status of key indicators and to provide information on possible confounders so that any differences between the intervention and comparison arms can be adjusted for in the final analysis.

1.2. Purpose of the KPC survey

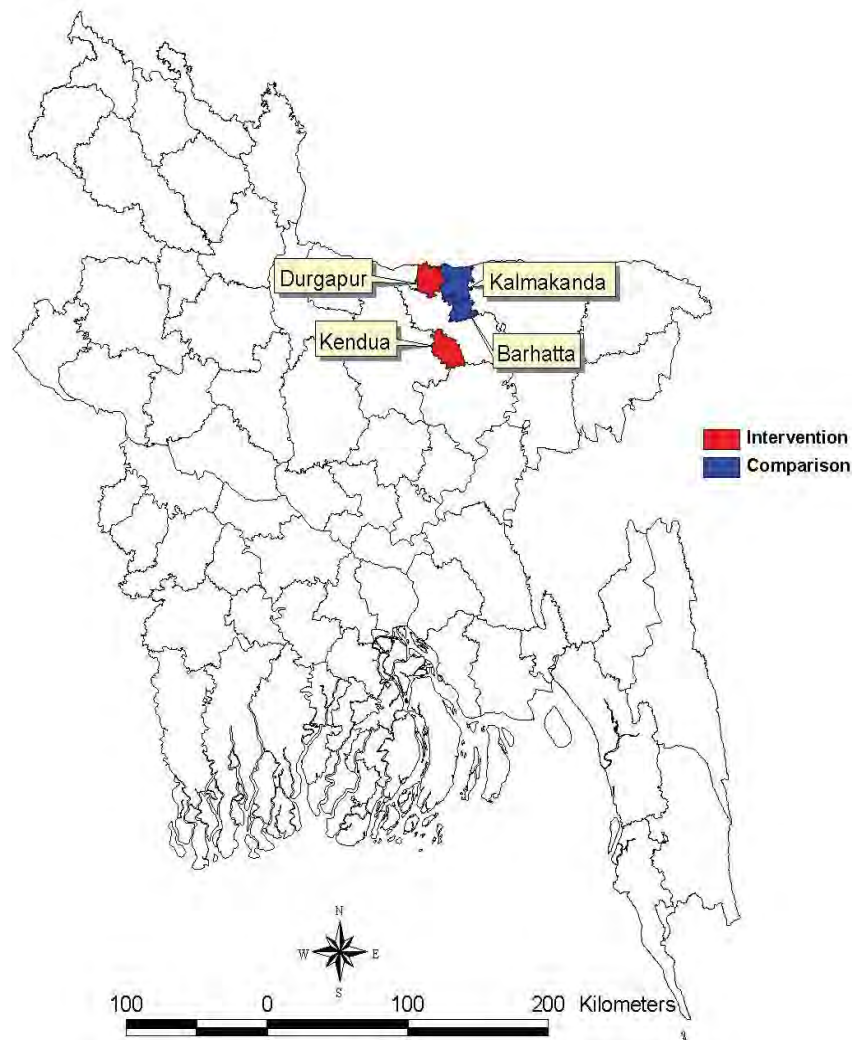
The purpose of the baseline survey was to describe baseline levels of knowledge and practice in relation to maternal, neonatal and child interventions, and provide baseline estimates of selected maternal, neonatal and child health indicators.

Section 2: METHODS

2.1. Study area

The study was carried out in Netrokona district, which is situated in the northern part of Bangladesh. This district has been identified by the Government of Bangladesh as one of 14 low performing districts with high child mortality (MICS 2007). The study was carried out in all 20 unions of the two intervention upazilas, Kendua (13 unions) and Durgapur (7 unions). Each union was considered as cluster. The comparison group consisted of all 15 unions from Kalmakanda (8 unions) and Barhatta (7 unions) upazilas, the only two upazilas in Netrokona where similar maternal, neonatal and child survival projects are not being implemented or there are no future plans of such implementation. These 15 unions of comparison areas were divided into 20 parts and each part was considered as cluster.

Figure 2-1: Map of study area



2.2. Study design

A quasi-experimental study design was used for the study in order to explore the effectiveness, equity and cost-effectiveness of the intervention package. A total forty clusters were selected for the study. Twenty clusters were from the two CRWRC/USAID intervention upazilas, while the other 20 clusters were selected from two nearby upazilas with usual GoB services as comparison areas. The Knowledge, Practice and Coverage (KPC) survey was conducted at baseline among mothers of under-two year children residing in the study areas.

2.3. Respondents and Sample size

a) Indicator and respondents

The key indicators measured in the baseline KPC survey 2010 are provided in Annex 1. The list of indicators was prepared on the basis of rapid CATCH indicators.

The measurement of these indicators required a population of under-2 children and women who had a birth outcome in the previous two years (i.e, since 1st January 2008).

b) Sample size

Standard formulas (Betty 2003) have been used to estimate the required sample size based on the normal distribution, confidence levels of 95%, 80% power, and a design effect of 1.5 (to allow for clustering). Rapid CATCH indicators (and questionnaire) and the module on maternal and newborn care guided selection of indicators for the sample size calculation. Annex-1 shows the sample requirements according to selected indicators. The largest sample size required for each cluster was 96 under-2 children for the primary indicator of care seeking for suspected pneumonia. The largest sample required for the maternal and newborn care indicators was 50 women who had a birth outcome since 1st January 2008.

c) Selection of village and households from upazila

The selection process consisted of two stages. In the first stage, 4-9 villages were selected from each cluster using PPS to get 750-900 households (HHs). Next a census was done to map and list the HHs of the selected villages. In each selected village a sketch map was drawn indicating boundary, landmark and Bari locations. All HHs and all women who had a birth outcome (live birth or still birth) since Jan 01, 2008 were enumerated and listed. In the second stage sampling was done according to the following steps

Step 1: First, 125 women with pregnancy outcomes since 1st January 2008 were drawn from the list randomly for collecting information on child health, morbidity, nutrition, ITN, HIV/AIDS, family planning etc. using a computer designed programme . One hundred and twenty five women were selected to attain the required number (96) of under-2 children for the sample.

Step 2: Then, 60 women who had a pregnancy outcome since 1st January 2008 were randomly selected from the 125 women for maternal and newborn care measurement.

Step 3: Next, 30 women were randomly selected from the 60 women selected in step 2 for maternal costing who had a birth outcome since 1st January 2009.

Finally, based on the randomization, a list of HHs by village was provided to the supervisor for conducting the survey. The list contained detailed information on which module needed to be used for which selected women.

2.4. Survey instruments

A household survey questionnaire was used to collect the required information. The questionnaire consisted of four modules. These included:

Module I: Household information, socioeconomic information, information on women and information about People's Institution were collected in this module.

Module II: Information about maternal care and immediate newborn care was collected in this module.

Module III: Cost related to ANC, delivery, PNC and complication during pregnancy was collected in this module.

Module IV: Information about child health, morbidity, nutrition, ITN, HIV/AIDS, Family planning etc. and cost related to care seeking was collected in this module.

2.5. Training and data collection

50 participants received training on mapping and listing from 30 January to 01 February 2010. This included a two-day classroom session and a one day field practice session. Forty data collectors and 9 field supervisors received 6-day training on data collection tools from 11 February to 16 February 2010 including a one day field practice at nearby villages which were not selected as sample villages. Data collection commenced from 17 February 2010 and completed on 06 May 2010.

2.6. Quality assurance

The quality of data collection was maintained by trained field supervisors through spot checking, cross checking, consistency checking and editing. Each day, field supervisor accompanied three or four data collectors for part of their work-day and observed some interviews. Completed questionnaires submitted to the field supervisor were reviewed by the field supervisor. Any errors, discrepancies and other problems were discussed and resolved at the end of each day and at weekly meetings. This sometimes resulted in a re-visit to the household. A random sample of 5% of households interviewed was revisited by field supervisors or data collectors to check the correctness of the information collected. Any discrepancies were resolved with the original data collectors and supervisors.

2.7. Data entry and analysis

SQL server 2005 was used for data entry and the interface was designed by Visual Basic. Data was analyzed with the statistical software STATA 10.

The data files related to cost (Modules III and IV) were transferred to SPSS 14 for analysis. All costs are presented in taka. To value the time of the accompanied, their occupation and average daily wages were identified. The analysis of costs of illness is disaggregated into two components – direct cost and indirect cost. Direct costs refer to household expenditures related to seeking treatment (medical expenses such as physician's fee, drug cost, cost of hospital stay both for patient and accompanied person) along with non-medical expenses such as transport costs. Indirect costs refer to loss of household productive labor time (monetized loss of working hours) for patients and accompanying household members.

Consequently, direct cost was calculated to measure the cost of illness. Household health care costs for the pregnant women and the under two sick children were calculated in the following way:

- Total cost of consultations (at all providers, including non-government and private): The number of visits made to different types of provider, as well as the number of illness episodes for which care was not sought, along with their associated costs, were obtained through the standardized household questionnaire.
- Drug costs: The household survey collected information on expenditures incurred by households for obtaining drugs, both from public and private facilities. Using the reported cost of drugs, average cost per person (all visits irrespective of whether the visit had zero or positive drug cost) was derived by each upazila.
- Travel cost: Travel costs incurred by households to seek medical care were obtained through the household surveys. Travel expenses consist of costs associated with travel to and from the hospital by the patient and any accompanying relatives during hospitalization. The questionnaire asked households about total cost of travel and the number of individuals traveling with the patient for the visit. Total travel cost of all households taken together was divided by the total number of person reported by households to derive the cost per person.
- Hotel cost: Hotel cost included cost related to night stay in the hospital, food cost for night stay and any other cost was incurred during night stay.
- Diagnostic cost: the diagnostic cost includes cost related blood test, urine test, ultra sonogram, stool test or any other test needed for this treatment.
- Attendant cost: this cost included cost related to the attendant who were present or visit when the women or the child was hospitalized. The components of this costing analysis consisted of accommodation cost and food cost of the attendant.

Descriptive analysis has been done to present out-of-pocket expenditures for the cost of managing maternal complications and child illness.

2.8. Sample size and final interviews conducted

Table 2-1 illustrates households listed and number of individual women and under-two children interviews held. Around 53 percent of women were intentionally sampled for interviews among the listed women aged 15-49.

Table 2-1: Results of the household, individual women's and under-two children interviews

Characteristics	Intervention		Comparison		Total	
	n	%	n	%	N	%
Households listed	18621	100	18198	100	36819	100
Women age 15-49 listed	4,698	100	4,751	100	9,449	100
Women sampled	2,499	53.1	2,499	52.6	4,998	52.9
Women interviewed in households	2,044	81.8	2,044	81.8	4,088	81.8
Women interviewed for maternal health information	1,108	44.3	1,113	44.5	2,221	44.4
Women interviewed for child age 0-23 months information	1,988	79.6	1,973	79.0	3,961	79.3

SECTION 3: CHARACTERISTICS OF HOUSEHOLDS AND RESPONDENTS

This section presents information on the demographic and socioeconomic information of the survey respondents and their households. The information in this section is based on 4,079 randomly selected households.

3.1. Household population and composition

Table 3-1 shows the distribution of the household population by age and sex according to survey areas. The total population of the surveyed households was 22,539 and was almost equally divided between males (51 percent) and females (49 percent). The sex composition did not vary in intervention and comparison areas. The proportion of children less than 2 years of age was between 17-19 percent in the surveyed households whereas the proportion of population over age 50 was similar across areas (9 percent) (Table 3-1).

Table 3-1. Percent distribution of household population by age and sex for the surveyed areas

Age	Intervention			Comparison			Total		
	Male (5,451)	Female (5,642)	Total (11,093)	Male (5,661)	Female (5,783)	Total (11,444)	Male (11,112)	Female (11,425)	Total (22,537)
< 2	19.4	17.7	18.5	17.7	16.8	17.2	18.5	17.2	17.9
2- 5	9.9	10.4	10.1	10.6	11.2	10.9	10.3	10.8	10.5
5-15	20.3	19.9	20.1	20.1	19.4	19.7	20.2	19.6	19.9
15 – 49	43.3	41.6	42.5	44.6	41.6	43.0	44.0	41.6	42.8
50+	7.0	10.4	8.8	7.0	11.1	9.1	7.0	10.8	8.9

Table 3-2 shows the distribution of households in the survey by the number of household members. These characteristics are important because they are often associated with differences in household socioeconomic levels and may affect the overall wellbeing of the families. The average household size in the surveyed areas was 5.5 compared to 4.7 nationally (BDHS 2007) and did not vary much by intervention and comparison areas.

Table 3-2: Percent distribution of households by number of household members according to area

	Intervention (N= 2,038)	Comparison (N=2,041)	Total (N=4,079)
Number of Household members			
2	0.8	0.8	0.8
3	14.2	11.8	13.0
4	21.3	20.1	21.0
5	21.4	23.8	22.6
6	17.8	17.2	17.5
7	11.5	10.7	11.1
8	6.4	6.8	6.6
9+	6.7	8.2	7.4
Mean size of Households (SD)	5.4 (±2.05)	5.6(±2.19)	5.5(±2.12)

3.2. Household characteristics

The 2009 baseline survey collected information on certain characteristics including access to electricity, type of sanitation facility, source of drinking water and main housing materials. These physical characteristics are used to assess the general well-being and socioeconomic status of the households. Table 3-3 shows that around one-fifth of the households in both intervention and comparison areas had access to electricity. Access to improved source of drinking water was slightly better in the intervention areas (99 percent) compared to comparison areas (97 percent), but access to improved sanitation facility was markedly better in intervention areas (73 percent vs. 63 percent) (Table 3-3).

Table 3-3: Percentage distribution of households by households characteristics according to area

	Intervention (N= 2,038))	Comparison (N=2,041)	Total (N=4,079)
Electricity	20.8	20.2	20.5
Source of Drinking water			
Improved Source	98.5	97.2	97.9
Piped water	0.0	0.34	0.17
Shallow tube well	89.7	76.9	83.3
Deep tube well	8.8	20.0	14.4
Non-improved source	1.5	2.7	2.2
Surface well/other well	0.8	0.9	0.9
Pond/Tank/Lake	0.3	0.2	0.3
River stream	0.3	1.3	0.8
Others	0.1	0.3	0.2
Toilet facility			
Improved facility	73.1	62.5	67.8
Septic tank/Modern toilet	2.0	1.0	1.5
Water sealed/Slab latrine	22.6	22.2	22.4
Pit latrine	48.5	39.3	43.9
Non-improved facility	27	37.7	32.2
Open/Hanging latrine	20.0	28.3	24.1
No facility/bush/field	6.9	9.4	8.1
Others	0.1	0.0	.02
Main roof material			
Bamboo/thatch/palm leaf	14.5	19.2	16.8
Tin	85.0	80.6	82.8
Cement/concrete	0.3	0.2	0.3
Others	0.2	0.1	0.1
Main floor material			
Earth/sand, palm/bamboo	97.4	95.3	96.3
wood planks	0.0	0.1	0.0
Cement/concrete, ceramic tiles/mosaic	2.6	4.7	3.6
Others	0.0	0.1	0.0
Main wall material			
Cane/palm/trunks, bamboo with mud	43.3	61.1	52.2
Tin	47.8	34.6	41.2
Stone with lime, cement, bricks with or without plaster	4.0	3.4	3.7
Others	4.9	0.9	2.9

3.3. Household possessions

The 2009 baseline survey collected information on household ownership of selected assets, some of which were used along with other indicators for calculating the wealth index for the survey. Table 3-4 shows the percentage of households that owned durable goods and land by intervention and comparison areas. The intervention and comparison areas were almost similar with respect to the possession of durable goods except for items such as quilt, mattress, kitchen cabinet, and bicycle which were much higher in the intervention areas. About 80 percent of the respondents owned land, in the form of either a homestead or other cultivable land. However, ownership of land either cultivable (48 percent in intervention vs. 38 percent in comparison) or homestead (78 percent vs. 73 percent) was more common in intervention areas than comparison areas. Also around 23 percent of households did not own any land in comparison areas which was higher than intervention areas (18 percent).

Table 3-4: Percentage of households that have durable goods and land ownership according to area

Ownership	Intervention (N= 2,038))	Comparison (N=2,041)	Total (N=4,079)
Durable goods			
Radio	5.7	6.1	5.9
Television	13.2	13.8	13.5
Tape recorder	2.6	3.2	2.9
VCR/VCP/DVD player	4.1	4.3	4.2
Mobile phone	37.2	40.6	38.9
Land telephone	0.2	0.7	0.4
Electric fan	11.0	10.2	10.6
Computer	0.2	0.5	0.3
Refrigerator	0.5	1.2	0.9
Watch	26.0	29.8	27.9
Cabinet	29.9	24.8	27.4
Kitchen cabinet	32.2	13.8	23.0
Cot/bed	96.1	92.9	94.5
Table	59.6	61.8	60.7
Chair	59.2	61.7	60.5
Sofa	2.2	3.8	3.0
Blanket/Quilt	87.5	79.8	83.7
Mattress	81.5	69.5	75.5
Bicycle	27.4	13.9	20.6
Motor cycle/Scooter	3.2	2.3	2.7
Animal drawn cart	1.5	0.5	1.0
Car/Microbus	0.2	0.1	0.1
Truck/Bus	0.4	0.3	0.4
Motor-boat	0.1	0.8	0.5
Boat without motor	1.3	3.6	2.5
Rickshaw/rickshaw van	5.0	2.1	3.5
Household did not possess any of these items	1.2	2.6	1.9
Land ownership			
Homestead	77.5	73.0	75.2
Other cultivable land	47.5	37.6	42.5
Neither of the above	18.1	23.1	20.1

3.4. Wealth Index

The wealth index was constructed from the data on ownership of household durable goods, as well as dwelling characteristics, source of drinking water and sanitation facilities. Each asset was assigned a weight (factor score) generated through principle components analysis, and the resulting asset scores were standardized to a normal distribution with a mean of zero and a standard deviation of one (Gwatkin et al., 2000). Each household was then assigned a score for each asset, and the scores were summed for the household. Households were ranked according to the total score, and then divided into quintiles from the lowest (poorest) to the highest (richest). Distribution of households by wealth index and upazilas is presented in Table 3-5. Overall, the households in intervention areas were better off as a lesser proportion of them were in the poorest quintile (17 percent in intervention vs. 24 percent in comparison areas) and more in the richest quintile (22 percent in intervention vs. 18 percent in comparison) compared to comparison areas. The proportion of households in the poorest quintile was lowest (12 percent) for Kendua upazila.

Table3-5: Distribution of wealth index by area for all households in the surveyed upazila

Characteristics	N	Wealth quintiles				
		Lowest	Second	Middle	Fourth	Highest
Total	4,079	20.1	20.0	19.9	20.0	20.0
Area						
Intervention	2,038	16.6	19.9	21.2	20.5	21.9
Comparison	2,041	23.6	20.1	18.7	19.6	18.1
Upazilas						
Barhatta	829	21.7	18.8	17.4	20.4	21.7
Durgapur	779	24.0	23.9	21.6	16.7	13.9
Kalmakanda	1,212	24.8	21.0	19.6	19.0	15.6
Kendua	1,259	12.0	17.4	21.0	22.8	26.9

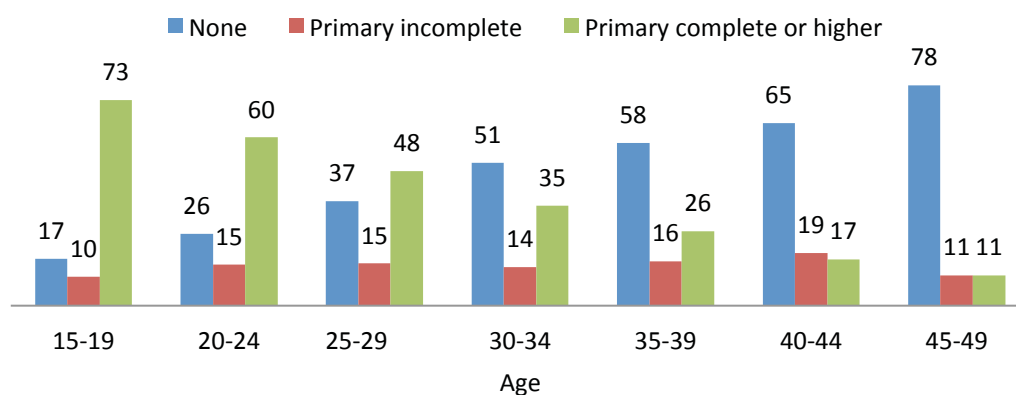
3.5. Characteristics of survey respondents

Table 3-6 provides information on the characteristics of the survey respondents (ever-married women aged 15-49 years). More than 60 percent of the respondents in both intervention and comparison areas were aged between 15-29 and the mean age were 27.5 years. In both the areas, 95 percent were married at the time of the survey. Around one-third of the respondents in intervention areas had never been to school compared to 45 percent in comparison areas. Figure 3-1 shows the distribution of women by education and age. There is a remarkable increase in education in younger women. Further details on the educational status of the women have been provided in Annex 2.1.1. In addition, among the surveyed households, a little less than 3 percent of the respondents were found to belong to other ethnic groups, mainly Garo and Hajong.

Table 3-6: Percentage distribution of different characteristics of survey respondents (eligible women 15-49 years) according to area

Characteristics	Intervention (N=2,038)	Comparison (N=2,041)	Total (N=4,079)
Age			
15-19	1.6	2.2	1.9
20-24	34.2	33.1	33.7
25-29	31.9	33.2	32.6
30-34	18.7	18.7	18.7
35-39	9.8	7.7	8.7
40-44	3.0	4.1	3.6
45-49	0.8	1.0	0.9
Mean age in years (SD)	27.45 (±5.75)	27.47 (±5.88)	27.46 (±5.81)
Marital status			
Currently married	99.4	99.4	99.4
Separated	0.1	0.1	0.1
Divorced	0.3	0.2	0.2
Widowed	0.3	0.4	0.4
Education			
No education (0 years)	32.6	44.6	38.6
Primary incomplete (1-4 years)	17.0	12.4	14.7
Primary complete (5 years)	22.7	19.8	21.3
Secondary incomplete (6-9 years)	21.5	16.7	19.1
Secondary or higher (10+ years)	6.2	6.5	6.4
Religion			
Islam	95.0	88.4	91.7
Hinduism	3.1	9.5	6.3
Christianity	1.9	2.1	2.0
Ethnic group			
Not member of any ethnic group	97.4	97.3	97.4
Hajong	0.7	0.7	0.7
Garos	1.9	2.0	1.9
Hudi	0.1	0.0	0.02

Figure 3-1: Distribution of survey respondents (eligible women age 15-49 years) by education and age



SECTION 4: ANTENATAL CARE, DELIVERY AND POSTNATAL CARE

This section presents findings from the baseline KPC survey on different aspects of maternal health such as knowledge and care-seeking behaviours regarding antenatal, delivery, postnatal care and maternal complications. These results are based on data obtained from 1,481 mothers who reported live or still births in the one year preceding the survey.

4.1. Antenatal care

Antenatal care from a trained health care provider is one of the essential services needed to monitor the health and well-being of the mother and her child

4.1.1. Mother's knowledge on antenatal care

Table 4-1 presents information on the knowledge of women regarding antenatal care and the number of visits required by a woman during pregnancy. On an average 60 percent of women were aware of the need for antenatal care during pregnancy. However, among these women only 47 percent in intervention and 31 percent in comparison areas mentioned the need for four or more antenatal care visits (Table 4-1).

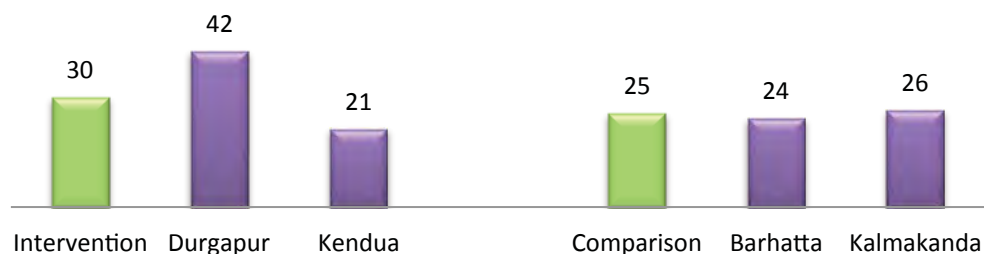
Table 4-1: Percentage of respondents' aware on need for antenatal care and number of antenatal visits needed

	Intervention	Comparison	Total
N	753	728	1,481
Knew about antenatal care	64.5	55.0	59.8
N (Knew about antenatal care)	486	400	886
3 or more antenatal visit needed	86.8	82.0	84.7
4 or more antenatal visit needed	46.7	30.5	39.4

4.1.2. Antenatal care coverage

Figure 4-1 shows that 40 percent of women in intervention and 37 percent in comparison areas received at least one antenatal care from any provider.

Figure 4-1: Percentage of women aged 15-49 with a live birth or still birth in the last year preceding the survey and received any antenatal care, by area and upazila



Antenatal care received from medically trained providers was 30 percent in intervention and 25 percent in comparison areas (Table 4-2). Among the different upazilas more women of Durgapur (42 percent) and less women of Kendua (21 percent) had received antenatal care from trained providers. The likelihood of receiving antenatal care from a medically trained provider increased with increasing education and household wealth and decreased with increasing age (Table 4-2)

ANNEX VII. COMMUNITY HEALTH WORKER TRAINING MATRIX

Community Participants (CHVs, TTBA, PI and Village Doctors)	Government Participants	Project Staff		Number Trained Over Life of Project		Focus of Training
			Total	Male	Female	
	35	66	101	10	91	TOT on Antenatal Care, Post-natal Care and Essential Newborn Care
		46	46	5	41	Community Development Training
10		2	12	1	11	Material Development Workshop
	3	10	13	1	12	Behavior Change Communication (BCC)
	3		3	3	0	IMCI Clinical Management Training
	6	4	10	9	1	TOT on IMCI Package
		38	38	4	34	Community Capacity and Sustainability Training
5028		40	5068	507	4561	Record Keeping and Management
4783		41	4824	482	4342	Volunteerism`
4738		40	4778	478	4300	Formation of CCC and PI
377			377	377	0	Village doctor Basic Training
		1	1	0	1	Learning That Last
		1	1	1	0	PRA Training
	6		6	1	5	ETAT Training
6		44	50	5	45	PICI and Sustainability Training
		31	31	3	28	Training on LPC Survey

Community Participants (CHVs, TTBA, PI and Village Doctors)	Government Participants	Project Staff		Number Trained Over Life of Project		Focus of Training
			Total	Male	Female	
		29	29	3	26	CCI Monitoring Workshop
	3	1	4	4	0	IMCI Clinical Management Training
5217		41	5258	526	4732	Group Bi-laws
5022		40	5062	506	4556	Leadership and Management
		1	1	1	0	Water Policy and Water Resource Management
		1	1	1	0	PICI and Sustainability Training
4861		40	4901	490	4411	Networking
		25	25	3	22	Workshop and Audit on CCI
678			678	68	610	Several Village Level Training
27			27	3	24	Super CHV Training
		42	42	4	38	Monthly Workshop on vision of PI Sustainability
139			139	14	125	Group Management Training for PI and CCC leaders
17			17	2	15	Responsibility Training for PI leaders
145			145	15	130	Sustainability Training for CCC/PI Leaders
		26	26	3	23	Monthly Workshop on Group Audits and Account Keeping
		26	26	3	23	Audits and Account keeping
		29	29	3	26	Workshop on Advocacy
		28	28	3	25	Vision Workshop of PI leaders
	55		55	6	49	ANC Delivery and PNC

Community Participants (CHVs, TTBA, PI and Village Doctors)	Government Participants	Project Staff		Number Trained Over Life of Project		Focus of Training
			Total	Male	Female	
						Training for CHCP
4			4	0	4	PI Registration Workshop
35			35	4	31	9 Design Training for Health Subcommittee and PI/CCC Leaders
		16	16	2	14	Accessing Health Facilities for the Marginalized People
52			52	5	47	9 Design Training for Super CHVs
		16	16	2	14	Workshop of Advocacy
28			28	3	25	Community Clinic Management orientation with PI and CCC leaders
11		6	17	2	15	Workshop on Mixed PI Formation
30			30	3	27	Theater for Development Training
	4		4	3	1	IMCI Training
		5	5	0	5	PI Module writing Workshop
3216		26	3242	324	2918	Audits and Account keeping for Groups
3457		26	3483	348	3135	Functions of Health Sub Committee
2998		26	3024	302	2722	Health Care to the poor
	8	10	18	2	16	Rapid Health Facility Assessment Training
67			67	7	60	Management and Record Keeping

Community Participants (CHVs, TTBA, PI and Village Doctors)	Government Participants	Project Staff		Number Trained Over Life of Project		Focus of Training
			Total	Male	Female	
224			224	22	202	Audit CCI and PICI
70			70	7	63	Gender and Reproductive Health
35			35	4	31	Local Resource Mobilization
69			69	7	62	Monitoring and Evaluation
16			16	2	14	Responsibility Training for PI leaders
172			172	17	155	Leadership Development
51			51	5	46	Social Leadership and Development Training
53			53	5	48	Capacity Building and Sustainability Training
27			27	3	24	Exit Strategy Plan
41,663	123	824	42,610	4,624	37,986	Total # of People Trained: 42,610
17	35	43	95	10	85	Refresher TOT ANC PNC ENC
559			559	56	503	Refresher ANC PNC ENC for TTBA
558			558	56	502	Refresher ANC PNC ENC for CHV
280			280	280	0	Village Doctor Refresher Training
30			30	3	27	Drama Refresher Training
1,444	35	43	1,522	405	1,117	Total # of Training Encounters: 44,132

Community Participants (CHVs, TTBA, PI and Village Doctors)	Government Participants	Project Staff		Number Trained Over Life of Project		Focus of Training
				Total	Male	Female

Annex VIII. Evaluation SOW

Terms of Reference for GRACE KREULEN, PhD, RN

Final Evaluator -External Consultant for the Child Survival Project (SUSOMA) Project in Bangladesh August 3-11, 2014

I. Introduction

World Renew will hire **Grace Kreulen, PhD, RN** an independent consultant to conduct a final performance evaluation (FE) for the **Bangladesh Child Survival (SUSOMA)** project funded by USAID's Child Survival and Health Grants Program (CSHGP) with **Cooperative Agreement No. GHS-A-00-09-00009-00** (September 30, 2009 to September 29, 2014). Contact person is **Alan Talens (World Renew Health Advisor address: 1700 28th Street SE Grand Rapids Michigan atalens@worldrenew.net, Phone no. (616) 224-0740 x 2150)**. The Child Survival Project is in **Netrokona District, Bangladesh**. USAID's CSHGP supports community-oriented projects implemented by U.S. private voluntary organizations (PVOs) and nongovernmental organizations (NGOs) and their local partners. The purpose of this program is to contribute to sustained improvements in child survival and health outcomes by supporting the innovations of PVOs/NGOs and their in-country partners in reaching vulnerable populations.

This document describes the Final Evaluator's SOW for the Bangladesh Child Survival Project (SUSOMA) Final Evaluation.

II. Background

The SUSOMA project (derived from Bangla *Shusto Sontan O Ma* - Healthy Child and Mother) is a 100% maternal and newborn child health (MNCH) intervention in 2 rural sub-districts in Northern Bangladesh with a large population of poor and ethnic minorities. The **goal** of this project is to reduce mortality and improve health status among the most marginalized mothers and newborns which will result in improved household and community behaviors and increased utilization of maternal and newborn services through establishment of public –private collaboration called the **People's institutions**, the community based organizations.

III. Project Population

Beneficiaries*	Total
Total Population	484,920
Total Neonates (0-28 days)	19,873
Infants aged 0–11 Months	19,314
Children aged <5 Years	96,571
Women of Reproductive Age (15–49 years)	124,313
Total Beneficiaries	220,884
Expected Pregnancies*	21,932
Community Health Workers or Volunteers (CHWs), Disaggregated by Sex	998 (99 m, 899 f)
Health Facilities (Hospital to Sub Health Post)	74
Community-Based Structures (Peoples Institutions)	4

Source: Population Census, Netrokona, Bangladesh Bureau of Statistics and Health Demographic Surveillance, 2001

*http://www.unfpa.org/sowmy/resources/docs/country_info/profile/en_Bangladesh_SoWMy_Profile.pdf

IV. Partners

World Renew partners with 2 local NGOs: **SATHI** and **PARI**, with experience in capacity development and health programming in implementing the project in the sub districts of Durgapur and Kendua respectively. The International Center for Diarrheal Disease Research, Bangladesh (**ICDDR, B**) is another partner; ICDDR, B conducts the Operations Research part of the project- a quasi-experimental research design to test whether the strategy, the Peoples' Institution is more effective, equitable and cost effective than currently available programs in the area. **LAMB** (Lutheran Aid to Medicine in Bangladesh) a local training institution is the partner responsible for the training of CHVs, TBAs, Ministry of Health and Family Welfare and project staffs.

V. Key Activities

World Renew Bangladesh CSP's level of efforts is 100% focused on maternal and newborn intervention package and integrated into the Government of Bangladesh's (GOB) C-IMCI (Community -Integrated Management of Childhood Illness) strategy. It is expanded to include newborns, and delivered at the household level by trained traditional birth attendants and unpaid community health volunteers (CHVs). The project is introducing a best practice in a new environment, by implementing the *innovative* community mobilization approach: the project delivery strategy, the "**People's Institution Model**". This is unique in that it reaches the poorest and most marginalized members of the community. The community- based organizations formed within this model interact and collaborate with both the informal health care system and the public health sector in ways that lead to stronger, more sustainable health systems. An **Operations Research** (OR) is part of the project to test the effectiveness of delivery strategy – using the People's Institution model.

Community-based activities of the volunteer health workers (CHVs and trained TBAs) are the following:

Maternal Care • Community Health Volunteers (CHVs) counsel mothers on the importance of ANC, skilled delivery, and breastfeeding. • Establishment of an emergency health fund in each sub districts. • Traditional Birth Attendants (TBAs) trained to perform clean deliveries and make referrals to skilled birth attendants and other qualified providers (health facilities). • CHVs trained to provide postnatal care.
Healthy Newborn Care and Breastfeeding • CHVs trained to counsel mothers and other influencing groups on essential newborn care practices. • TBAs trained to provide essential newborn care immediately after delivery.
Birth Asphyxia • CHVs counsel mothers on risk factors and preventive measures to reduce birth asphyxia. • TBAs trained on the early management of birth asphyxia and post-resuscitation referral and management.
Low Birth Weight (LBW) • TBAs trained in identifying LBW neonates, kangaroo care, and breastfeeding promotion. • CHVs counsel adolescent girls and mothers to reduce known risks related to LBW. • Coordination with GOB on maternal nutrition and IFA.
Neonatal Sepsis • CHVs trained to counsel mothers and other influencing groups on neonatal sepsis. • CHVs trained to manage sepsis in the home.

VI. Purpose of the Final Evaluation

The purpose of USAID's CSHGP is to contribute to advancing the health system strengthening goals of Ministries of Health toward achieving sustained improvements in child survival and health outcomes, particularly among vulnerable populations, by supporting the innovative, integrated community-oriented programming of PVOs/NGOs and their in-country partners. CSHGP cooperative agreements offer unique opportunities to demonstrate the links between specific delivery strategies and measured outcomes. The FE is intended as a performance evaluation but should be broadly accessible to various audiences including Ministries of Health (MOHs), and findings will contribute evidence relevant to global initiatives such as the Global Health Initiative and Feed the Future.¹ It is important that the final evaluator consider the audiences listed below, when conducting the evaluation and writing the report.

The FE provides an opportunity for all project stakeholders to take stock of accomplishments to date and to listen to the beneficiaries at all levels, including mothers and caregivers, other community members and opinion leaders, health workers, health system administrators, local partners, other organizations, and donors. The FE Report will be used by the following audiences as a source of evidence to help inform decisions about future program designs and policies:

1. In-country partners at national, regional, and local levels (e.g., MOH and other relevant ministries, district health team, local organizations, communities in project areas).
2. USAID (CSHGP, Global Health Bureau, USAID Missions), and other CSHGP grantees.
3. The international global health community. The FE report will be posted for public use at <http://www.mchipngo.net> and the USAID Development Experience Clearinghouse at <https://dec.usaid.gov>.

VII. Methodology

The evaluation methodology consists of a mixed-methods approach using both quantitative and qualitative data. The approach comprises both a desk review of secondary data sources and the collection of qualitative data to complement existing data. The written design of the evaluation must be further defined and specified by the final evaluator (e.g., number of key informant interviews, focus groups discussions, observations, and locations) and must be shared with project stakeholders and implementing partners for comment before the evaluation commences. World Renew will facilitate this sharing and feedback.

Secondary Data:

The final evaluator will review project reports (e.g., Detailed Implementation Plan (DIP); annual reports; Mid Term Evaluation knowledge, practice, and coverage baseline; and final survey and any monitoring reports) to assess the quality of quantitative and qualitative data and make assessments of project results in relation to the project design and targets set. The final evaluator will review key U.S. Government/USAID strategic documents at the global and national levels relevant to the content of project. All relevant policy and strategy documents at the national level (e.g., MOH policies and strategies) are also crucial and to be used and referenced.

¹ For more information on these two initiatives, visit <http://www.usaid.gov> and <http://www.feedthefuture.gov>.

Qualitative Data:

In-depth qualitative interviews or focus group discussions may be conducted with stakeholders, including project staff, MOH, local NGOs and community-based organizations, district health teams, community- and facility-based health workers, community members, community leaders, and mothers (exit interviews). If possible, the assessment will also include observations of activities supported by the project. This will involve site visits to one or more implementation areas. It is recommended that the final evaluator randomly select communities to visit from a list provided by World Renew. However, purposive sampling may be warranted in addition to explore certain areas in more depth to investigate particular results (e.g., high or low performance or unexpected results).

Limitations:

The evaluation report must include a discussion of the methodological limitations of the evaluation. (Additional guidance on reporting format is provided in the CSHGP Guidelines for Final Evaluations, specifically in the Final Evaluation Report Template included therein).

VIII. Evaluation Questions (updated)

The final evaluator and the evaluation team will use existing data collected or compiled during the life of the project, as well as additional data collected during the evaluation to answer the following questions:

Primary Evaluation Questions	Related Sub-Questions
1. To what extent did the SUSOMA project contribute to improved MNCH-related household and community behaviors, availability and utilization of quality services?	a) To what extent and in what ways did the local NGO's (SATHI and PARI) effectively engage communities to strengthen private/public partnerships in support of MNCH? b) How did community engagement and mobilization strategies using the PI model impact public-private collaboration, allocation of resources for health (local EHF, community and facility-based care), local government capacity for facility services, and policy advocacy? c) To what extent and in what ways did the utilization of volunteer CHWs contribute to improved MNCH practices and increased coverage and utilization of ANC, assisted delivery, and post partum care? d) To what extent and in what ways were community health system enhancement strategies effective? Did the Quality Improvement System improve services at the village level? Did engaging the informal health system reduce harmful practices? What was the impact of the referral process for mothers and sick newborns?
2. What strategies and factors (both planned and unplanned) lead to achievement of key critical results? What challenges/barriers were faced and how were they overcome?	a) Was the project implemented as designed, including the incorporation of key partners outlined in the DIP? What changes were made to the implementation plan and why? b) What is the quality of the data and of the system for measuring project results? Did the quantitative and qualitative indicators provide useful evidence for decision-making? c) How did consideration of socioeconomic factors and gender affect implementation and outcomes? Were females and males appropriately engaged in the PI model strategy? Did the project effectively unify the socially and economically underprivileged and create opportunities and resources for MNCH not usually available to these individuals/groups? d) What synergy/integration occurred between strategies that impacted results?
3. Which project strategies have potential be sustained	a) What evidence is there that SATHI and PARI have become more sustainable as organizations able to support community engagement and

or expanded? What are the promising practices and lessons learned?	mobilization? b) To what extent and in what ways has the project developed an enabling and learning environment to support sustainable capacity and advocacy for quality MNCH care? c) What aspects of the program can be or are being scaled-up to benefit more people and to foster lasting policy/program development? What factors influence the success of scale-up efforts? d) What resources would be required to institutionalize or scale up key intervention components (cost analysis)?
4. Did the operation research provide evidence that supports attribution of project results to the PI model? How could scale-up of the PI model impact MNCH in Bangladesh?	a) What role did the OR study have in evaluating and improving the impact of the PI model on MNCH outcomes at the community level? To what extent did OR results provide evidence that the PI model of community mobilization (vs other confounding factors): 1) Promotes equity by engaging the poor and marginalized to have power to make decisions in health and care seeking² 2) Builds local capacity to identify and address community needs, provide quality services, raise social capital (SC) and contribute to desired MNCH outcomes 3) Enables the community to establish linkages with health facilities to improve quality and access to health services and to advocate for policy changes b) How were results of the OR study used for informed decision making and improvement of the PI model?

IX. Final Evaluator Characteristics and Expected Timeline

The consultant will serve as the evaluation team leader and is welcome to propose additional evaluation team members to round out the evaluation team's skill set in order to ensure adequate representation of evaluation, technical, geographic, cultural and language skills. Team members, their affiliations, and disclosure of conflicts of interest must be listed in an annex to the evaluation report. The consultant will coordinate closely with the World Renew team regarding tool finalization, evaluation methodology, timeline, and draft report finalization.

Requirements:

The consultant must be approved by USAID CSHGP and should meet the following minimum requirements:

- Proven expertise and leadership in integrated community-oriented reproductive, maternal newborn, and child health projects conduct of evaluations (baseline, end line) using mixed methods.
- Experience with design, collection, and analysis using applied research methods in a program implementation context.
- Familiarity with public health system in **Bangladesh**.
- Demonstrated ability to communicate with and lead a team of stakeholders, staff, and national experts in participatory evaluation.
- Familiarity with USAID programming.
- Skill or familiarity with cost analysis methods for program assessments
- Excellent analytical and writing skills (English)
- Signed statement explaining any conflict of interest³

² Closing the gap between the lowest and highest quintiles of rich/poor.

Key Tasks of the Evaluation Team Leader:

- Review project documents and resources to understand the project
- Refine the evaluation objectives and key questions based on the CSHGP guidelines in coordination with World Renew team and its partners.
- Develop the field evaluation schedule and assessment tools.
- Train enumerators and team members on objective and process of the evaluation including evaluation tools.
- Lead the team to complete the collection, analysis, and synthesis of supplemental information regarding the program performance.
- Interpret both quantitative and qualitative results and draw conclusions, lessons learned, and recommendations regarding project outcome.
- Lead an in-country debriefing meeting with key stakeholders, with a PowerPoint slideshow deliverable, no longer than 20 slides (with USAID/Washington, DC, participation remotely, as able).
- Prepare draft report in line with the CSHGP guidelines and submit to CSHGP and World Renew simultaneously on or before September 1.
- Prepare and submit the final report, which is due at the USAID CSHGP GH/HIDN/NUT office on or before 90 days after the end of the project.
-

Timeline:

Dates (2014)	Activities
January	Send project documents (DIP, Baseline Reports (KPC and RHFA), OR data from ICDDR,B, Mid Term Evaluation Report, all annual reports to consultant (done)
Aug 1 and 2 (Fri and Sat)	Travel
August 3 (Sun)	Meet with ICDDR,B in the morning and with the evaluation team in the afternoon
August 4 (Mon)	Meet as evaluation team in the morning to develop questions. Drive up to program area (Netrokona District in the afternoon.
August 5-6 (Tues and Wed)	Field interviews (3 teams - 2 regular teams + 1 rover)
August 7 (Thurs)	Government interviews in Dhaka
Aug 8 (Sat)	Writing
Aug 9-10 (Sat and Sun)	Team works on the evaluation findings and report sections.
Aug 13 (Tue)	Dissemination
Aug 13 (Wed)	Travel
Aug 30	Submission of Report to USAID

³ CSHGP grantees are required to hire an external evaluator for the final evaluation. That fiduciary relationship creates a conflict of interest that is minimized by the CSHGP requirement of submission of a draft evaluation report directly to the CSHGP.

X. Final Evaluation Report

The Final Evaluation report will follow the outline in USAID CSHGP's Guidelines for Final Evaluations (submission instructions as indicated in the guidelines.) A final report, written by the final evaluator, will be submitted **directly** to the CSHGP

XI. Budget

Expenses [Level of Effort: 100% Maternal Newborn Health]	Amount (in USD)
1. FE consultant fee (Daily rate: \$400/day); cost to include all foreseen expenses during the evaluation.	\$10,000
2. Cost in-country for carrying out evaluation (accommodation and local travel of evaluation team)	\$ 5,000
Total	\$ 15,000

XII. Deliverables

At the conclusion of the consultancy period, the consultant is expected to complete the following deliverables:

1. Lead an in-country debriefing meeting with key stakeholders (and remote participation by USAID/Washington, DC) with a PowerPoint presentation no longer than 20 slides for distribution
2. Prepare a draft report in line with the CSHGP guidelines and submit to CSHGP and World Renew simultaneously on or before September 1, 2014.
3. Prepare and submit the final report, which is due at the USAID CSHGP GH/HIDN/NUT office on or before 90 days after the end of the project.

Annex IX. Evaluation Methods and Limitations

A. Prior to conducting the evaluation in Bangladesh, the evaluation team leader prepared by examining documents listed in Annex XI.

B. SUSOMA Final Evaluation, Evaluation Team Schedule

Dates	Activities
Aug 3, 4	Workshop 1 & 2: Team building, project review, final evaluation quantitative data review, develop stakeholder interview questions (Dhaka)
Aug 5, 6, 7	Field visits (3 teams): Stakeholder interviews, record interview data (Netrokona)
Aug 8	Day off
Aug 9, 10	Compile interview data, triangulate data, interpret finding, draft conclusions and recommendations (Dhaka)
Aug 11	Prep for Netrokona dissemination
Aug 12	Final evaluation dissemination in Netrokona

C. Final Evaluation Methodology. The evaluation team used the following participatory process over a two-week period:

1. Discuss expectations about the evaluation
2. Review evaluation principles for child survival projects and evaluation frameworks
3. Examine SUSOMA final evaluation objectives and processes and the evaluation report.
4. Receive reports from PARI and SATHI on their roles and activities in SUSOMA, reviewed evaluation results received to date (KPC, RHFA, CSSA, OR).
5. Determine final evaluation priority focus.
6. Identify key stakeholders to be interviewed, designed stakeholder questionnaires.
7. Conduct key informant interviews/focus group discussions in three teams--listened to beneficiaries, stakeholders, and partners to validate and gain greater understanding of project.
8. Process the results from each team and triangulate the information with other data previously collected (KPC, RHFA, CSSA, M&E)
9. Develop group consensus on project achievements, challenges, sustainability, lessons learned, conclusions and recommendations.
10. Dissemination: Share finalized results with key government officials, health facility providers, elites, PI leaders, CHVs, and TTBA in Netrokona.
11. Discussed project accomplishments with USAID Mission and ICDDR,B in Dhaka.
12. CANCELED: A final dissemination is planned for late September in Dhaka upon completion of the KPC and OR reports by ICDDR,B.

D. Developing stakeholder interview questions. The evaluation team used a set of guiding questions directly linked to the FE questions to develop questionnaires for each stakeholder group (see next page). The questions were summarized into the acronym ACSI, which was translated in Bengali to mean 'to tell a story/paint a picture:'

1. Accomplishments: What results were achieved? How did interventions contribute to results?
2. Challenges & Inputs: What factors contributed/detracted from critical results and why?
3. Sustainability: What strategies can be sustained, scaled-up, shared globally?
4. Impact: What evidence links project results with the PI model?

The Final Evaluation field interview questions by stakeholder group were translated into Bengali for interviews. The English version is in Annex X.

The SUSOMA Final Evaluation Question Guide for developing stakeholder interview questions		
	Primary Questions	Guiding Sub-Questions with Probes
Accomplishments	A. To what extent and how did the project contribute to improved MNCH-related: a) household and community behaviors, b) equitable availability and utilization of quality services?	- To what extent and in what ways has the local NGO's (SATHI and PARI) engaged communities to strengthen private/public partnerships in support of MNCH? - How did community engagement and mobilization using the PI model impact MNCH outcomes? - In what ways did community capacity for management of health and health systems increase? - How were public-private collaboration and feedback mechanisms established? - What training & capacity building was essential to successful PI mobilization? - In what ways were resources for EHF and local capacity for facility services & policy advocacy established? - To what extent and in what ways has SUSOMA improved MNCH practices and equitable access to services for the marginalized at household and community levels? - In what ways did ENC actions and MNCH behaviors promoted by CHWs increase health equity? - What lead to increased maternal MNCH knowledge and practices? - What lead to increased coverage and utilization of ANC, assisted delivery, and post partum care? - To what extent and in what ways has SUSOMA enhanced community health system quality? - How did the Quality Improvement System improve services at the village level? - In what ways did engaging the informal health system reduce harmful practices? - What made the referral process for mothers and sick newborns effective? - In what ways was the capacity of MOHFW enhanced and structures established to ensure ongoing QOC.
	B. What key strategies and factors lead to achievement of critical results? What challenges/ barriers were faced and how were they overcome?	- How has consideration of socioeconomic factors and gender affected implementation and outcomes? - To what extent were females and males appropriately engaged in the PI model strategy? - In what ways did the project unify the socially and economically underprivileged? Who benefited the most? - How did it create opportunities and resources for MNCH not usually available to these individuals/ groups? - What community partners and structures are especially important for improving MNCH outcomes? - What specific strategies are the most effective? In what ways are they most effective? - What strategies did not work? - What unplanned activities occurred that influenced results? - What synergy/integration occurred between strategies that impacted results? - What challenges and barriers were faced in implementing SUSOMA and how were they overcome? - To what extent are project implementation and data systems effective? - Was the project implemented as designed, including the incorporation of key partners outlined in the DIP? What changes were made to the implementation plan and why? - What is the quality of the data and the system for measuring project results? Did the quantitative and qualitative indicators provide useful evidence for decision-making?

Sustainability	C. Which project strategies have potential be sustained, scaled-up or expanded? What promising practices and evidence can contribute to global learning?	1. To what extent and in what ways are SATHI and PARI more sustainable as organizations able to support community engagement and mobilization? • What are local NGOs doing differently than before? What factors enabled these changes? 2. To what extent and in what ways has the project developed a learning environment to support sustainable capacity and advocacy for quality MNCH care? What more can be done? • How has the learning been shared with decision makers at local, district, and national levels? 3. What elements of SUSOMA are most likely to be sustained after the current program ends and why? • What exit strategies are in place to maximize the likelihood that the outcomes will be sustained? • What is most critical to sustaining the PI Model innovation? 4. What aspects of the program can be or are being scaled-up to benefit more people and to foster lasting policy/program development? • To what extent have components of SUSOMA been integrated or institutionalized into the formal HCSx? What factors influence the success of scale-up efforts? • What are the best practices of SUSOMA? What one strategy would you want to share with others? 5. What resources would be required to institutionalize or scale up key intervention components (cost analysis)?
Impact	4. To what extent and in what ways does the OR provide evidence for attribution of project results to the PI model? How could scale-up of the PI model impact MNCH in Bangladesh?	1. What evidence links results to the PI model? 2. How were results of the OR study used for informed decision making and improvement of the PI model? How might they be applied in other settings? 3. To what extent did OR results provide evidence that the PI model of community mobilization is more capable than comparison programs of: • Promoting equity by engaging the poor and marginalized to have power to make decisions in health and care seeking (closing the gap between lowest and highest quintiles of rich/poor) • Building local capacity to identify and address community needs, provide quality services, raise social capital, and contribute to desired MNCH outcomes • Enabling the community to establish linkages with health facilities to improve quality and access to health services and to advocate for policy change.

- E. Stakeholder interviews occurred as part of the final evaluation over a 3-day period at the district health complex and SUSOMA office in Netrokona, the health complexes and partner NGO offices in Kendua and Durgapur, throughout the intervention upazilas, and in Dhaka. Stakeholders to be interviewed were categorized into 7 groups: 1) government officials, 2) SUSOMA and NGO staff, 3) government health facilities and providers, CHWs (CHVs, TTBAAs), and ISPs/village doctors, 4) PI groups at varied functional levels (PI, CCC, PGs), 5) beneficiaries (mothers, husbands, in-laws), 6) training institution directors, and 7) other. Three teams conducted the interviews: Team A did interviews in Kendua, Team B was in Durgapur, and the Rover Team interviewed in Netrokona, Kendua and Durgapur. The interview schedule, names of stakeholders interviewed and sites visited during the final evaluation are listed in Annex XI.

For each IR, the final evaluation team identified groups and individuals to be interviewed (see table below).

Summary of Stakeholders Interviewed for each IR									
Stakeholder Group	Persons interviewed	49 Team Interviews			Project IRs				
		A	B	R	1	2	3	4	5
Officials Netrokona Upazila Dhaka	CS, DCS, DDFP, GYN Specialist UH&FPO, UFPO, HI in charge, USSO UP Chair IMCI	4 1 1 1	1 1 1 1	3 1 1 1	X X X X	X X X X	X X X X	X X X X	X X X X
Implementing NGOs	Sathi/Pari Staff Sathi/Pari Management	1 1 1 1	1 1 1 1	1 1 1 1	X X X X	X X X X	X X X X	X X X X	X X X X
Upazila /Ward health facilities and health workers (FWV, FWA, CSBA, SACMO, FPI, HI)	FWC and CC workers and facilities Pvt HW, CHVs/TTBAs ISP/VDs	3 1 1 1	3 1 1 1	4 1 1 1	X X X X	X X X X	X X X X	X X X X	X X X X
PI groups- 3-tiers	PI groups/members/committees CCC PG/health groups (female=8, male=2)	1 1 1 4	2 1 1 2	1 1 1 2	X X X X	X X X X	X X X X	X X X X	X X X X
Beneficiaries	Pregnant women & U2 mothers, Husbands and father/mothers-in-law	1 1 1 1	1 1 1 1	1 1 1 1	X X X X	X X X X	X X X X	X X X X	X X X X
Training institutions	Lamb training directors	1 1 1 1	1 1 1 1	1 1 1 1	X X X X	X X X X	X X X X	X X X X	X X X X
USAID ICDDR,B	Bangladesh Mission Director Operations Research Study team	1 1 1 1	1 1 1 1	1 1 1 1	X X X X	X X X X	X X X X	X X X X	X X X X

During field interviews, observations were made of communities, government (FWCs/RD, CCs) and private health facilities, 'model' CCs with active daily PI involvement in clinic management and on the Management committee, and 'regular' CCs with PI members only serving on the decision-making Management Committee, low, medium and highly functional PI groups and their meetinghouses.

Interview data was entered in English on a standard reporting form within one day of completion of each interview. Thereafter, the evaluation team met for two days during which it compiled interview data by stakeholder group, arrived at consensus on themes across stakeholder interviews, triangulated all data sources, interpreted findings, and drafted conclusions and recommendations.

- F. Stakeholder interview processing. The evaluation team processed results from stakeholder interviews and triangulated them with other data. Consensus regarding accomplishments, challenges, sustainability and impact can be found below and are reflected in this report. Consensus regarding best practices and conclusions are in the report.
- G. Limitations of evaluation data. The evaluation team had an appropriate mix of information to inform the final evaluation report, however, it had to deal with multiple issues related to quality of the preliminary KPC data and Operations Research reports.
 - I. The KPC survey report was received in preliminary form from ICDDR,B on July 23, 2014. Also received was a preliminary summary table of percentage results (without N's or confidence intervals) for the 43 maternal newborn child health indicators at baseline and endline for the intervention and comparison groups. In reviewing the data it became clear

that the maternal newborn care and cost module data was collected at baseline from women with children aged 0-23 months while the endline KPC survey sampled women with children aged 0-11 months. (This change was made without notifying World Renew.) The data provided was comparable, because ICDDR,B recomputed the baseline indicators using the 0-11 month metric, however, the reanalysis of baseline data was incomplete and without sample size and confidence intervals. ICDDR,B sent preliminary updated endline data with confidence intervals (CIs) on August 12. On August 26, 2014, World Renew held a conference call with USAID to confer with them on issues related to the KPC data and report.

Extensive feedback about the KPC data and the draft KPC survey report were provided by World Renew and the lead final evaluator via email/phone calls and were discussed with the OR team at ICDDR,B on August 7, 2014 during the FE visit at which time concerns discussed included the FE finding that SUSOMA partner staff reported irregularities in the KPC data collection processes in both Kendua and Durgapur, such as erratic data collector work behavior and community member complains. ICDDR,B reported that in endline data cleaning made it necessary to re-interview a substantial number of households, which they were doing at that time. Dialogue with Dr. Emdad continued until the final updated KPC reports for baseline and endline including cost and wealth quintile data and the final complete baseline and endline indicator data was received until October 30. The final KPC report was of adequate quality to utilize in writing the final report with one exception: There were no statistical comparisons of differences between groups from baseline to endline and between intervention and controls. The endline CIs in the not-yet-finalized August 12 data were all that has been shared with World Renew, despite ongoing requests via email for statistical comparisons between baseline and end line for key summary variables and statistical comparisons of the change over time between intervention and comparison groups. All data comparisons in the Final KPC Report are observational only with the exception of computed rich to poor ratios for the wealth quintile data.

There is some concern about the appropriateness of the comparison group selection. ICDDR,B states that they selected the KPC survey comparison upazilas in Netrokona because they had “usual GOB services.” However, during the life of the SUSOMA project, unacknowledged donor health projects were happening in the comparison areas. PARI was conducting a large maternal newborn health project (EDM Switzerland funded) in four unions in Kalmakanda upazila and was working with the PI system in Barhatta in integrated programming. These activities in the comparison upazilas have the potential to confound estimation of SUSOMA program effects and need to be deliberated upon in comparing intervention and comparison group outcomes.

2. The Operations Research Study report was received in draft form from ICDDR,B on July 24, 2014. Extensive feedback was given to ICDDR,B on the draft report by World Renew, USAID/Evidence Project and the lead evaluator via email, phone call, and a July 30 conference call. As part of the final evaluation, the Dr. Kreulen, Ms. Nancy TenBroek, and Dr. Alan Talens met with Dr. Shams, Dr. Emdad and the OR team at ICDDR,B on August 7 to further discuss and come to resolution of issues related to the OR study (including the KPC). The issues discussed included data quality, sampling, analysis, and the structure of the report. On August 28, 2014 a ‘revised OR report’ was received with improvements; however, multiple concerns persisted that limited interpretation of the report data. These were communicated with Dr. Emdad who sent the *Final OR Qualitative and Social Capital Study Report* on November 3, 2014. This report is in XIXe. The *Final OR Qualitative and Social Capital Study Report* was of adequate

quality to utilize in writing the FE report, however, because it did not follow the USAID/Evidence Project OR Report guidance World Renew requested an additional summary report be written that brought together all aspects of the operations research study. The draft *OR Final Summary Report* was received from ICDDR,B on November 21. World Renew finalized this report and it is in annex XV.

Concerns communicated with Dr. Emdad on the August 28 version of the revised OR report which persist into the *Final OR Qualitative and Social Capital Study Report* include:

- a. Some remaining lack of clarity in the description of sampling for the qualitative process evaluation, related to: 1) the inclusion criteria for in-depth interviews are not listed (p13), 2) the manner of selection of focus group discussion and social mapping participants is not described (p13), 3) lack of an explanation for the number of informants selected for purposive qualitative sampling or if the numbers listed are for baseline or endline/actual or real (p13), 4) how focus group and social mapping/organizational profiling participants were selected (p 13-14).
- b. In addition, there is confusion related to sampling that makes it difficult to understand the data presented. The table listing informant numbers for the qualitative sampling (pg13) has both PI group members and non-members for in-depth interviews (IDI) and focus group discussions (FGD), while the narrative following report data from PI group members.
- c. Guidelines for informants, which must be the baseline survey tools in the annex, are included without indication if the same measurement tools were used for endline.
- d. The social capital findings were not updated.
 - Sampling for social capital measurement includes both group members and non-members. Because the descriptive findings presented do not differentiate between members and non-members and one half of those interviewed were non-members, the influence of the PI model on components of social capital that are described may be masked.
 - Construction of an 18-item social capital scale at baseline and a 35-item scale at endline from the social capital data using reliability analysis to maximize Cronbach's Alpha at each period individually prevents direct comparison of baseline and endline scores. The report appropriately separates the association between level of social capital and PI group membership status at baseline. Theory-based scale construction and/or factor analysis may be a more appropriate approach to scale construction.

SUMMARY OF DATA PROCESSED BY EVALUATION TEAM

A. Accomplishments

- I. Well-established 3-tiered PI system (PI,CCC,PG)
 - a) Trained skilled PI leaders and members.
 - (1) Women's leadership has increased
 - b) At least 1 primary group functioning in every village in each upazilla, 22CCCs, 4 PIs
 - c) Emergency Health Fund****(for poor people) and transportation*. EHF established which is managed, raised and used by PI for emergency MNCH needs in community.
 - d) Health savings--IGA, GO resource utilization
 - e) Increased awareness** and motivation* through local volunteers (CHV, TTBA) H2H visits and TfD drama team performances * →
 - (1) Increased demand for/utilization of services
 - (2) Awareness/involvement of mothers-in-law, husbands and cooperating to promote facility-based deliveries
 - (3) Superstition regarding MNC has decreased
 - (4) Skilled community advocate (CHV)
 - f) PI-CHV-TTBA-VD collaboration for MNCH
 - g) CHVs/TTBAs* are established in the community as volunteers with PI supervision and provision of mobile phones for better communication
 - h) Capacity building starting with PG
 - (1) Ability to solve problems
 - (2) Unity--Groups working together for MNC
 - (3) People claim their rights
 - (4) Empowerment of women, evolving inclusion of men
 - (5) PIs beginning to form primary groups on their own
 - i) Capacity measurement and monitoring
2. PPP established at the community level
 - a) Engagement of all community working together
 - (1) all aware of MNH issues and confident in communicating goals with GO health facilities and officials
 - (2) Local elites, chairman and members support PI initiatives. Used influencing groups (chairmen, members, elite) to develop relationships with GO
 - b) MOUs between PI and GO
 - c) GO-PI linkage and collaboration:
 - (1) CHV-TTBA-GOHV meeting and working together in facilities**--improved communication and relationships, good networking for NID and satellite clinics, share information and update each other
 - Network developed between PI and CC, RD, FWC, GBC & DSK facilities for accessing their health services.
 - Community people now know what services are available in HFs so that GO staff bound to provide services
 - PI is doing Govt's staffs' duties, so they provide QOC services because people now know about quality services
 - PI has good network/relation with higher Govt's officials which creates fear among union/village level staffs
 - (2) Local data management/matching meetings established to get complete HMIS data
 - (3) UTAC meetings where PI share progress with MNCH, inform GO officials of needs, influence strategies to meet gaps, coordinate.
 - (4) GO officials recognizing effort of CHVs/TTBAs and PI.
 - (5) CC mgmt/support team participation by PI, CCC, PG.
 - d) Referral system (slip) well established and used by CHVs TTBAs** (communication slip/cell phone).
 - e) Improved quality health services being provided
 - (1) Training for GOB on ANC/PNC by LAMB, IMCI training
 - (2) Increased availability of GO resources and services.
 - (3) Matching meetings & microplanning meetings enhance quality of services and availability of supplies/drugs. CHVs listed names of pregnant mothers by walking on foot through the village and shared with HF providers to get quality services.

- (4) Logistical support provided to CCs (delivery kit, delivery bed, weighing scales, BP cuffs, etc)
 - (5) Referrals and check-ups at facilities have improved.
 - (6) PI working with all health facilities, involved in management of 23 model clinics (~1/3rd)
 - (7) Community clinics are open/providing services-100% (95% functioning well) -- 60 clinics total
- 3. Training TOT design*: CHTs trained PIs in leadership, management, record keeping, register, gender, local resource mobilization, M&E, sustainability, PICI, audit, CCI, networking, advocacy:
 - a) GO HW; H&FP workers
 - b) TTBAAs, CHV: Maternal care, ANC/PNC, community development, Sustainable development, Exchange visit to successful PIs, Attend, PI management, referral system etc.
 - c) VD
 - d) Primary groups, CCCs, PIs
 - e) SATHI AND PARI staff
 - f) TOT with Joyramkura
- 4. Increased health practices
 - a) Knowledge of danger signs, health services, 4ANC+
 - b) Birth preparedness
 - c) ANC/PNC increased* with better follow-up on care
 - d) More skilled and facility-based deliveries (CHVs/TTBAAs contact CSBAAs (FWA, FWV, HA) for delivery
 - e) Reduced use of traditional healers

B. Challenges Encountered/Overcome

- 1. Health Facility Infrastructure
 - a) Not enough workers (improving)
 - b) Frequent transfer of GO officials and workers
 - c) Institutional delivery not readily available throughout Upazilla
 - d) Lack of supplies/services at baseline—improved by endline
 - e) Disturbed communication between CC mgmt and CC support group.
- 2. **Religious, poverty, and gender barriers
 - a) Overcome as PG members meet with religious leaders/IMAMs to explain MNCH goals. Need to maintain ongoing linkages.
 - b) Difficult including men in the program, however, males are essential for decision making at family and community level. Eventually they supported the women, even carrying PM/newborn to health facilities in emergency.
 - c) Poor were the focus of and benefitted the most from the intervention in terms of savings, health and service knowledge and practices, EHFAs, skills in leadership, development of common platform for MNC and grassroots helping mentality.
- 3. PI system
 - a) Initial challenges when setting up PGs
 - (1) Illiterate TTBAAs
 - (2) Initial community acceptance of CHV/TTBA roles
 - (3) Participation by influentials
 - (4) Engagement of rich and poor
 - (5) Men and women working together
 - (6) Not valued by GO*-improving
 - (7) Resistance from communities and families and husbands*--Not allowing women to do work as CHV/TTBA, should stay at home, MNCH messaging-overcome by H2H
 - b) Only womens' groups formed initially, began men's groups in last 2 years. In Y4 formed men's primary groups, initiating programs with fathers-in-law, husbands, and male health workers.
- 4. Access to quality services
 - a) Women engaging in potentially harmful practices
 - (1) Superstition-based care decisions
 - (2) Home delivery by unskilled TBA
 - (3) Going to uninformed VD or traditional healers for care

- b) ANC in facilities was difficult initially. Now it is more readily available from qualified staff at the CC and FWC levels
 - c) Transport of pregnant mother to facilities—problem overcome with establishment of EHF and EmTransport systems
 - d) PNC services available but not adequately promoted--slow increase in PNC
 - e) Access limited by poor roads/rivers/community infrastructure
5. Staff issues
- a) Maintaining the following reports/ documents

C. Sustainability

1. Sustainability of PI model
- a) Pl's forming own groups, including men's groups
 - b) Strong skilled PI leaders, CHVs, TTBA's
 - c) EHF's and Health Savings Accounts for IGA established
 - d) Pl have bylaws, bank accounts, plans, self-monitoring of capacity. They are capable of planning, budgeting, microplanning, and conducting the PICI sessions.
 - e) Pl has established skills in the 6 PICI capacity areas and self-monitor.
 - f) Partnership with GO well established (PPP)
 - (1) Pl-HF MOUs with health facilities. There is acceptance of the PI in the community and at the facility level.
 - (2) Networking, coordination, support and advocacy channels established
 - (3) Referral system established and strengthened with women and babies now getting better treatment by referral
 - (4) Coordination/matching meetings occur monthly
 - (5) Community members 100% part of management committees and decision-making group supporting community clinics 23/60 model clinics, total # PI members on clinic committees = 190
 - (6) DDFP linking CHVs and TTBA's with FP work and planning to provide training to them
 - g) Pls officially registered with GOB social welfare dept
 - h) Social capital of PI members is enriched and culture of servant leadership of their communities established
 - i) Local resources are being mobilized for health service improvements (need examples)
 - j) Pls are supervising CHV/ TTBA and conducting trainings
 - k) CHV/TTBA work as volunteers for their community will continue household visits, MNC lessons to primary groups, meeting with health workers, linkage with health facilities, referrals. They report needing basic supplies and continued training and relationships with HF and gov't.
 - l) Pl is capable of supervising the CHVs, making lists of health lessons for them to share with the community, and also in arranging training for new or replacement CHVs
 - m) Pls equipped to conduct trainings for new primary groups, CHVs, TTBA's, and to link with other NGOs for support if needed.
 - n) Pls/CHVs/TTBA's will continue sharing good practices and successes.
 - o) Staff relate that most critical to sustaining the PI model are servant leadership, effective networking, financial solvency, and gender equality.
2. Gains in MNCH are expected to continue as Pl's continue to promote healthy mothers and babies at the grassroots level and through PPP and increase SBA deliveries.

D. Impact:

1. PI model is
- a) engaging the entire community
 - b) foundational to improving social capital
 - c) creating a cadre of new grassroots leaders
 - d) empowering women socioeconomically, decision-making leadership capacities
 - e) active in promotion of gender-based leadership (men's groups formed and forming)
 - f) leading to commitment to MNCH by all in a strong PPP
 - g) increasing communication and networking between GO and PI both horizontally and vertically
 - h) increasing access to GO and private sector health and social services (other NGO's like JTS, DSK, GBC)
 - i) leading to the practice of good MNC health habits
 - j) bringing hope and health care to the marginalized poor. Everyone at PI/CC/PG seems happy face!

- k) Once licensed can take loan from social welfare dept, get ards for widows & vulnerable groups.
- 2. PI model is associated with health improvements in communities
 - a) Decreased maternal newborn deaths
 - b) Increased MCH service utilization and coverage
 - c) Increased institutional / skilled delivery (decreased unskilled home births)
 - d) Improved practice of good health habits by pregnant women and mothers
- 3. DDFP recognizes the important role CHVs and TTBA's have in promoting MNCH

ANNEX X. DATA COLLECTION INSTRUMENTS

1. **KPC survey instruments** from endline are in Annex Xa. The baseline survey was not made available.
2. **Operations Research Survey Tools** are in annex Xb. The same tools were used at both baseline and endline.
3. **RHFA instrumentation** is described in the RHFA report in Annex Xc.
4. **CSSA component items** are listed in the CSSA dashboard document Annex XIXb.
5. **Stakeholder Interview Questionnaires** are described below.

Stakeholder Interview Questionnaires

In depth qualitative interviews were conducted with SUSOMA stakeholders as part of the evaluation process to gain a greater understanding of the how and why of project accomplishments and challenges. Stakeholders interviewed included 1) government officials, 2) SUSOMA and NGO staff, 3) government health providers, CHVs, TTBAAs, and ISPs/village doctors, 4) PI groups (PI, CCC, PGs), 5) beneficiaries (mothers, husbands, in-laws), 6) training institutions. Interview questionnaires targeted for each of the six stakeholder groups were derived from the final evaluation questions that were categorized using the A-C-S-I mnemonic:

- **Accomplishments:** What results were achieved? How did interventions contribute to results?
- **Challenges & Inputs:** What factors contributed/detracted from critical results and why?
- **Sustainability:** What strategies can be sustained, scaled-up, shared globally?
- **Impact:** What evidence links project results with the PI model?

As part of the interviews, observations were made of FWCs, CCs, CC Management Committees, and PI group meetinghouses.

A. Questionnaire for Government officials

Lead in question:

What is your relationship with the SUSOMA project?

Accomplishments

1. To what extent has the SUSOMA project helped you to accomplish district/sub-district targets related to MNCH? How effective is the support provided by this project?
2. To what extent and in what ways have the local NGO's (Sathi and Pari) engaged communities to strengthen private/public partnership in support of MNCH? What collaborations have occurred that were not there before the project?
3. In what ways has the project helped to engage and build capacity of local communities for health?
3. To what extent and in what ways has SUSOMA enhanced community health system quality? Especially in the following areas:
 - In improving the village level health services
 - In reducing the harmful practices of the informal health systems
 - In establishing referral process for mothers and sick newborns effective?

Challenges and Inputs

4. In what ways did the project unify the socially and economically underprivileged? Who benefited individuals/groups?
5. To what extent were females and males appropriately engaged in the PI model strategy?
6. What community linkages and structures were established that contributed to improved MNCH outcomes?

7. What SUSOMA strategies are most effective? In what ways they are effective?
8. What challenges and barriers did you face in working with SUSOMA? How they were overcome?

Sustainability

9. What elements of SUSOMA do you plan to continue? How will you do it?
10. What steps are you taking to sustain MNCH and service improvements?

Impact

11. What do you see as the biggest impact of the SUSOMA project on MNCH? What SUSOMA intervention is most linked to the improved MNCH outcomes?
12. What evidence links results to the PI model?

B. Questionnaire for SUSOMA and NGO staff

Lead in question:

What is your relationship with the SUSOMA project?

Achievements

1. What were the three top ways you engaged a community to strengthen private/public partnerships for health?
 - a. How were public-private collaboration and feedback mechanisms established?
 - b. What training and capacity building was essential to successful PI mobilization?
 - c. In what ways were resources for EHF and local capacity for facility service & policy advocacy established?
 - d. In what ways and how did community capacity for management of health and health systems increase?
2. To what extent has SUSOMA improved practices and access to services for the marginalized mothers and newborns?
 - a. What strategies led to increased maternal MNCH knowledge and practices?
 - b. What strategies led to increased coverage and utilization of ANC, assisted delivery and post partum care?
 - c. In what ways did engaging the informal health system reduce harmful practices?
3. What made the referral process for mothers and sick newborns effective?
4. In what ways was the capacity of MOHFW enhanced and structures established to ensure ongoing QOC?

Challenges & Inputs

5. To what extent were females and males appropriately engaged in the PI model strategy?
6. In what ways did the project unify the socially and economically underprivileged? Who benefited the most?
7. How did it create opportunities and resources for MNCH not usually available to these individuals / groups?
8. Did you find the monthly monitoring system helpful and how?
9. What specific strategies were the most effective? In what ways were they effective?
10. What challenges and barriers were faced in carrying out this project?

Sustainability

11. What elements of SUSOMA are most likely to be sustained after the current program ends and why?
12. What is most critical to sustaining the PI model innovation?
13. What exit strategies are in place to maximize the likelihood that the outcomes will be sustained?
14. If you had one thing to share that you think is a best practice, what is it?

Impact

15. What SUSOMA intervention do you think is most linked to improved health outcomes?

C. Questionnaire for GOB Health Workers (FWV, CSBA, CHCP), CHWs (TTBA, CHV), ISPs (VD)

Lead in question:

What is your relationship with the SUSOMA project?

Accomplishments

1. Did you receive any training from SATHI and PARI in providing and supporting MNCH services? What are those training? How helpful were these trainings?
2. What do you think how PI is playing its role in providing and supporting MNCH services?
3. Which MNCH practices are improved due to SUSOMA interventions? and How?
4. To what extent was SUSOMA able to make these services available to the people and their families?
5. In what ways or to what extent has SUSOMA improved the quality of the health services? How?

Challenges and Inputs

6. What challenges did you face implementing the project and achieving results and how did you overcome those challenges?

Sustainability

7. How will the MNCH activities continue so that people continue to receive these services when this current program ends?
8. Which of your activities will be sustained when the current program will end?
9. What resources are essential for the sustainability of your activities or for your to continue doing this work?

Impact

10. What do you know about the PIs involvement with the MNCH services? What has been effective?

D. Questionnaire for PI, CCC and PGs

Lead in question:

What is your relationship with the SUSOMA project?

Accomplishments

1. What kind of support did Pari/Sathi extend to PIs to engage communities in strengthening partnership/good relationship with government health and family planning departments in support of MNCH?
2. How did community people engage in achieving good results of maternal newborn health (MNH) using PI model?
3. How did SUSOMA contribute to make community people aware of practicing good habits related to MNH and access to available services equally?
4. Please tell us to what extent and how the SUSOMA project support you to develop quality in community health system?

Challenges and Inputs

5. How did socio-economic condition and gender affect implementation and achieving results of SUSOMA project?
6. What kind of community partners and structures are most important to improve MNH?
7. Which strategies are most effective and why do those most effective?
8. What kind of challenges and barriers did your group face in doing mother and child work and how did it overcome them?
9. Of the HMIS data are you collecting, which of it is the most helpful? Why?

Sustainability

10. Upon completion of the SUSOMA project what elements or learning of the project will be most likely be ongoing or continued?
11. For the PI to expand or scale-up their work, what resources or training do you need?

Impact

12. How has your PI helped your community? Tell us stories of your success.

E. Questionnaire for Beneficiaries

Lead in question:

What is your relationship with the SUSOMA project?

Accomplishments

1. In your area who are working for maternal and newborn issue? Please explain what they are doing?
2. Do you have any group or Peoples Institution in your area? What they are doing? Do you have any relationship with them? Pls explain.
3. Do you know any TTBA's and CHVs? What they are doing in your area? What are the changes happened in your area as a result of their intervention? Have you received any support from any CHV/TTBA?
4. What are the maternal and newborn health knowledge you are practicing as a result of the health education you have received?
5. Have you received any consultation from any CHV/TTBA for receiving any health treatment? Where you usually go for receiving health service? Do you think currently the health facilities improved in the last five years on maternal and newborn issues? Pls share in which areas?
6. Do you know about emergency health fund? Have you contributed or received any support from the EHF? How it benefited you and do you think it is helpful for the community?

Challenges & Input:

7. What challenges are you currently getting for receiving maternal and newborn health services from the health facilities? How you overcome the situation? who is helping you?
8. Do you think poor people from our community are receiving same type of health services? What type of health services they are getting and why?

Sustainability

9. What are the changes happening in your community as a result of the involvement of the Peoples Institutions and CHVs and TTBA's?

Impact

10. What type of changes will continue in maternal and newborn health if the PI and the CHVs/TTBA's continue their activities in the community?

F. Questions for Training Institutions

Lead in question:

What is your relationship with the SUSOMA project

Accomplishments/Challenges

1. How did working with the SUSOMA project change you as an organization for training?
2. What is unique about the SUSOMA approach to training?
3. What suggestions do you have for improvement of the SUSOMA training approach?
 - a. SUSOMA used direct training via LAMB and indirect training through Joyramkura. What do you see as the advantages / disadvantages of these approaches?

Sustainability

4. What suggestions do you have for community ownership of training?

Impact

5. What improvements have you made to your training have by made based on your SUSOMA experience?

স্বৈচ্ছামূলক সম্মতিপত্র Household KPC Survey

Protocol Number: PR-10002

Protocol Title: Operations research on improving maternal, newborn and child health through building public-private partnerships

Investigator's name: Dr. Dewan Md. Emdadul Hoque

Organization: ICDDR,B; Dhaka, Bangladesh

গবেষণার উদ্দেশ্য (Purpose of the research):

আপা/ভাই, আসসালামু আলাইকুম/ আদাব,

আমরা ঢাকার কলেরা (আই সি ডি ডি আর,বি) হাসপাতালের পক্ষে কাজ করি। আই সি ডি ডি আর,বি, বাংলাদেশ সরকার ও সি,আর,ডাব্লিউ,আর,সি (CRWRC) এর যৌথ সহযোগীতায় গর্ভবতী মহিলা, নবজাতক ও শিশুদের জন্য উন্নততর স্বাস্থ্য ব্যবস্থা প্রদানে কাজ করছে। গর্ভবতী মহিলা, নবজাতক ও শিশুদের চিকিৎসা ও স্বাস্থ্য আরও উন্নত করার এই কার্যক্রমের আমরা মূল্যায়ন করছি। আপনার ও আপনার এলাকার অন্যদের কাছ থেকে আমরা যে তথ্য পাব তার সাহায্যে আমরা এই এলাকার স্বাস্থ্য ব্যবস্থা সম্পর্কে এবং কি ভাবে এই ব্যবস্থাকে আরো ভাল করা যায় তা বুঝতে পারবো।

কেন আপনাকে এই গবেষণায় অংশগ্রহণ করতে আমন্ত্রণ করা হলো?

আপনি গবেষণা এলাকায় বসবাস করেন এবং আপনার দুই বছরের কম বয়সী বাচ্চা আছে বিধায় আপনাকে এই গবেষণায় অংশ নিয়ে আমাদেরকে সাহায্য করার জন্য আপনাকে আমন্ত্রণ জানাচ্ছি।

উত্তর দাতার কাছে কি প্রত্যাশা?

বিগত ৫ বৎসর আপনার এলাকায় এই গবেষণার কার্যক্রম চলেছে। যদি আপনি এই গবেষণায় অংশ গ্রহণ করতে আমাদের প্রস্তাবে রাজী থাকেন, তা হলে আমরা আজ আপনাকে আপনার, আপনার পরিবার ও আর্থ-সামাজিক অবস্থা সম্পর্কে কিছু প্রশ্ন করব। আপনার খানা বা ঘরে গত এক বছরের মধ্যে ডেলিভারী হয়েছে এমন কোন মহিলা থাকলে আমরা তার গর্ভকালীন ও প্রসব পরবর্তী অবস্থা এবং নবজাতকের যত্ন সম্পর্কে জানতে চাইব। আপনার খানা বা ঘরে ২ বৎসরের কম বয়সের শিশু থাকলে তার খাওয়া দাওয়া ও স্বাস্থ্য সম্পর্কে প্রশ্ন করব, আপনি বাড়িতে শিশুর দেখাশোনা কিভাবে করছেন এবং যখন বাচ্চা অসুস্থ হয় তখন তার চিকিৎসার জন্য কোথায় যান ও তাতে কত খরচ হয় ইত্যাদি সম্পর্কে জানতে চাইব। আপনার শিশুর ওজন ও মাপ নিব। আপনি যদি রাজি থাকেন তাহলে আজকে আমরা আপনাকে কিছু প্রশ্ন করব যার জন্য ৪০ থেকে ৫০ মিনিটের মত সময় লাগতে পারে। আপনার সাথে কথা-বার্তার সময় আমরা প্রশ্নপত্র পূরণ করতে চাই যাতে আপনি যা বলেছেন তা আমরা লিখে রাখতে পারি।

ঝুঁকি এবং সুবিধা

এই গবেষণায় অংশগ্রহণের জন্য আপনার ঝুঁকির সম্ভাবনা খুবই কম। আপনি যে তথ্য দিবেন সে গুলো সম্পূর্ণ গোপন রাখা হবে এবং শুধুমাত্র গবেষণার কাজে ব্যবহার করা হবে।

আপনি যদি এই গবেষণায় অংশগ্রহণ করেন তবে আপনার কাছ থেকে আমরা যে তথ্য পাব তা গর্ভবতী মহিলা, নবজাতক ও শিশুদের জন্য এই উন্নত স্বাস্থ্য ব্যবস্থাপনার প্রয়োজনীয়তা সম্পর্কে বুঝতে সাহায্য করবে। এ ছাড়া এ সকল তথ্য স্বাস্থ্য সেবাকে আরো কি ভাবে উন্নত করা যায় এবং তা যেন আরো বেশী কার্যকরী হয়, এসব বুঝতে আমাদেরকে সাহায্য করবে। আপনার দেওয়া তথ্যের কার্যকারিতা ব্যাপক, যা গর্ভবতী মহিলা, নবজাতক ও শিশুদের সুস্থতা ও মৃত্যুর হার কমানোর জন্য নীতিমালা প্রণয়ন ও পরবর্তী কার্যক্রমের দিক নির্দেশনা দিবে এবং আপনার এলাকায় আরো ভালোভাবে কার্যক্রম চালাতে সহায়তা করবে। তাছাড়া এসব তথ্য পরবর্তীতে বাংলাদেশ ও অন্যান্য স্থানে গর্ভবতী মহিলা, নবজাতক ও শিশুদের স্বাস্থ্যের উন্নয়ন কার্যক্রমে অবদান রাখবে।

গোপনীয়তা এবং বিশ্বস্ততা

আপনাকে নিশ্চয়তা প্রদান করা হচ্ছে যে, আপনাকে চিহ্নিত করার মত সকল তথ্য বিশ্বস্ততার সাথে সম্পূর্ণ গোপন রাখা হবে। আপনি আমাদেরকে যে সকল তথ্য প্রদান করবেন তার সবকিছুই গোপন থাকবে এবং তালিকাভি দিয়ে আটকানো থাকবে। গবেষণার গবেষকবৃন্দ, সম্ভাব্য ক্ষেত্রে গবেষণার পরিচালক, এবং বিশেষ প্রয়োজনে দেশের আইন বা আইনী সংস্থা ছাড়া অন্য কেউই আপনার দেওয়া তথ্য জানতে পারবে না। গবেষণার তথ্যগুলো হয়ত বিশ্লেষণের জন্য দেশের বাইরে পাঠানো হতে পারে (কেবলমাত্র যখন প্রয়োজ্য), তবে আপনাকে চিহ্নিত করার মত সকল তথ্য খুবই সাবধানতার সাথে ব্যবহার করা হবে, এবং নগন্য সংখ্যক ব্যক্তির বাইরের কেউই তা জানতে পারবেন না।

এই গবেষণায় আমরা আপনার সকল প্রশ্নের উত্তর দিতে বাধ্য। এই গবেষণার গবেষকদের সাথে আপনি যে কোন সময় যোগাযোগ করতে পারেন (তথ্যপ্রদানকারীকে প্রয়োজনে গবেষকদের ঠিকানা ও ফোন নং দিন)। আমরা আরো বলতে চাই যে, এই গবেষণার ফলাফল গবেষণার শেষে জানানো হবে।

তথ্যের ভবিষ্যৎ ব্যবহার

আপনার দেওয়া তথ্য হয়তো অন্যান্য গবেষকদের সাথে বিনিময় হতে পারে তবে, এতে আপনার দেওয়া তথ্যের গোপনীয়তা রক্ষায় সকল রকমের সাবধানতা গ্রহণ করা হবে এবং আপনাকে কোনভাবেই চিহ্নিত করা যাবে না।

অংশগ্রহণ না করা বা প্রত্যাহার করার অধিকার

এই গবেষণায় আপনার অংশগ্রহণ হবে সম্পূর্ণ স্বতঃস্ফূর্ত এবং এই গবেষণায় আপনি অংশগ্রহণ করবেন কি করবেন না এটা সম্পূর্ণ আপনার নিজের উপর। আপনি যে কোন সময় গবেষণায় অংশগ্রহণ না করার সিদ্ধান্ত নিতে পারেন। গবেষণায় অংশগ্রহণ না করা অথবা নিজেকে প্রত্যাহারের জন্য আপনার কোন ক্ষতি অথবা সমস্যা হবে না। আপনি যদি এই কাজে অংশগ্রহণ নাও করেন অথবা আপনি যদি কখনও গবেষণা থেকে নিজেকে সরিয়ে নেন তবুও আপনি ও আপনার পরিবার এই এলাকার বিভিন্ন হাসপাতাল/ক্লিনিক/স্বাস্থ্য সেবিকার কাছ থেকে বরাবর যে স্বাস্থ্য সেবা পেতেন তার কোন ব্যতিক্রম হবে না।

ক্ষতিপূরণ নীতি

আগেই বলা হয়েছে যে এই কাজে আপনার অংশগ্রহণ সম্পূর্ণ স্বতঃস্ফূর্ত এবং এই গবেষণায় অংশগ্রহণের জন্য আপনাকে কোন প্রকার খরচ প্রদান করা হবে না।

আপনি এই গবেষণায় অংশ নিতে রাজী থাকলে সেটা স্বাক্ষর করে বা বুড়ো আঙ্গুলের ছাপ দিয়ে সম্মতি দিন।

সহযোগীতা করার জন্য ধন্যবাদ

অংশগ্রহণকারীর স্বাক্ষর বা বুড়ো আঙ্গুলের ছাপ

তারিখ

স্বাক্ষীর স্বাক্ষর বা বুড়ো আঙ্গুলের ছাপ

তারিখ

প্রধান গবেষকের/তার পক্ষে স্বাক্ষর

তারিখ

(নোটঃ প্রধান গবেষকের পক্ষে যদি কেউ স্বাক্ষর করেন, তার পুরো নাম ও পদবী লিখুন এবং স্বাক্ষর করুন)

গবেষক/দের এবং কমিটি কোঅরডিনেশন সেক্রেটারীয়েট পুরো নাম, পদবী এবং ফোন নং

১. ডাঃ দেওয়ান মোঃ ইমদাদুল হক
ডেপুটি প্রোজেক্ট কোঅরডিনেটর, শিশুস্বাস্থ্য ইউনিট
আই,সি,ডি,ডি,আর,বি
ফোন: ৮৮১০১১৫ (ঢাকা)
২. মিঃ এম.এ. সালাম খান
কমিটি কোঅরডিনেশন সেক্রেটারী
আই,সি,ডি,ডি,আর,বি
ফোন: ৯৮৮৬৪৯৮, ০১৭১১৪২৮৯৮৯ (ঢাকা)

Module I

Endline KPC Survey 2014

Name	Code	
CLUSTER/UNION		সাক্ষাৎকার শুরু হবার সময়: _____:_____:_____
UPAZILA		
VILLAGE		
HOUSEHOLD ID		
WOMEN ID		সাক্ষাৎকার শেষ করার সময় _____:_____:_____
ADDRESS (Location)		_____:_____:_____

Interview summary

Visit 1	Visit 2	Visit 3	Final Visit
Date _____:_____:_____	_____:_____:_____	_____:_____:_____	Date _____:_____:_____
Interviewer's Name _____	_____	_____	Interviewer's code _____
Result code* ____	____	____	Result code ____
Next Visit _____:_____:_____	_____:_____:_____	_____	Total # of visits ____

	ফলাফল বৃত্তায়িত করুন		বর্তমান অবস্থা
	করতে হবে	করা হয়েছে	মন্তব্য
১ লা জানুয়ারী ২০১৩ সাল বা তার পরে গর্ভ ফলাফল আছে এমন মহিলার জন্য Module II (মা ও নবজাতকের যত্ন) পূরন করতে হবে কি? Is it required to complete Module II (maternal and immediate newborn care) for the woman with a birth outcome since 01 January-2013?	Y / N	Y / N	
১ লা জানুয়ারী ২০১৩ সাল বা তার পরে গর্ভ ফলাফল আছে এমন মহিলার জন্য Module III / MATERNAL COST MODULE পূরন করতে হবে কি? Is it required to complete Module III / MATERNAL COST MODULE for women in the HH with a birth outcome since 01-January-2013?	Y / N	Y / N	
*Result Codes			
01. Interview Complete 02. Partial complete 03. Refused to give interview 04. Could not find the residence	05. The woman was not available at the date of interview 06. No woman found with pregnancy outcome since 01 January 2012 07. Others _____		

Supervision	Name	Code	Date
Reviewed by FS			_____:_____:_____
Checked by FRS			_____:_____:_____
Reviewed by QC Team			_____:_____:_____
Data Entered by			_____:_____:_____

Section A: Household Information

This Section contains some house hold information of the selected woman and other members of the same house-hold

	পরিবারের গঠন (বর্তমানে জীবিত ও গৃহের নিয়মিত বাসিন্দা):	পুরুষ (Male)	মহিলা (Female)	
A01	2 বছরের কম বয়সী শিশুর সংখ্যা Number of U2 years children in the Household			
A02	2 - 5 বছরের কম বয়সী শিশুর সংখ্যা Number of children of age 2-up to 5 years			
A03	5-15 বছরের কম বয়সী বালক / বালিকার সংখ্যা..... Number of children/adolescents of age 5-up to 15 years			
A04	পরিবারে 15- 49 বছর বয়স্ক সদস্য সংখ্যা Number of adults of age 15-49 years			
A05	15- 49 বছর বয়স্ক কখনও বিয়ে হয়েছিল এমন মহিলার সংখ্যা Number of ever-married women of age 15-49 yrs			
A06	50 বছর বা তার উর্ধ্ব বয়সের সদস্য সংখ্যা Number of adults of age 50+ years			

Section B: Socio-Economic Information

No.	Questions and Filters	Coding Categories	Skip
B01	আপনার ঘরের/খানার সদস্যদের পানি পান করার প্রধান উৎস কি/কোথায়? What is the main source of drinking water for members of your household?	পাইপের পানিঃ (Piped water) বাড়ীর ভিতরে ট্যাপের (পাইপের) পানি (Piped inside dwelling) 11 বাড়ীর বাহিরে ট্যাপের (পাইপের) পানি (Piped outside dwelling) 12 কুপের পানিঃ (Well water) শ্যালো টিউবওয়েল (Shallow tubewell)..... 21 গভীর নলকূপ (Deep tubewell) 22 কুয়া (Surface well/other well) 23 ভূ-পৃষ্ঠের পানিঃ (Surface water) পুকুর/খাল/বন্ধ জলাশয়/হ্রদ/দীঘি/বিল/হাওড় (Pond/Tank/Lake)..... 31 নদী/ঝরনা পানি (River Stream)..... 32 বৃষ্টির পানি (Rain water) 41 অন্যান্য (Other) 97 (নির্দিষ্ট করুন)	

No.	Questions and Filters	Coding Categories	Skip
B02	আপনাদের কি ধরনের পায়খানা/ল্যাট্রিন এর ব্যবস্থা আছে? What kind of toilet facility does your household have?	সেপটিক ট্যাংক/আধুনিক ল্যাট্রিন (Septic tank/Modern toilet) 11 গর্ত (পিট) টয়লেট/ল্যাট্রিন (Pit toilet/Latrine) জলাবদ্ধ/স্লাব (স্যানিটারী) ল্যাট্রিন (Water sealed/Slab latrine)..... 21 গর্তের (পিট) ল্যাট্রিন (Pit latrine) 22 খোলা/ঝুলন্ত ল্যাট্রিন (Open/Hanging latrine)..... 23 ল্যাট্রিন নাই/বোপ ঝাড়/মাঠ (No facility/Bush/Field)..... 31 অন্যান্য (Others) 97 (নির্দিষ্ট করুন)	
B03	আপনাদের ঘরের/খানার কোন সদস্যের এই জিনিসগুলো আছে কি? [প্রত্যেকটি জিনিসের কথাই জিজ্ঞেস করুন] How many of the followings are owned by your household?	Yes No রেডিও (Radio)..... 1..... 2 টেলিভিশন (Television) 1..... 2 টেপ রেকর্ডার (Tape recorder) 1..... 2 ভিসিপি/ভিসিআর/ডিভিডি (VCR/VCP/DVD player) 1..... 2 মোবাইল ফোন (mobile phone) 1..... 2 টেলিফোন (Land Telephone) 1..... 2 বৈদ্যুতিক পাখা (Electric Fan) 1..... 2 কম্পিউটার (Computer) 1..... 2 ফ্রিজ (Refrigerator) 1..... 2 ঘড়ি (Watch) 1..... 2 আলমারি (Almira) 1..... 2 রান্নাঘরের তাকিয়া (Kitchen cabinet) 1..... 2 খাট/চৌকি (cot/bed)..... 1..... 2 টেবিল (Table) 1..... 2 চেয়ার (Chair)..... 1..... 2 সোফা (Sofa) 1..... 2 লেপ/কম্বল (Lep/Kombol/Blanket) 1..... 2 তোষক/জাজিম (Toshok/Jajim/Matress) 1..... 2 বাই সাইকেল (Bicycle) 1..... 2 মোটর সাইকেল/স্কুটার (Motor cycle/Scooter) 1..... 2 গরু/মহিষের গাড়ী (Animal drawn cart)..... 1..... 2 গাড়ি/মাইক্রোবাস (Car/Microbus) 1..... 2 মালবাহী গাড়ি/বাস (Truck/Bus) 1..... 2 ইঞ্জিন চালিত নৌকা (Motor-Boat) 1..... 2 নৌকা (ইঞ্জিন ছাড়া) (Boat without motor)..... 1..... 2 রিক্সা/ভ্যান (Rickshaw/Rickshaw Van)..... 1..... 2	
B04	আপনাদের ঘরে কি বিদ্যুৎ আছে? Do you have Electricity in your house?	হ্যাঁ (Yes) 1 না (No) 2	

No.	Questions and Filters	Coding Categories	Skip
B05	আপনারা যে ঘরে থাকেন সে ঘরের চালের/ছাদের প্রধান নির্মাণ-সামগ্রী কি? [দেখে লিখুন, যদি থাকার জন্য একাধিক ঘর থাকে তবে সবচেয়ে বড় ঘরের নির্মাণ-সামগ্রী লিখুন] Main Material of the Roof.	<u>প্রাকৃতিক ছাদঃ Natural Roof</u> ছাদ নেই No roof 11 খড়/ছন/তালপাতা Bamboo/Thatch/Palm leaf 12 <u>কাঁচা ছাদঃ Rudimentary Roof</u> বাঁশ Bamboo 21 কাঠের তক্তা Wood Planks 22 কার্ডবোর্ড Cardbord 23 <u>উন্নত ছাদঃ Finished roof (Pukka)</u> টিন Tin 31 সিমেন্ট Cement/Concrete..... 32 টালি Tiles..... 33 অন্যান্য Others 97 (নির্দিষ্ট করুন)	
B06	আপনারা যে ঘরে থাকেন সে ঘরের মেঝের প্রধান নির্মাণ-সামগ্রী কি? [দেখে লিখুন, যদি থাকার জন্য একাধিক ঘর থাকে তবে সবচেয়ে বড় ঘরের নির্মাণ-সামগ্রী লিখুন] Main material of the Floor.	<u>কাঁচা মেঝে Natural floor</u> মাটি/বালু Earth/sand 11 <u>প্রাথমিক পর্যায়ের মেঝেঃ Rudimentary floor</u> কাঠের তক্তা Wood Planks 21 তাল গাছ/ বাঁশ Palm/Bamboo 22 <u>উন্নত মেঝে Finished floor</u> নকশা করা কাঠের পাটাতন/ পালিশকৃত কাঠ Parquet/Polished Wood..... 31 সিমেন্ট/ইট বালি জমানো Cement/Concrete 32 সিরামিক টাইলস/মোজাইক Ceramic Tiles/Mosaic 33 অন্যান্য Others 97 (নির্দিষ্ট করুন)	
B07	আপনারা যে ঘরে থাকেন সে ঘরের দেয়ালের প্রধান নির্মাণ-সামগ্রী কি? [দেখে লিখুন, যদি থাকার জন্য একাধিক ঘর থাকে তবে সবচেয়ে বড় ঘরের নির্মাণ-সামগ্রী লিখুন] Main material of the Walls	<u>প্রাকৃতিক দেয়ালঃ Natural Walls</u> দেয়াল নাই No walls 11 পটকাঠি/বেত/তাল গাছ/গাছের গুড়ি Cane/Palm/Trunks .. 12 মাটি Mud 13 <u>প্রাথমিক পর্যায়ের দেয়ালঃ Rudimentary Walls</u> মাটিসহ বাঁশ Bamboo with Mud..... 21 মাটিসহ পাথর Stone with Mud 22 প্লাই-উড Plywood 23 কার্ডবোর্ড Cardbord 24 <u>উন্নত দেয়ালঃ Finished Walls</u> টিন Tin 31 চুন সুড়কি দিয়ে তৈরী পাথরের দেয়াল (Stone with lime). 32 ইট (প্লাস্টার ছাড়া) Bricks (Without plaster)..... 33 ইট / সিমেন্ট (প্লাস্টার সহ) Bricks / Cement (With plaster)34 উন্নতমানের কাঠের তক্তা Polished Wood Planks 35 অন্যান্য Others 97 (নির্দিষ্ট করুন)	
B08	আপনার ঘরে/খানায় আপনাদের নিজেদের কতগুলো জীবজন্তু আছে? [যদি জানা না থাকে তাহলে '99', যদি কিছুই না থাকে তাহলে "00" বসান। যদি সংখ্যা 90 বা তার বেশী হলেও "90" লিখুন] [কোন পশু/পাখির খামার বা বিক্রি/ব্যবসার জন্য থাকলে সেই পশু/পাখির সংখ্যা এখানে লিখবেন না] How many of the following animals are owned by your household?	গরু (Cow) মহিষ (Buffalo) ছাগল (Goats) ভেড়া (Sheeps) মুরগী (Chickens) হাঁস (Ducks)	

No.	Questions and Filters	Coding Categories	Skip
B09	আপনাদের কোন নিকট/কাছের আত্মীয় কি বিদেশে থাকেন/কাজ করেন? Do you have any relative living or working outside of Bangladesh?	হ্যাঁ (Yes) 1 না (No) 2	→ B11
B10	তিনি বা তারা কি আপনাকে বা আপনাদেরকে টাকা পাঠান? Do they send you money from abroad?	হ্যাঁ (Yes) 1 না (No) 2	
B11	আপনার ঘরের/খানার কেউ কি এই সংস্থা/প্রতিষ্ঠানের সদস্য? Does anybody from this household belong to any of the following organizations?	YES NO পিপলস ইনস্টিটিউশন (People's Institution) 1 2 গ্রামীণ ব্যাংক (Grameen Bank) 1 2 ব্রাক (BRAC)..... 1 2 বি আর ডি বি (BRDB)..... 1 2 প্রশিকা (Proshikha) 1 2 আশা (ASHA) 1 2 টিএমএসএস (TMSS)..... 1 2 অন্য কোন সংস্থা (Any other organization) 1 2 নির্দিষ্ট করুন (Specify)_____ | | | নির্দিষ্ট করুন (Specify)_____ | | |	
B12	আপনার পরিবার (খানা) কি বসতবাড়ীর জমির মালিক? হ্যাঁ হলে কতটুকু? [না হলে 00 লিখুন, জানিনা হলে 99 লিখুন] Does your family own household land? If yes how much? [If no write 00, if don't know write 99]*	| | | একর | | | শতক Acre Decimal	
B13	আপনার পরিবারের (খানার) কোন চাষযোগ্য জমি আছে কি? হ্যাঁ হলে কতটুকু? [না হলে 00 লিখুন, জানিনা হলে 99 লিখুন] Does your family possess any cultivable land?, if yes how much? (If no then write 00, if doesn't know then write 99)*	| | | একর | | | শতক Acre Decimal	
B14	আপনি কোন ধর্মের অনুসারী? What is your religion?*	মুসলিম (Muslim) 1 হিন্দু (Hinduism) 2 বৌদ্ধ (Buddhism) 3 খৃষ্টান (Christianity) 4 অন্যান্য (Others) 7 (নির্দিষ্ট করুন)	
B15	আপনি কি কোন আদিবাসী গোত্র/নৃ-গোষ্ঠী/উপজাতী/সম্প্রদায়ের অন্তর্ভুক্ত? Are you belonging to any ethnicity?	হ্যাঁ (Yes) 1 না (No) 2	→ C01
B16	আপনি কোন নৃ-গোষ্ঠী/সম্প্রদায়ের (উপজাতী) অন্তর্ভুক্ত? What is your ethnic group?	হাজং (Hajong) 1 গারো (Garo) 2 খাসিয়া (Khasia) 3 মগ (Mog) 4 মুরং (Murong) 5 হুদি (Hudi) 6 অন্যান্য (Others) 7 (নির্দিষ্ট করুন)	

Section C: Personal Information

১লা জানুয়ারী ২০১২ সাল বা তার পরে গর্ভ ফলাফল হয়েছে এমন মহিলাকে এই প্রশ্নগুলো করতে হবে।

All questions are to be addressed to women with a delivery outcome since January 1, 2012

No.	Questions And Filters	Coding Categories	Skip
C01	আপনি কোন সালের কোন মাসে জন্ম গ্রহণ করেছিলেন? In what month and year were you born? মাস জানা না থাকলে "99" লিখুন (If don't know month, write '99')	মাস (Month)..... সাল (Year).....	
C02	বর্তমানে আপনার বয়স কত? How old were you at your last birthday?	বয়স (পূর্ণ বছরে) Age in completed years.....	
C03	আপনি কি বর্তমানে বিবাহিতা, তালাকপ্রাপ্তা, আলাদা থাকেন না বিধবা? Are you now married, divorced, separated or widowed?	বিবাহিতা (married) 1 তালাকপ্রাপ্তা (divorced)..... 2 আলাদা থাকেন (separated) 3 বিধবা (widow) 4	→ C05 → C05 → C05
C04	আপনার স্বামী সর্বোচ্চ কোন ক্লাস পাশ করেছেন (কোন ক্লাস সম্পূর্ণ করেছেন)? What is the highest grade/class or number of years of studies you have completed at that schooling?	সর্বোচ্চ কোন ক্লাস Highest Class/Grade (কোন ক্লাস/শ্রেণী সম্পূর্ণ করে না থাকলে "00" লিখুন) [Write '00' if no class completed]	
C05	আপনি কি কখনও স্কুলে, মাদ্রাসায় বা উপানুষ্ঠানিক শিক্ষা স্কুলে (বয়স্ক শিক্ষা কেন্দ্র বা অন্যকোথাও) লেখাপড়া করেছেন? Did you ever study in school, madrasa or non formal school?	হ্যাঁ (Yes) 1 না (No) 2	→ C07
C06	আপনি সর্বোচ্চ কোন ক্লাস/শ্রেণী পর্যন্ত লেখাপড়া করেছেন? What is the highest grade/class or number of years of studies you have completed at that schooling?	সর্বোচ্চ কোন ক্লাস Highest Class/Grade (কোন ক্লাস/শ্রেণী সম্পূর্ণ করে না থাকলে "00" লিখুন) [Write '00' if no class completed]	
C07	ঘরের কাজের পাশাপাশি আপনি এমন কোন কাজ কি করেন যা থেকে আপনার আয় হয়? যেমন, কেউ জিনিসপত্র বিক্রী করেন, কেউ নিজের ছোট ব্যবসায় বা পারিবারিক খামারে বা ব্যবসায় কাজ করেন, কেউ গরু-ছাগল বর্গা নেন ইত্যাদি। As you know, some women take up jobs for which they are paid in cash or kind. Others sell things, have a small business or work on the family farm or in the family business. Are you doing any of these things or any work?	হ্যাঁ Yes 1 না No 2	
	এবার আমি, আপনি ১ লা জানুয়ারী ২০১২ সাল বা তার পরে যতবার গর্ভবতী হয়েছেন, গর্ভপাত ব্যতিত (২৮ সপ্তাহ পূর্ণ হয়নি), তার প্রত্যেকটির ব্যাপারে আলোচনা করতে চাই। সেই গর্ভের ফলাফল জীবিত জন্ম বা মৃত জন্ম যাই হোক না কেন, সবগুলো সম্পর্কেই আলোচনা করতে চাই। আপনার শেষ গর্ভবস্থা দিয়েই আলোচনা শুরু করতে চাই। Now I would like to discuss with you about all of your pregnancies since 01-January-2012 except abortion (before 28 weeks), irrespective of if the child was born alive or still birth. I would like to start with your last pregnancy.		
C08	শেষ গর্ভের ফলাফলের তারিখ (Date of last pregnancy outcome)	-.....-.....	
C09	এই গর্ভাবস্থার ফলাফল কি ছিল? জীবিত শিশু নাকি মৃত শিশু? Status of pregnancy Outcome	জীবিত জন্ম Live birth 1 মৃত জন্ম Still Birth 2	→ C11
C10	জন্মের পর বাচ্চাটি কি কেঁদেছিল বা নড়াচড়া করেছিল বা শ্বাসপ্রশ্বাস নিয়েছিল? Cry/move/breathe after birth	হ্যাঁ Yes 1 না No 2	→ C13
C11	শিশুর বর্তমান অবস্থা Status of the child (alive or dead)	জীবিত এবং সাথে থাকে (Alive & live with mother)..... 1 জীবিত কিন্তু অন্যত্র থাকে (Alive but live elsewhere)..... 2 মৃত (Not alive)..... 3	→ C13 → C13
C12	যদি মৃত হয়: মৃত্যুর সময় তার বয়স কত ছিল? [দুই মাস (60 দিন) এর কম হলে দিনে লিখুন] If the child died, write down child's age at death	দিন Days 1 মাস Months 2	

No.	Questions And Filters	Coding Categories	Skip
C13	শেষ গর্ভের পূর্ববর্তী গর্ভাবস্থার ফলাফলের তারিখ (Date of pregnancy outcome before the last birth)	ফলাফল আছে 1 - - আর কোন গর্ভের ইতিহাস নাই 2	→ D01
C14	এই গর্ভাবস্থার ফলাফল কি ছিল? জীবিত শিশু নাকি মৃত শিশু? Status of pregnancy Outcome	জীবিত জন্ম Live birth 1 মৃত জন্ম Still Birth 2	→ C16
C15	জন্মের পর বাচ্চাটি কি কেঁদেছিল বা নড়াচড়া করেছিল বা শ্বাসপ্রশ্বাস নিয়েছিল? Cry/move/breathe after birth	হ্যাঁ Yes 1 না No 2	→ D01
C16	(নাম) কি এখনও জীবিত? Status of the child (alive or dead)	জীবিত এবং সাথে থাকে (Alive & live with mother)..... 1 জীবিত কিন্তু অন্যত্র থাকে (Alive but live elsewhere)..... 2 মৃত (Not alive)..... 3	→ D01 → D01
C17	যদি মৃত হয়: মৃত্যুর সময় তার বয়স কত ছিল? [দুই মাস (60 দিন) এর কম হলে দিনে লিখুন] If the child died, write down child's age at death	দিন Days..... 1 মাস Months 2	

Section D: People's Institution Group

This section contains some information about People's Institution group

আপনি হয়ত জানেন যে কখনও কখনও এলাকা ভিত্তিক কিছু কমিটি/দল থাকে। আমি এখন এসব বিষয়ে কিছু প্রশ্ন করব।

You may know that there are local committees in many communities. Now I will discuss about such committee / group in your area.

No.	Questions And Filters	Coding Categories	Skip
D01	আপনার এলাকায় এমন কোন কমিটি বা দল (গ্রুপ) সম্পর্কে আপনি জানেন কি যারা মা ও শিশুর স্বাস্থ্যের উন্নতির জন্য কাজ করে? Do you know about any committees, or network or group in your community that works towards improving maternal and child health?	হ্যাঁ Yes 1 না No 2	→ D12
D02	আপনি বা আপনার পরিবারের কোন সদস্য কি এই ধরনের কমিটি বা দল (গ্রুপ) এর সদস্য? Are you and/or any of your family member is a member of any such group?	হ্যাঁ Yes 1 না No 2	→ D04
D03	আপনি/আপনার পরিবারের সদস্য কতদিন আগে এই কমিটি বা দলের (গ্রুপের) সদস্য হয়েছেন? [বছরে বললে মাসে পরিবর্তিত করুন। ১ মাসের কম হলে ০০ লিখুন] How long ago did you or someone in your family become a member of this group? Interviewer: If respondent answer in years convert it into months. If less than one month write '00' in the box	মাস MONTH..... মনে নাই Don't Remember..... 99	
D04	এই কমিটি বা গ্রুপ কোন কোন বিষয় নিয়ে কাজ করে? What issues does the group deal with?	মায়ের স্বাস্থ্য সেবা Mother's health A শিশুর স্বাস্থ্য সেবা Baby's health..... B পরিবার পরিকল্পনা Family planning..... C শিক্ষা Education..... D অসুস্থ মা ও শিশুর পরিবহনের ব্যবস্থা করে Arrange transportation for sick mother & babies E অসুস্থ মা ও শিশুর চিকিৎসার জন্য অর্থের ব্যবস্থা করে Financing sick mother & babies F অন্যান্য Others X নির্দিষ্ট করুন জানেন না Don't know Z	
D05	এই কমিটি/দলের কাছে আপনি কি মায়ের অথবা শিশুর স্বাস্থ্য সম্পর্কিত কোন প্রকার সমস্যার কারণে সাহায্যের জন্য গিয়েছিলেন? Did you ever go for any sort of help from this group for maternal or child health related problems?	হ্যাঁ Yes 1 না No 2	

No.	Questions And Filters	Coding Categories	Skip
D06	এই কমিটি/দলের কাছ থেকে আপনি কি কখনও মায়ের অথবা শিশুর স্বাস্থ্য সম্পর্কিত কোন প্রকার সমস্যার কারণে কোন ধরনের সাহায্য পেয়েছিলেন? Have you ever received any sort of help from this group for maternal or child health related problems?	হ্যাঁ Yes 1 না No 2	→ D12
D07	এই কমিটি/দলের কাছ থেকে মায়ের অথবা শিশুর স্বাস্থ্য সম্পর্কিত কোন প্রকার সমস্যার কারণে কি ধরনের সাহায্য পেয়েছিলেন? What kind of support did you receive from this group for maternal or child health related problems?	পরিবহনের ব্যবস্থা করেছিল Arranged transportation A টাকা পয়সার ব্যবস্থা করেছিল Arranged financial support B স্বাস্থ্যকর্মীকে জানানো Informed health worker C স্বাস্থ্যকর্মীর পরিদর্শন নিশ্চিত করা Ensured visit of health worker D স্বাস্থ্যকেন্দ্র থেকে সেবা পাওয়ার ক্ষেত্রে সহায়তা করেছিল Ensured service from/linkage with health facility E অন্যান্য Other X	
D08	[D 07 এ A বৃত্তায়িত হলে] এই কমিটি/দলের কাছ থেকে কি ধরনের পরিবহন সুবিধা পেয়েছিলেন? If D07 A is circled, ask, what kind of support for transportation did you receive from the group?	যানবাহন খুঁজতে সাহায্য করেছে Helped in finding a vehicle 1 যানবাহন দিয়েছে Provided with a vehicle 2 প্রযোজ্য নয় Not applicable 3	
D09	[D 07 এ B বৃত্তায়িত হলে] তাদের তহবিল থেকে সরাসরি আপনাকে টাকা দিয়েছিল না-কি এলাকা থেকে টাকা ভুলে দিয়েছিল? If D07 B is circled, ask, did they give you money directly from their fund or arranged money from the community?	তহবিল থেকে দিয়েছিল Gave money from their fund 1 এলাকা থেকে টাকা ভুলে দিয়েছিল Arranged from community ... 2 উভয়েই Both 3 প্রযোজ্য নয় Not applicable 3 জানি না Don't know 9	
D10	[D 07 এ E বৃত্তায়িত হলে] এই কমিটি/দলের কাছ থেকে স্বাস্থ্যকেন্দ্র হতে সেবা পাওয়ার ক্ষেত্রে কি ধরনের সহায়তা পেয়েছিলেন? If D07 E is circled, ask, what kind of support for service/linkage did you receive from the group?	 প্রযোজ্য নয় Not applicable 3	
D11	এই কমিটি/দলের কাছ থেকে মায়ের অথবা শিশুর স্বাস্থ্য সম্পর্কিত সমস্যার কারণে যে সাহায্য পেয়েছিলেন তা কি আপনার কাছে উপকারী মনে হয়েছে? Do you consider the help that you received for maternal or child health related problems as beneficial?	হ্যাঁ Yes 1 না No 2	

তথ্যসংগ্রহকারীর জন্য নির্দেশিকা Instruction for interviewer: CHECK Questions			
D12	এই মহিলার ১ লা জানুয়ারী ২০১৩ সাল বা তার পরে কোন গর্ভ ফলাফল আছে কি (Question C08 and C13)? Is there any pregnancy outcome for this woman since 01-January-2013 (Question C08 and C13)?	হ্যাঁ Yes 1 না No 2	→ D14
D13	আপনাকে কি এই মহিলার নিকট হতে maternal and immediate newborn care (Module II) এর জন্য তথ্য সংগ্রহ করতে বলা হয়েছে? Were you asked to collect information on maternal and immediate newborn care (Module II)?	হ্যাঁ Yes 1 না No 2	→ Module II
D14	মহিলার সাথে বর্তমানে এমন কোন সন্তান বাস করে যাহার, ১ লা জানুয়ারী ২০১২ সাল বা তার পরে জন্ম (Q. C11 / Q.C16 -এ '1' বৃত্তায়িত)? Is there any child born since 01-January-2012 currently live with the mother ('1' circled either in Q. C11 or Q. C16)?	হ্যাঁ Yes 1 না No 2	→ Module IV
D15	উত্তর দাতাকে ধন্যবাদ জানিয়ে সাক্ষাৎকার শেষ করুন। Thanks the mother for providing time and end the interview.		

Section DX: Health Contacts and Sources of Health Information

No.	Questions and Filters	Coding Categories			
DX01	During the last month, how often have you come in contact with each of the following: গত একমাসে আপনি উল্লেখিত স্বাস্থ্যসেবাদানকারীর সাথে কতবার সাক্ষাৎ করেছেন বা সংস্পর্শে এসেছেন?		প্রায়ই (৪ বারের অধিক)	মঝে মঝে (১ থেকে ৩ বার)	এক বারও নয়
		দক্ষ/প্রশিক্ষণপ্রাপ্ত স্বাস্থ্য কর্মী (Medically trained)			
		পাশ করা ডাক্তার (MBBS doctor)	1	2	3
		নার্স/ধাত্রী (Nurse/midwife)	1	2	3
		প্যারামেডিক/মেডিকেল এসিসটেন্ট/সাকমো (Paramedic/MA/SACMO)	1	2	3
		পরিবার কল্যাণ পরিদর্শক (FWV)	1	2	3
		কমিউনিটি স্বাস্থ্য কর্মী (CHW)	1	2	3
		অন্যান্য স্বাস্থ্য কর্মী (Other health worker)			
		স্বাস্থ্য সহকারী/ পরিবার কল্যাণ সহকারী (HA /FWA)	1	2	3
		পুষ্টি কর্মী (CNP)	1	2	3
		কমিউনিটি স্বাস্থ্য সেচ্ছাসেবী (CHV)	1	2	3
		অন্যান্য কমিউনিটি স্বাস্থ্য কর্মী - এনজিও কর্মী, সেচ্ছাসেবী (Other CHWs, NGO worker, volunteer)	1	2	3
		অন্যান্য (Other)			
		প্রশিক্ষণপ্রাপ্ত টিবিএ (প্রশিক্ষণপ্রাপ্ত ধনী, চাউনী, দাই) (TTBA)	1	2	3
		প্রশিক্ষণহীন টিবিএ (ধনী, চাউনী, দাই) TBA (Dai/Dhorni/Chauni)	1	2	3
		হোমিওপ্যাথ/হোমিওপ্যাথ ঔষধের দোকান (Homeopath/Homeopath drug store)	1	2	3
		আয়ুর্বেদিক চিকিৎসক / আয়ুর্বেদিক ঔষধের দোকান /হেকিম/কবিরাজ (Ayurved/ Ayurvedic drug store /Hekim/Kabiraj)	1	2	3
		গ্রাম ডাক্তার (Village doctor)	1	2	3
		এলোপ্যাথী ঔষধের দোকান (Allopath drug store)	1	2	3
		ইমাম/বাড় ফুক/ওবা (Spiritual healer)	1	2	3
		অন্যান্য (Others) (নির্দিষ্ট করুন) _____	1	2	3

Module II

Maternal and immediate newborn care module

Endline KPC Survey 2014

ALL QUESTIONS ARE TO BE ADDRESSED TO WOMEN WITH A PREGNANCY OUTCOME SINCE 1st JANUARY 2013

Name	Code	
CLUSTER/UNION		সাক্ষাৎকার শুরু হবার সময়: _____ : _____
UPAZILA		
VILLAGE		
HOUSEHOLD ID		সাক্ষাৎকার শেষ করার সময় _____ : _____
WOMEN ID		

Section E: Maternal Care

No.	Questions And Filters	Coding Categories	Skip
E00	গর্ভকালীন সময়ে একজন মহিলার মানসম্মত মাতৃ স্বাস্থ্যসেবা পাওয়ার অধিকার রয়েছে, এ ব্যাপারে আপনি জানেন কি? Are you aware that a pregnant women has the right to access quality MNH services?	হ্যাঁ Yes 1 না No 2 জানি না/ মনে নাই Don't know/Can't remember 9	
E01	গর্ভকালীন সময়ে একজন মহিলা অসুস্থ না হলেও মেডিকেল চেকআপ (ANC) করার দরকার আছে কি? Do you know about ANC (Ante natal care), a medical check-up for a woman during pregnancy, even when she is not sick?	হ্যাঁ Yes 1 না No 2 জানি না/ মনে নাই Don't know/Can't remember 9	→ E03 → E03
E02	গর্ভকালীন সময়ে একজন মহিলার কমপক্ষে কত বার মেডিকেল চেকআপ (ANC) করা দরকার? Can you tell me at least how many times a pregnant woman should receive such kind of medical check-up (ANC) during pregnancy?	বার (গর্ভকালীন সময়ে) Times (during pregnancy) জানি না/ মনে নাই Don't know/Can't remember 9	
E03	শেষ গর্ভের সময়, গর্ভকালীন মেডিকেল চেক-আপের জন্য আপনি কি কাউকে দেখিয়েছিলেন? Did you see (consult) anyone for antenatal care during your most recent pregnancy?	হ্যাঁ Yes 1 না No 2 জানি না/ মনে নাই Don't know/Can't remember 9	→ E11 → E11

No.	Questions And Filters	Coding Categories	Skip
E04	শেষ গর্ভের সময়, গর্ভকালীন মেডিকেল চেক-আপের জন্য আপনি কাকে দেখিয়েছিলেন? [মহিলাকে জিজ্ঞেস করুন] আরও কিছু? [মহিলার নিজে থেকে দেয়া সবগুলো উত্তরই বৃত্তায়িত করুন]। উত্তরগুলো পড়ে শুনাবেন না। একাধিক উত্তর হতে পারে।] Whom you see for antenatal care during you most recent pregnancy? [Do not readout the answers. Ask anyone else? Record all the answers]	<u>দক্ষ/প্রশিক্ষণ প্রাপ্ত স্বাস্থ্য কর্মী (Medically trained)</u> পাশ করা ডাক্তার (MBBS doctor)..... A নার্স/ধাত্রী (Nurse/midwife) B প্যারামেডিক/মেডিকেল এসিসটেন্ট/সাকমো (Paramedic/MA/SACMO)..... C পরিবার কল্যাণ পরিদর্শক (FWV)..... D সি,এস,বি,এ (CSBA) E <u>অন্যান্য স্বাস্থ্য কর্মী (Other health worker)</u> স্বাস্থ্য সহকারী/ পরিবার কল্যাণ সহকারী (HA /FWA) . F পুষ্টি কর্মী (CNP)..... G সুসমা কার্যক্রমের স্বেচ্ছাসেবী (Volunteer of SUSOMA prj)H অন্যান্য কমিউনিটি স্বাস্থ্য কর্মী - এনজিও কর্মী, স্বেচ্ছাসেবী (Other CHWs, NGO worker, volunteer) I <u>অন্যান্য (Other)</u> প্রশিক্ষণ প্রাপ্ত টিবিএ (প্রশিক্ষণ প্রাপ্ত ধনী, চাউনী, দাই) (TTBA) J প্রশিক্ষণহীন টিবিএ (ধনী, চাউনী, দাই) TBA(Dai/Dhorni/Chauni) K হোমিওপ্যাথ/হোমিওপ্যাথ ঔষধের দোকান (Homeopath/Homeopath drug store) L আয়ুর্বেদিক ডিকিৎসক / আয়ুর্বেদিক ঔষধের দোকান /হেকিম/কবিরাজ (Ayurved/ Ayurvedic drug store /Hekim/Kabiraj) M গ্রাম ডাক্তার (Village doctor) N এলোপ্যাথী ঔষধের দোকান (Allopath drug store) ... O ইমাম/ঝাড় ফুক/ওঝা (Spiritual healer) P পরিবারের অন্যান্য সদস্য/আত্মীয়/ প্রতিবেশী/বন্ধু Family/relative/Neighbor/friend..... Q অন্যান্য Others X (নির্দিষ্ট করুন) জানি না/মনে নাই Don't know/can't remember Z	

No.	Questions And Filters	Coding Categories	Skip
E05	শেষ গর্ভের সময়, গর্ভকালীন মেডিকেল চেক-আপ আপনি কোথায় নিয়েছিলেন/করিয়েছিলেন? [মহিলাকে জিজ্ঞেস করুন] আরও কিছু? [মহিলার নিজে থেকে দেয়া সবগুলো উত্তরই বৃত্তায়িত করুন। উত্তরগুলো পড়ে শুনাবেন না। একাধিক উত্তর হতে পারে।] [মহিলা যেখান থেকে সেবা পেয়েছেন, সেই স্বাস্থ্যকেন্দ্রের নাম লিখুন। যদি একাধিক জায়গা থেকে সেবা নিয়ে থাকেন, তাহলে সবগুলো জায়গারই নাম এবং কোড লিখুন।] Code : নাম Name: _____ Code : নাম Name: _____ Code : নাম Name: _____ Where did you receive antenatal care for this most recent pregnancy? Do not readout the answers. Ask anywhere else? Record all the answers. Record the name of the places where the women sought care.	সরকারী স্বাস্থ্য কেন্দ্র (Govt Health center) মেডিকেল কলেজ হাসপাতাল (Medical College Hospital).....A জেলা/সদর হাসপাতাল (District /Sadar Hospital).....B মা ও শিশু স্বাস্থ্য কেন্দ্র (MCWC).....C উপজেলা স্বাস্থ্য কমপ্লেক্স (UHC).....D ইউনিয়ন স্বাস্থ্য ও পরিবার কল্যাণ কেন্দ্র/সাব সেন্টার/আরডি (FWC/SC/RD).....E কমিউনিটি ক্লিনিক (Community clinic).....F সেটেলাইট ক্লিনিক/ ইপিআই কেন্দ্র (Satellite clinic/EPI centre).....G অন্যান্য সরকারী স্বাস্থ্য কেন্দ্র (Other Govt Health facility) ..H বেসরকারী স্বাস্থ্য কেন্দ্র (Non Govt Health center) এনজিও হাসপাতাল (NGO hospital) I এনজিও স্থায়ী স্বাস্থ্য কেন্দ্র (NGO static health centre) J এনজিও সেটেলাইট ক্লিনিক (NGO satellite clinic) K পুষ্টি কেন্দ্র (NNP centre).....L অন্যান্য বেসরকারী স্বাস্থ্য কেন্দ্র (Other NGO Health facility).....M প্রাইভেট (Private Health sector) হাসপাতাল/ ক্লিনিক (Hospital/clinic).....N স্বাস্থ্য কেন্দ্র /ডিসপেনসারী (Health centre/Dispensary) O এমবিবিএস ডাক্তারের চেম্বার (MBBS doctor's chamber) ...P গ্রাম ডাক্তারের চেম্বার (Village doctor's chamber).....Q প্যারামেডিক/মেডিকেল এসিস্টেন্ট/সাকমোর চেম্বার (Paramedic/MA/SACMO chamber).....R এলোপ্যাথী ঔষধের দোকান (Allopath drug store) S অন্যান্য প্রাইভেট স্বাস্থ্য কেন্দ্র (Other private Health facility)T বাড়ী (Home) নিজ বাড়ী, স্বামী/পুত্র বাড়ী (Own home, husband/father in laws house).....U বাবার বাড়ী (My natal home) V অন্যান্য (Others).....X (নির্দিষ্ট করুন) জানি না/মনে নাই Don't know/can't remember Z	
E06	[Question E04 দেখুন, code A থেকে E এর যে কোন একটি বা একাধিক বৃত্তায়িত থাকলে কোড/কোডগুলো এখানে লিখুন: _____, _____, _____। এবার কোড/কোডগুলো দেখে দেখে মহিলাকে প্রশ্ন করুন:] আপনি এর/এদের ভিতর যার কাছ থেকে প্রথম গর্ভকালীন মেডিকেল চেক-আপ করিয়েছিলেন/নিয়েছিলেন, তখন আপনি কত মাসের গর্ভবতী ছিলেন? How many months pregnant were you when you first received antenatal care from for this pregnancy from the mentioned skilled health care provides (Code A-E of Q E04)?	মাসের গর্ভবতী Month-pregnant (during 1st check-up)..... প্রযোজ্য নয় Not applicable 97 জানা নাই/মনে নাই DK/can't remember 99	

No.	Questions And Filters	Coding Categories	Skip
E07	[Question E04 দেখুন, code A থেকে E এর যে কোন একটি বা একাধিক বৃত্তায়িত থাকলে কোড/কোডগুলো এখানে লিখুন: _____, _____, _____! এবার কোড/কোডগুলো দেখে দেখে মহিলাকে প্রশ্ন করুন গ] আপনি এর/এদের কাছ থেকে মোট কতবার গর্ভকালীন মেডিকেল চেক-আপ করিয়েছিলেন/নিয়েছিলেন? How many times did you receive antenatal care from for this pregnancy from the mentioned skilled health care provides (Code A-E of Q E04)?	বার Number প্রযোজ্য নয় Not applicable 97 জানা নাই/মনে নাই DK/can't remember 99	
E08	শেষ গর্ভের সময়, গর্ভকালীন মেডিকেল চেক-আপের সময় কখনও কি আপনার ----- ? (প্রত্যেকটি বিষয় পড়ে শোনান) ওজন নেয়া হয়েছিল? রক্ত - চাপ পরীক্ষা করা হয়েছিল? প্রস্রাব পরীক্ষা করা হয়েছিল? রক্ত পরীক্ষা করা হয়েছিল? আলট্রাসোনোগ্রাম করা হয়েছিল? আপনার পেটে হাত দিয়ে পরীক্ষা করা হয়েছিল? As part of your antenatal care during this pregnancy, were any of the following done at least once? -Were you weighed? -Was your blood pressure measured? -Did you give a urine sample? -Did you give a blood sample? -Was your ultrasonogram done? -Was your abdominal examination done	হ্যাঁ Yes না No ওজন Weight 1 2 রক্ত - চাপ Blood pressure 1 2 প্রস্রাব পরীক্ষা Urine test 1 2 রক্ত পরীক্ষা Blood test 1 2 আলট্রাসোনোগ্রাম Ultra sonogram 1 2 পেটে হাত দিয়ে পরীক্ষা Abdominal exam .. 1 2	
E09	শেষ গর্ভের সময়, যখন আপনি গর্ভকালীন চেক-আপ করিয়েছিলেন তখন কখনও আপনাকে গর্ভকালীন বিপদচিহ্ন সম্পর্কে কিছু বলা হয়েছে কি? During (any of) your antenatal care visits of your most recent pregnancy, were you told about the signs of pregnancy complications?	হ্যাঁ Yes 1 না No 2 জানি না/ মনে নাই Don't know/Can't remember 9	→ E11 → E11
E10	কোন একটি গর্ভকালীন বিপদচিহ্ন দেখা দিলে আপনাকে কোথায় যেতে হবে সে ব্যাপারে আপনাকে কিছু বলা হয়েছিল কি? Were you told where to go if you had any of these complications?	হ্যাঁ Yes 1 না No 2 জানি না/ মনে নাই Don't know/Can't remember 9	

No.	Questions And Filters	Coding Categories	Skip
E11	কখনও কখনও গর্ভকালীন সময় কিছু বিপদ চিহ্ন দেখা যেতে পারে এবং তখন গর্ভবতীকে তাৎক্ষণিকভাবে স্বাস্থ্যকেন্দ্রে পাঠানো দরকার হয়। গর্ভকালীন সময়ে কি কি বিপদচিহ্ন দেখা দিলে একজন মহিলাকে তাৎক্ষণিকভাবে হাসপাতালে পাঠাতে হয়? [মহিলাকে জিজ্ঞেস করুন] আরও কোন সমস্যা/জটিলতা? [মহিলার নিজে থেকে দেয়া সবগুলো উত্তরই বৃত্তায়িত করুন। উত্তরগুলো পড়ে শুনাবেন না। একাধিক উত্তর হতে পারে।] During pregnancy, women may encounter severe problems or illness and should go or be taken immediately to a health facility. What types of symptoms would cause you to seek care at a health facility right away? Ask: Anything else? Circle all signs mentioned, but do not prompt with any suggestions.	যোনীপথে রক্তস্রাব Vaginal Bleeding A দ্রুত শ্বাস/শ্বাস নিতে কষ্ট হওয়া Fast/difficult breathing B জ্বর Fever C তলপেটে তীব্র ব্যথা Severe abdominal pain D মাথা ব্যথা চোখে ঝাপসা দেখা Headache/ Blurred Vision E খিচুনি/ফিট Convulsions/fits F দুর্গন্ধযুক্ত স্রাব Foul smelling vaginal discharge G গর্ভের বাচ্চার নড়াচড়া কমে যাওয়া/বন্ধ হওয়া Fetal movement reduced/absent H যোনীপথ দিয়ে ঘোলাটে/সবুজাভ কিছু বের হওয়া Leaking brownish/greenish fluid from the vagina I অন্যান্য Others X নির্দিষ্ট করুন জানা নাই/মনে নাই DK/can't remember Z	
E12	শেষ গর্ভের সময়, আপনি আয়রন ট্যাবলেট বা আয়রন সিরাপ পেয়েছিলেন/কিনেছিলেন কি? [প্রয়োজনে মহিলাকে আয়রন ট্যাবলেট বা আয়রন সিরাপের বোতল দেখান] During your last pregnancy, were you given or did you buy any iron tablets/syrup? [If necessary then show the tablet or bottle of syrup and then ask]	হ্যাঁ Yes 1 না No 2 জানি না/ মনে নাই Don't know/Can't remember 9	→ E14 → E14
E13	শেষ গর্ভের সময়, আপনি মোট কত দিন আয়রন ট্যাবলেট/সিরাপ খেয়েছিলেন? সংখ্যায় বলতে না পারলে, কাছাকাছি দিনের সংখ্যা লিখুন During the whole pregnancy, how many days did you take the tablet/ syrup? If the answer is not numeric, probe for approximate number of days.	দিন Days	
E14	শেষ গর্ভের সময়, সুসমা কার্যক্রমের কোন মাদারস্ গ্রুপ এর কোন মিটিং এ অংশগ্রহণ করেছিলেন? During your last pregnancy, did you attend any meeting of mothers group of SUSOMA project?	হ্যাঁ Yes 1 না No 2 জানি না/ মনে নাই Don't know/Can't remember 9	
E14a	শেষ গর্ভের সময় বাচ্চা হওয়া এবং জরুরী অবস্থা বিষয়ক পরিকল্পনার জন্য কোন স্বাস্থ্যকর্মীর সাথে আলোচনা/পরামর্শ করেছিলেন কি? Did you discuss a plan for birth and emergencies with a health care worker?	হ্যাঁ Yes 1 না No 2 জানি না/ মনে নাই Don't know/Can't remember 9	→ E14c → E14c

No.	Questions And Filters	Coding Categories	skip
E14b	কার সাথে আলাপ/পরামর্শ করেছিলেন? With whom?	<u>দক্ষ/প্রশিক্ষণ প্রাপ্ত স্বাস্থ্য কর্মী (Medically trained)</u> পাশ করা ডাক্তার (MBBS doctor).....A নার্স/ধাত্রী (Nurse/midwife) B প্যারামেডিক/মেডিকেল এসিস্টেন্ট/সাকমো (Paramedic/MA/SACMO).....C পরিবার কল্যাণ পরিদর্শক (FWV).....D সি.এস.বি.এ (CSBA) E <u>অন্যান্য স্বাস্থ্য কর্মী (Other health worker)</u> স্বাস্থ্য সহকারী/ পরিবার কল্যাণ সহকারী (HA /FWA) F পুষ্টি কর্মী (CNP).....G সুসমা কার্যক্রমের স্বেচ্ছাসেবী (Volunteer of SUSOMA prj) H অন্যান্য কমিউনিটি স্বাস্থ্য কর্মী - এনজিও কর্মী, স্বেচ্ছাসেবী (Other CHWs, NGO worker, volunteer) I <u>অন্যান্য (Other)</u> প্রশিক্ষণ প্রাপ্ত টিবিএ (প্রশিক্ষণ প্রাপ্ত ধনী, চাউনী, দাই) (TTBA) J প্রশিক্ষণহীন টিবিএ (ধনী, চাউনী, দাই) TBA(Dai/Dhorni/Chauni) K হোমিওপ্যাথ/হোমিওপ্যাথ ঔষধের দোকান (Homeopath/Homeopath drug store) L আয়ুর্বেদিক চিকিৎসক / আয়ুর্বেদিক ঔষধের দোকান /হেকিম/কবিরাজ (Ayurved/ Ayurvedic drug store /Hekim/Kabiraj) M গ্রাম ডাক্তার (Village doctor) N এলোপ্যাথী ঔষধের দোকান (Allopath drug store) O ইমাম/ঝাড় ফুক/ওঝা (Spiritual healer) P পরিবারের অন্যান্য সদস্য/আত্মীয়/ প্রতিবেশী/বন্ধু Family/relative/Neighbor/friend.....Q অন্যান্য Others X (নির্দিষ্ট করুন) কেউ আসেনি None came Y জানি না/মনে নাই Don't know/can't remember Z	
E14c	শেষ গর্ভের সময় বাচ্চা হওয়া এবং জরুরী অবস্থা বিষয়ক পরিকল্পনার জন্য আপনার স্বামীর সাথে আলাপ/পরামর্শ করেছিলেন কি? Did you discuss a plan for birth and emergencies with your husband?	হ্যাঁ Yes 1 না No 2 জানি না/ মনে নাই Don't know/Can't remember 9	
E15	ডেলিভারীর সময় ব্যবহারের জন্য শেষবার গর্ভবতী থাকা অবস্থাতেই ডেলিভারী কিট ক্রয় বা সংগ্রহ করে রেখেছিলেন কি? Did you buy / collect delivery kit for using during delivery?	হ্যাঁ Yes 1 না No 2 জানি না/ মনে নাই Don't know/Can't remember 9	
E16	ডেলিভারীর সময় যদি কোন অসুবিধা হয়, তাহলে যেন তাড়াতাড়ি হাসপাতাল বা স্বাস্থ্যকেন্দ্রে যাওয়া যায়, সে জন্য আগে থেকেই কি যানবাহনের ব্যবস্থা করে রেখেছিলেন? Did you arrange emergency transport before delivery in case complication during delivery?	হ্যাঁ Yes 1 না No 2 জানি না/ মনে নাই Don't know/Can't remember 9	
E17	ডেলিভারীর সময়টায় টাকা পয়সা লাগতে পারে, তাই আগে থেকেই টাকা পয়সা জমা করে রেখেছিলেন কি? Did you save money for emergency need during delivery?	হ্যাঁ Yes 1 না No 2 জানি না/ মনে নাই Don't know/Can't remember 9	
E17a	ডেলিভারীর সময় যদি রক্তের প্রয়োজন হয়, সে জন্য আগে থেকেই কি একজন রক্তদাতা নির্বাচন করে রেখেছিলেন? Did you identify a potential blood donor before delivery ?	হ্যাঁ Yes 1 না No 2 জানি না/ মনে নাই Don't know/Can't remember 9	→ E18 → E18

No.	Questions And Filters	Coding Categories	Skip
E17b	কাকে ঠিক করে রেখেছিলেন? Whom did you identify?	একই খানার লোকজন Household Member..... 1 রক্ত সম্পর্কের আত্মীয় Blood relative 2 প্রতিবেশী Neighbour..... 3 অপরিচিত ব্যক্তি Unknown person..... 4 অন্যান্য 7 (নির্দিষ্ট করুন) জানি না/ মনে নাই Don't know/Can't remember 9	
E18	ডেলিভারীর পর পর শিশুটিকে মুড়ানো মোছানোর জন্য কমপক্ষে দুই টুকরা কাপড় কি জোপাড়া করে রেখেছিলেন? Did you arrange two pieces of cloth for drying and wrapping the baby?	হ্যাঁ Yes 1 না No 2 জানি না/ মনে নাই Don't know/Can't remember 9	
E19	শেষ যখন আপনি গর্ভবতী ছিলেন, তখন (গর্ভবতী থাকাকালীন সময়ে) আপনার এই ডেলিভারীটি কোথায় হবে, সেটি কি ঠিক করে রেখেছিলেন? [উত্তর 'হ্যাঁ' হলে, জানতে চান,] কোথায় ডেলিভারী/শিশুটি হবে বলে ঠিক করে রেখেছিলেন? Did you select the place during pregnancy where your child would be delivered? If yes, ask which place did you select?	বাসায় At Home 1 স্বাস্থ্যকেন্দ্রে Health Center 2 আগে থেকে ঠিক করে রাখি নাই Didn't have any plan . 9	
E20	শেষ যখন আপনি গর্ভবতী ছিলেন, তখন (গর্ভবতী থাকাকালীন সময়ে) আপনার ডেলিভারীতে সাহায্য করার জন্য বা ডেলিভারীটি করানোর জন্য বা ডেলিভারীর সময় উপস্থিত থাকার জন্য পছন্দের কাউকে আপনারা ঠিক করে রেখেছিলেন কি? During your most recent pregnancy, did you or your family select someone or a companion of choice to be present for birth/ delivery?	হ্যাঁ Yes 1 না No 2 জানি না/ মনে নাই Don't know/Can't remember 9	→ E21 → E21
E20a	কাকে ঠিক করে রেখেছিলেন? Whom did you select?	<u>দক্ষ/প্রশিক্ষণ প্রাপ্ত স্বাস্থ্য কর্মী (Medically trained)</u> পাশ করা ডাক্তার (MBBS doctor).....A নার্স/দাত্রী (Nurse/midwife) B প্যারামেডিক/মেডিকেল এসিস্টেন্ট/সাকমো (Paramedic/MA/SACMO).....C পরিবার কল্যাণ পরিদর্শক (FWV).....D সি,এস,বি,এ (CSBA) E <u>অন্যান্য স্বাস্থ্য কর্মী (Other health worker)</u> স্বাস্থ্য সহকারী/ পরিবার কল্যাণ সহকারী (HA /FWA) F পুষ্টি কর্মী (CNP).....G সুসমা কার্যক্রমের স্বেচ্ছাসেবী (Volunteer of SUSOMA prj) ...H অন্যান্য কমিউনিটি স্বাস্থ্য কর্মী - এনজিও কর্মী, স্বেচ্ছাসেবী (Other CHWs, NGO worker, volunteer) I <u>অন্যান্য (Other)</u> প্রশিক্ষণ প্রাপ্ত টিবিএ (প্রশিক্ষণ প্রাপ্ত ধনী, চাউনী, দাই) (TTBA) J প্রশিক্ষণহীন টিবিএ (ধনী, চাউনী, দাই) TBA(Dai/Dhorni/Chauni) K হোমিওপ্যাথ/হোমিওপ্যাথ ঔষধের দোকান (Homeopath/Homeopath drug store) L আয়ুর্বেদিক চিকিৎসক / আয়ুর্বেদিক ঔষধের দোকান /হেকিম/কবিরাজ (Ayurved/ Ayurvedic drug store /Hekim/Kabiraj) M গ্রাম ডাক্তার (Village doctor) N এলোপ্যাথী ঔষধের দোকান (Allopath drug store) O ইমাম/ঝাড় ফুক/ওঝা (Spiritual healer) P পরিবারের অন্যান্য সদস্য/আত্মীয়/ প্রতিবেশী/বন্ধু Family/relative/Neighbor/friend.....Q অন্যান্য Others X (নির্দিষ্ট করুন) জানি না/মনে নাই Don't know/can't remember Z	

No.	Questions And Filters	Coding Categories	Skip
E21	শেষ গর্ভের সময়, আপনাকে দেখতে বা আপনার স্বাস্থ্যের ব্যাপারে উপদেশ দিতে আপনার বাসায় কে এসেছিলেন? [মহিলাকে জিজ্ঞেস করুন] : আরও কেউ? মহিলার নিজে থেকে দেয়া সবগুলো উত্তরই বৃত্তায়িত করুন। উত্তরগুলো পড়ে শুনাবেন না। একাধিক উত্তর হতে পারে। Who had visited you to discuss issues regarding your health during your most recent pregnancy? [Do not read out the answers. Ask: Anything else? Circle all the answers]	দক্ষ/প্রশিক্ষণ প্রাপ্ত স্বাস্থ্য কর্মী (Medically trained) পাশ করা ডাক্তার (MBBS doctor).....A নার্স/ধাত্রী (Nurse/midwife) B প্যারামেডিক/মেডিকেল এসিসটেন্ট/সাকমো (Paramedic/MA/SACMO).....C পরিবার কল্যাণ পরিদর্শক (FWV).....D সি,এস,বি,এ (CSBA).....E অন্যান্য স্বাস্থ্য কর্মী (Other health worker) স্বাস্থ্য সহকারী/ পরিবার কল্যাণ সহকারী (HA /FWA) F পুষ্টি কর্মী (CNP).....G সুসমা কার্যক্রমের স্বেচ্ছাসেবী (Volunteer of SUSOMA prj) ...H অন্যান্য কমিউনিটি স্বাস্থ্য কর্মী - এনজিও কর্মী, স্বেচ্ছাসেবী (Other CHWs, NGO worker, volunteer) I অন্যান্য (Other) প্রশিক্ষণ প্রাপ্ত টিবিএ (প্রশিক্ষণ প্রাপ্ত ধনী, চাউনী, দাই) (TTBA) J প্রশিক্ষণহীন টিবিএ (ধনী, চাউনী, দাই) TBA(Dai/Dhorni/Chauni) K হোমিওপ্যাথ/হোমিওপ্যাথ ঔষধের দোকান (Homeopath/Homeopath drug store) L আয়ুর্বেদিক চিকিৎসক / আয়ুর্বেদিক ঔষধের দোকান /হেকিম/কবিরাজ (Ayurved/ Ayurvedic drug store /Hekim/Kabiraj) M গ্রাম ডাক্তার (Village doctor) N এলোপ্যাথী ঔষধের দোকান (Allopath drug store) O ইমাম/ঝাড় ফুক/ওঝা (Spiritual healer) P পরিবারের অন্যান্য সদস্য/আত্মীয়/ প্রতিবেশী/বন্ধু Family/relative/Neighbor/friend.....Q অন্যান্য Others X (নির্দিষ্ট করুন) কেউ আসেনি None came Y জানি না/মনে নাই Don't know/can't remember Z	→ E23a → E23a
E22	যে আপনার বাসায় এসেছিলেন আপনাকে দেখতে, সে জন্মের পর নবজাতকের যত্ন কিভাবে নিতে হবে সে সম্পর্কে বুঝানোর সময় কি কিছু দেখিয়েছিলেন? দেখিয়ে থাকলে, কি কি দেখিয়েছিল? [মহিলাকে জিজ্ঞেস করুন] : আরও কিছু? মহিলার নিজে থেকে দেয়া সবগুলো উত্তরই বৃত্তায়িত করুন। উত্তরগুলো পড়ে শুনাবেন না। একাধিক উত্তর হতে পারে। Did the person/health worker demonstrate immediate newborn care by showing you things? What did the health worker show you while talking about immediate newborn care? [Do not read out the answers. Ask: Anything else? Circle all the answers]	পুতুল Doll A ছবিওয়ালা কার্ড Card with pictures B কাপড় Cloth C অন্যান্য Others D নির্দিষ্ট করুন (Specify) সে বুঝানোর জন্য কিছু দেখান নি Didn't show me anything Y মনে নাই Don't know/cant remember Z	

No.	Questions And Filters	Coding Categories	Skip
E23	যে আপনার বাসায় এসেছিলেন আপনাকে দেখতে, সে কি আপনাকে কিছু দিয়েছিলেন? উনি আপনাকে কি কি জিনিস দিয়েছিলেন? [মহিলাকে জিজ্ঞেস করুন] : আরও কিছু? মহিলার নিজে থেকে দেয়া সবগুলো উত্তরই বৃত্তায়িত করুন। উত্তরগুলো পড়ে শুনাবেন না। একাধিক উত্তর হতে পারে। Did the health worker provide you anything during the visit? [Do not read out the answers. Ask: Anything else? Circle all the answers]	রেফারেল স্লিপ Referral Slip A ডেলিভারী সম্ভাব্য তারিখের কার্ড Delivery notification card B ডেলিভারী কিট Clean delivery kit C আয়রন ট্যাবলেট/সিরাপ Iron Tablet/Syrup D ভিজিএফ কার্ড (ভাউচার) VGF Card (Voucher) E অন্যান্য Others X (নির্দিষ্ট করুন) কিছুই দেয় নি Nothing Y মনে নাই Don't know/cant remember Z	
E23a	মাতৃ স্বাস্থ্যসেবা প্রদানে প্রশিক্ষণহীন দাই এর নতুন ভূমিকা সম্পর্কে আপনি অবগত আছেন কি? Are you aware of the new role of TBAs regarding MNH services?	হ্যাঁ Yes 1 না No 2 জানি না/ মনে নাই Don't know/Can't remember 9	
E24	শেষ গর্ভের সময়, নবজাতকের ধনুষ্টংকার অর্থাৎ জন্মের পর নবজাতকের খিচুনি প্রতিরোধের জন্য আপনি আপনার বাহুতে কোন ইনজেকশন দিয়েছিলেন কি? During your most recent pregnancy did you receive an injection in the arm to prevent the baby from getting tetanus, that is convulsions after birth?	হ্যাঁ (Yes)..... 1 না (No) 2 জানা নাই/মনে নাই DK/can't remember..... 9	→ E26 → E26
E25	শেষ গর্ভের সময়, কতবার আপনি এরকম ইনজেকশন নিয়েছিলেন? During your most recent pregnancy, how many times did you receive such an injection?	একটি One..... 1 দুইটি Two..... 2 তিন বা তদুর্ধ্ব Three Or More 3 জানা নাই/মনে নাই DK/can't remember..... 9	
E26	শেষ গর্ভের আগে আপনি কখনও কি TT ইনজেকশন নিয়েছিলেন যেমন আগের গর্ভের সময়ে অথবা দুই গর্ভের মধ্যবর্তী সময়ে অথবা জীবনের যে কোন সময়ে? Did you receive any tetanus toxoid injection at any time before the most recent pregnancy, including previous pregnancy or between pregnancies?	হ্যাঁ (Yes)..... 1 না (No) 2 জানা নাই/মনে নাই DK/can't remember..... 9	→ E28 → E28
E27	শেষ গর্ভের আগে মোট কতবার আপনি এরকম TT ইনজেকশন নিয়েছিলেন? Before the recent pregnancy, how many times did you receive a tetanus injection?	একটি One..... 1 দুইটি Two..... 2 তিন বা তদুর্ধ্ব Three Or More 3 জানা নাই/মনে নাই DK/can't remember..... 9	
E28	আপনার আত্মীয়দের মধ্য থেকে, শেষ গর্ভের সময় ডেলিভারীতে কেউ সাহায্য করেছিল কি? Was there anyone of your family who assisted the delivery during most recent pregnancy?	হ্যাঁ Yes..... 1 না No 2 জানি না/ মনে নাই Don't know/Can't remember 9	→ E30 → E30
E29	আপনার আত্মীয়দের মধ্য থেকে কে ডেলিভারীতে সাহায্য করেছিল? [মহিলাকে জিজ্ঞেস করেন,] আরও কেউ? [মহিলার নিজে থেকে দেয়া সবগুলো উত্তরই বৃত্তায়িত করুন। উত্তরগুলো পড়ে শুনাবেন না। একাধিক উত্তর হতে পারে।] Who had assisted the delivery from among your family members? [Don't prompt].	মা Mother A স্বাভুদী Mother-in-law B বোন/ননদ/জা Sister C চাচী/মামী/খালা/ফুফু Aunt D দাদী/নানী Grandmother E ভাগনি/ভাতিজী Niece F স্বামী Husband G অন্য কোন মহিলা আত্মীয় other female relative X অন্য কোন পুরুষ আত্মীয় other male relative Y	
E30	আপনার আত্মীয় নন এমন কেউ ডেলিভারীতে সাহায্য করেছিল কি? Was there anyone from outside your family who assisted the delivery during most recent pregnancy?	হ্যাঁ Yes..... 1 না No 2 জানি না/ মনে নাই Don't know/Can't remember 9	→ E32 → E32

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E31	শেষ গর্ভের সময়, কে ডেলিভারীতে সাহায্য করেছিল? [মহিলাকে জিজ্ঞেস করেন,] আরও কেউ? [মহিলার নিজে থেকে দেয়া সবগুলো উত্তরই বৃত্তায়িত করুন। উত্তরগুলো পড়ে শুনাবেন না। একাধিক উত্তর হতে পারে।] যদি উত্তরদাত্রী বলেন যে, কেউ ডেলিভারীতে সহায়তা করেননি তাহলে জিজ্ঞাসা করুন, প্রাপ্ত বয়স্ক কেউ ডেলিভারীর সময়ে উপস্থিত ছিল কিনা? Who assisted with the delivery during last pregnancy? Anyone else? PROBE FOR THE TYPE(S) OF PERSON(S) AND RECORD ALL MENTIONED. IF RESPONDENT SAYS NO ONE ASSISTED, PROBE TO DETERMINE WHETHER ANY ADULTS WERE PRESENT AT THE DELIVERY.	দক্ষ/প্রশিক্ষণ প্রাপ্ত স্বাস্থ্য কর্মী (Medically trained) পাশ করা ডাক্তার (MBBS doctor)..... A নার্স/ধাত্রী (Nurse/midwife) B প্যারামেডিক/মেডিকেল এসিসটেন্ট/সাকমো (Paramedic/MA/SACMO)..... C পরিবার কল্যাণ পরিদর্শক (FWV)..... D সি,এস,বি,এ (CSBA) E <u>অন্যান্য স্বাস্থ্য কর্মী (Other health worker)</u> স্বাস্থ্য সহকারী/ পরিবার কল্যাণ সহকারী (HA /FWA) . F পুষ্টি কর্মী (CNP)..... G সুসমা কার্যক্রমের স্বেচ্ছাসেবী (Volunteer of SUSOMA prj)H অন্যান্য কমিউনিটি স্বাস্থ্য কর্মী - এনজিও কর্মী, স্বেচ্ছাসেবী (Other CHWs, NGO worker, volunteer) I <u>অন্যান্য (Other)</u> প্রশিক্ষণ প্রাপ্ত টিবিএ (প্রশিক্ষণ প্রাপ্ত ধনী, চাউনী, দাই) (TTBA) J প্রশিক্ষণহীন টিবিএ (ধনী, চাউনী, দাই) TBA(Dai/Dhorni/Chauni) K হোমিওপ্যাথ/হোমিওপ্যাথ ঔষধের দোকান (Homeopath/Homeopath drug store) L আয়ুর্বেদিক চিকিৎসক / আয়ুর্বেদিক ঔষধের দোকান /হেকিম/কবিরাজ (Ayurved/ Ayurvedic drug store /Hekim/Kabiraj) M গ্রাম ডাক্তার (Village doctor) N এলোপ্যাথী ঔষধের দোকান (Allopath drug store) ... O ইমাম/ঝাড় ফুক/ওঝা (Spiritual healer) P পরিবারের অন্যান্য সদস্য/আত্মীয়/ প্রতিবেশী/বন্ধু Family/relative/Neighbor/friend..... Q অন্যান্য Others X (নির্দিষ্ট করুন) জানি না/মনে নাই Don't know/can't remember Z	

No.	Questions And Filters	Coding Categories	Skip
E32	শেষ গর্ভের সময়, ডেলিভারি কোথায় হয়েছিল? (উত্তরগুলো পড়ে শুনাবেন না) [কেবলমাত্র একটি উত্তর হবে] Where did the most recent delivery take place? ONLY ONE ANSWER ALLOWED	<u>সরকারী স্বাস্থ্য কেন্দ্র (Govt Health center)</u> মেডিকেল কলেজ হাসপাতাল (Medical College Hospital)....01 জেলা/সদর হাসপাতাল (District/Sadar Hospital).....02 মা ও শিশু স্বাস্থ্য কেন্দ্র (MCWC).....03 উপজেলা স্বাস্থ্য কমপ্লেক্স (UHC).....04 ইউনিয়ন স্বাস্থ্য ও পরিবার কল্যাণ কেন্দ্র/সাব সেন্টার/আরডি (FWC/SC/RD) 05 কমিউনিটি ক্লিনিক (Community clinic) 06 সেটেলাইট ক্লিনিক/ ইপিআই কেন্দ্র (Satellite clinic/EPI centre).....07 অন্যান্য সরকারী স্বাস্থ্য কেন্দ্র (Other Govt Health facility) ..08 <u>বেসরকারী স্বাস্থ্য কেন্দ্র (Non Govt Health center)</u> এনজিও হাসপাতাল (NGO hospital) 09 এনজিও স্থায়ী স্বাস্থ্য কেন্দ্র (NGO static health centre) 10 এনজিও সেটেলাইট ক্লিনিক (NGO satellite clinic).....11 পুষ্টি কেন্দ্র (NNP centre).....12 অন্যান্য বেসরকারী স্বাস্থ্য কেন্দ্র (Other NGO Health facility).....13 <u>প্রাইভেট (Private Health sector)</u> হাসপাতাল/ ক্লিনিক (Hospital/clinic).....14 স্বাস্থ্য কেন্দ্র /ডিসপেনসারী (Health centre/Dispensary) 15 এমবিবিএস ডাক্তারের চেম্বার (MBBS doctor's chamber) ...16 গ্রাম ডাক্তারের চেম্বার (Village doctor's chamber).....17 প্যারামেডিক/মেডিকেল এসিস্টেন্ট/সাকমোর চেম্বার (Paramedic/ MA/SACMO chamber) 18 এলোপ্যাথী ঔষধের দোকান (Allopath drug store) 19 অন্যান্য প্রাইভেট স্বাস্থ্য কেন্দ্র (Other private Health facility)20 <u>বাড়ী (Home)</u> নিজ বাড়ী, স্বামী/স্বত্ব ভাড়া বাড়ী (Own home, husband/father in laws house).....21 বাবার বাড়ী (My natal home) 22 অন্যান্য (Others 97 (নির্দিষ্ট করুন) জানি না/মনে নাই Don't know/can't remember 99	
E32a	শেষ গর্ভের ডেলিভারীর সময় নিরাপদ ডেলিভারী কিট ব্যবহার করা হয়েছিল কি? Was a clean delivery kit used during delivery of most recent pregnancy?	হ্যাঁ (Yes).....1 না (No) 2 জানা নাই/মনে নাই DK/can't remember.....9	

No.	Questions And Filters	Coding Categories	Skip
E33	কখনও কখনও ডেলিভারীর সময় কিছু বিপদ চিহ্ন দেখা যেতে পারে এবং তখন প্রসবকারী মাকে তাৎক্ষণিকভাবে স্বাস্থ্যকেন্দ্রে পাঠানো দরকার হয়। ডেলিভারীর সময়ে কি কি বিপদচিহ্ন দেখা দিলে একজন মহিলাকে তাৎক্ষণিকভাবে হাসপাতালে পাঠাতে হয়? [মহিলাকে জিজ্ঞেস করুন] আরও কোন সমস্যা/জটিলতা? [মহিলার নিজে থেকে দেয়া সবগুলো উত্তরই বৃত্তায়িত করুন। উত্তরগুলো পড়ে তनावেন না। একাধিক উত্তর হতে পারে।] During delivery, once contraction started women may encounter severe problem or illness and should go or be taken immediately to a health facility. While having contractions or delivering a baby, what types of symptoms would cause you to seek immediate care at a health facility right away? Circle all signs mentioned, but do not prompt with any suggestions.	খিঁচুনি Convulsion..... A তীব্র জ্বর High Fever..... B অতিরিক্ত রক্তশ্রাব Excessive Vaginal Bleeding..... C দ্রুত শ্বাস/শ্বাস নিতে কষ্ট হওয়া Fast/difficult breathing দুর্গন্ধযুক্ত শ্রাব A bad smelling vaginal discharge..... D ফুল না পরা Retained Placenta..... E তীব্র মাথা ব্যথা/চোখে ঝাপসা দেখা Severe Headache/blurred vision F দীর্ঘ / প্রলম্বিত প্রসব (12 ঘন্টার বেশী) ব্যথা থাকলে prolong labor 12 hr..... G শিশুর হাত/পা আগে বের হয়ে এলে Hand or Feet came first..... H অন্যান্য Others..... X (নির্দিষ্ট করুন) জানা নাই/মনে নাই DK/can't remember..... Z	
E34	আপনার শেষ গর্ভের ডেলিভারীর পর, ফুল পড়ার আগে, অতিরিক্ত রক্তক্ষরণ না হওয়ার জন্য আপনি কি কোন ইন্জেকশন পেয়েছিলেন? Immediately after delivery of your recent pregnancy, before the placenta was delivered, did you receive an injection to prevent you from bleeding too much?	হ্যাঁ (Yes)..... 1 না (No) 2 জানা নাই/মনে নাই DK/can't remember..... 9	
E35	ডেলিভারীতে সাহায্যকারী ব্যক্তি ফুল বের হওয়ার জন্য আপনার পেটে চাপ দিয়ে নাড়ীতে টান দিয়েছিলেন কি? Did the birth attendant hold your stomach and pull on the cord to help the placenta come out?	হ্যাঁ (Yes)..... 1 না (No) 2 জানা নাই/মনে নাই DK/can't remember..... 9	
E36	আপনার শেষ গর্ভের ডেলিভারীর পর, জড়ায় সংকোচনের মাধ্যমে রক্তক্ষরণ কমানোর জন্য, ফুল পরার পরপরই কেউ আপনার পেটে মালিশ করেছিল কি? During your recent pregnancy, immediately after the placenta was delivered, did someone massage your uterus to make it contract strongly and to prevent you from bleeding too much?	হ্যাঁ (Yes)..... 1 না (No) 2 জানা নাই/মনে নাই DK/can't remember..... 9	

No.	Questions And Filters	Coding Categories	Skip
E37	ডেলিভারীর পর একজন মায়ের কখনও কখনও এমন কিছু জটিলতা বা বিপদচিহ্ন দেখা যেতে পারে যে তখন তাকে অবিলম্বে চিকিৎসার জন্য হাসপাতালে/ ডাক্তারের কাছে নিয়ে যেতে হয়। ডেলিভারীর পর কি ধরনের লক্ষণ/ জটিলতা বা বিপদচিহ্ন দেখলে আপনি একজন মাকে চিকিৎসার জন্য হাসপাতালে বা স্বাস্থ্যকর্মীর কাছে নিয়ে যাবেন? [মহিলাকে জিজ্ঞেস করুন/ আরও কোন সমস্যা/জটিলতা? [মহিলার নিজে থেকে দেয়া সবগুলো উত্তরই বৃত্তায়িত করুন। উত্তরগুলো পড়ে শুনাবেন না। একাধিক উত্তর হতে পারে।] Sometimes mothers after delivery may have severe illness and should be taken immediately to a health facility. What type of symptoms would cause you to go to a health facility right away? Ask : Anything else? CIRCLE ALL SIGNS MENTIONED, BUT DO NOT PROMPT	যোনীপথে অতিরিক্ত রক্তস্রাব Excessive vaginal bleeding A শ্বাস নিতে কষ্ট/ দ্রুত শ্বাস Difficult breathing/ fast breathing B অতিরিক্ত জ্বর হলে High fever C পেটে তীব্র ব্যথা Severe abdominal pain..... D তীব্র মাথা ব্যথা/ঝাপসা দেখা Severe headache/blurred vision E খিচুনি / অজ্ঞান Convulsion/loss of consciousness.... F যোনীপথে দুর্গন্ধযুক্ত স্রাব Foul smelling vaginal discharge..... G পায়ের পিছনে ব্যথা Pain in calf H আচরণগত পরিবর্তন অর্থাৎ যেখানে মা নিজেকে বা বাচ্চাকে আঘাত করতে পারে Behavior that indicates she may hurt herself or the baby..... I অন্য কোন সমস্যা others X নির্দিষ্ট করুন জানা নাই/মনে নাই DK/can't remember..... Z	
E38	আপনার শেষ গর্ভের গর্ভকালীন সময়ে, ডেলিভারীর সময় বা ডেলিভারীর পর আপনার কি _____ হয়েছিল? (সমস্যা) প্রত্যেকটি সমস্যা পড়ে শুনান: - তীব্র মাথা ব্যথাসহ চোখে ঝাপসা দেখা - খিচুনি/একলামশিয়া/অজ্ঞান হওয়া - উচ্চ রক্তচাপ - অতিরিক্ত রক্তস্রাব - পানি ভাঙ্গার ৬ ঘন্টা পরও প্রসব না হওয়া - বাচ্চার মাথা ছাড়া শরীরের অন্য অংশ আগে আসা ১২ ঘন্টার অধিক প্রসব ব্যথা - ফুল না পড়া - দুর্গন্ধযুক্ত স্রাবের সাথে তীব্র জ্বর - হাতে/পায়ে/শরীরে পানি আসা - উপরে উল্লিখিত সমস্যাগুলোর কোনটাই হয়নি Did you have any of the following problems during your recent pregnancy, delivery or period after delivery? Read aloud the responses: - Blurred vision with severe headache - Convulsion/eclampsia/unconscious - High blood pressure - Excessive vaginal bleeding - Not delivered even after 6 hours of membrane rupture - Delivery of parts of the baby other than head - More than 12 hours of labor pain - Retained placenta - Foul smelling discharge with fever - Edema of hand/feet/body - None of the above mentined Problems	P= গর্ভাবস্থা (Pregnancy), D= ডেলিভারীর সময় (Delivery), AD= ডেলিভারীর পর (After delivery) সমস্যা P D AD তীব্র মাথা ব্যথাসহ চোখে ঝাপসা দেখা Blurred vision with severe headache A1.....A2.....A3 খিচুনি/একলামশিয়া/অজ্ঞান হওয়া Convulsion/eclampsia/unconscious B1.....B2.....B3 উচ্চ রক্তচাপ High blood pressure C1 C2 C3 অতিরিক্ত রক্তস্রাব Excessive vaginal bleeding D1 D2 D3 পানি ভাঙ্গার ৬ ঘন্টা পরও প্রসব না হওয়া Not delivered even after 6 hours of membrane rupture E1 -- -- বাচ্চার মাথা ছাড়া শরীরের অন্য অংশ আগে আসা Delivery of parts of the baby other than head.....--.....F2.....-- 12 ঘন্টার অধিক প্রসব ব্যথা More than 12 hours of labor pain.....--.....G2.....-- ফুল না পড়া Retained placenta -- H2 H3 দুর্গন্ধযুক্ত স্রাবের সাথে তীব্র জ্বর Foul smelling discharge with fever-- -- I3 হাতে/পায়ে/শরীরে পানি আসা Edema of hand/feet/body J1 J2 J3 উপরে উল্লিখিত সমস্যাগুলোর কোনটাই হয়নি None of the above mentined Problems Y1 Y2 Y3	→ E43a
E39	এই সমস্যা/জটিলতার জন্য আপনি কি কাউকে দেখিয়েছিলেন বা কারও সাহায্য নিয়েছিলেন? Did you seek any sort of treatment for this problem/complication?	হ্যাঁ Yes 1 না No..... 2 জানি না/ মনে নাই Don't know/Can't remember 9	→ E42 → E42

No.	Questions And Filters	Coding Categories	Skip
E40	এই সমস্যা/জটিলতার জন্য আপনি কাকে দেখিয়েছিলেন বা কার সাহায্য নিয়েছিলেন? [মহিলাকে জিজ্ঞেস করুন] আরও কেউ? [মহিলার নিজে থেকে দেয়া সবগুলো উত্তরই বৃত্তায়িত করুন। উত্তরগুলো পড়ে শুনাবেন না। একাধিক উত্তর হতে পারে।] From whom did you seek treatment for this problem/complication? Do not read out the answers. Ask: Anything else? Circle all the answers.	দক্ষ/প্রশিক্ষণ প্রাপ্ত স্বাস্থ্য কর্মী (Medically trained) পাশ করা ডাক্তার (MBBS doctor)..... A নার্স/ধাত্রী (Nurse/midwife) B প্যারামেডিক/মেডিকেল এসিসটেন্ট/সাকমো (Paramedic/MA/SACMO)..... C পরিবার কল্যাণ পরিদর্শক (FWV)..... D সি,এস,বি,এ (CSBA) E অন্যান্য স্বাস্থ্য কর্মী (Other health worker) স্বাস্থ্য সহকারী/ পরিবার কল্যাণ সহকারী (HA /FWA) . F গুটি কর্মী (CNP)..... G সুসমা কার্যক্রমের স্বেচ্ছাসেবী (Volunteer of SUSOMA pg)H অন্যান্য কমিউনিটি স্বাস্থ্য কর্মী - এনজিও কর্মী, স্বেচ্ছাসেবী (Other CHWs, NGO worker, volunteer) I অন্যান্য (Other) প্রশিক্ষণ প্রাপ্ত টিবিএ (প্রশিক্ষণ প্রাপ্ত ধনী, চাউনী, দাই) (TTBA) J প্রশিক্ষণহীন টিবিএ (ধনী, চাউনী, দাই) TBA(Dai/Dhorni/Chauni) K হোমিওপ্যাথ/হোমিওপ্যাথ ঔষধের দোকান (Homeopath/Homeopath drug store) L আয়ুর্বেদিক চিকিৎসক / আয়ুর্বেদিক ঔষধের দোকান /হেকিম/কবিরাজ (Ayurved/ Ayurvedic drug store /Hekim/Kabiraj) M গ্রাম ডাক্তার (Village doctor) N এলোপ্যাথী ঔষধের দোকান (Allopath drug store) ... O ইমাম/ঝাড় ফুক/ওঝা (Spiritual healer) P পরিবারের অন্যান্য সদস্য/আত্মীয়/ প্রতিবেশী/বন্ধু Family/relative/Neighbor/friend Q অন্যান্য Others X (নির্দিষ্ট করুন) জানি না/মনে নাই Don't know/can't remember Z	

No.	Questions And Filters	Coding Categories	Skip
E41	এই সমস্যা/জটিলতার জন্য আপনি কোথায় দেখিয়েছিলেন বা কোথায় সেবা পেয়েছিলেন? [মহিলাকে জিজ্ঞেস করুন] আরও কোথাও? [মহিলার নিজে থেকে দেয়া সবগুলো উত্তরই বৃত্তায়িত করুন। উত্তরগুলো পড়ে শুধাবেন না। একাধিক উত্তর হতে পারে।] [মহিলা যেখান থেকে সেবা পেয়েছেন, সেই স্বাস্থ্যকেন্দ্রের নাম লিখুন। যদি একাধিক জায়গা থেকে সেবা নিয়ে থাকেন, তাহলে সবগুলো জায়গারই নাম এবং কোড লিখুন।] Code : নাম Name: Code : নাম Name: Code : নাম Name: Where did you go to seek care for this problem/complication? Do not read out the answers. Ask: Anything else? Circle all the answers. Write down code and name of place.	<u>সরকারী স্বাস্থ্য কেন্দ্র (Govt Health center)</u> মেডিকেল কলেজ হাসপাতাল (Medical College Hospital)....A জেলা/সদর হাসপাতাল (District/Sadar Hospital).....B মা ও শিশু স্বাস্থ্য কেন্দ্র (MCWC).....C উপজেলা স্বাস্থ্য কমপ্লেক্স (UHC).....D ইউনিয়ন স্বাস্থ্য ও পরিবার কল্যাণ কেন্দ্র/সাব সেন্টার/আরডি (FWC/SC/RD).....E কমিউনিটি ক্লিনিক (Community clinic).....F সেটেলাইট ক্লিনিক/ ইপিআই কেন্দ্র (Satellite clinic/EPI centre).....G অন্যান্য সরকারী স্বাস্থ্য কেন্দ্র (Other Govt Health facility) ..H <u>বেসরকারী স্বাস্থ্য কেন্দ্র (Non Govt Health center)</u> এনজিও হাসপাতাল (NGO hospital) I এনজিও স্থায়ী স্বাস্থ্য কেন্দ্র (NGO static health centre) J এনজিও সেটেলাইট ক্লিনিক (NGO satellite clinic).....K পুষ্টি কেন্দ্র (NNP centre).....L অন্যান্য বেসরকারী স্বাস্থ্য কেন্দ্র (Other NGO Health facility).....M <u>প্রাইভেট (Private Health sector)</u> হাসপাতাল/ ক্লিনিক (Hospital/clinic).....N স্বাস্থ্য কেন্দ্র /ডিসপেনসারী (Health centre/Dispensary) O এমবিবিএস ডাক্তারের চেম্বার (MBBS doctor's chamber) ...P গ্রাম ডাক্তারের চেম্বার (Village doctor's chamber).....Q প্যারামেডিক/মেডিকেল এসিস্টেন্ট/সাকমোর চেম্বার (Paramedic/MA/SACMO chamber).....R এলোপ্যাথী ঔষধের দোকান (Allopath drug store) S অন্যান্য প্রাইভেট স্বাস্থ্য কেন্দ্র (Other private Health facility)T <u>বাড়ী (Home)</u> নিজ বাড়ী, স্বামী/স্বত্বাধী বাড়ী (Own home, husband/father in laws house) U বাবার বাড়ী (My natal home) V অন্যান্য (Others) X (নির্দিষ্ট করুন) জানি না/মনে নাই Don't know/can't remember Z	
E42	সুসমা কার্যক্রমের কমিউনিটি গ্রুপ এই সমস্যা/ জটিলতার জন্য আপনাকে চিকিৎসা পেতে কোন সহায়তা করেছিল কি? Did the community group of SUSOMA project help you in getting treatment for this problem/complication?	হ্যাঁ Yes 1 না No..... 2	→ E43a
E43	সুসমা কার্যক্রমের কমিউনিটি গ্রুপ আপনাকে চিকিৎসা পেতে কি ভাবে সহায়তা করেছিল? How did the community group of SUSOMA project help you in getting treatment?		
E43a	আপনার শেষ গর্ভের সময়ে, শিশু-মাতৃ স্বাস্থ্য বিষয়ক সেবা পাওয়ার ব্যাপারে স্বাস্থ্যসেবাদানকারীর সাথে আলাপচারিতায়/ব্যবহারে/আচরণে আপনি কি সন্তুষ্ট? Are you satisfied with the interactions with health care providers when receiving MNH services?	হ্যাঁ Yes 1 না No 2 প্রয়োজ্য নয়..... 7 জানি না/ মনে নাই Don't know/Can't remember 9	

E44	শেষ গর্ভের ডেলিভারীর পর কোন স্বাস্থ্যকর্মী বা কোন প্রশিক্ষণহীন দাই স্বাস্থ্যকেন্দ্রে বা বাড়িতে বা অন্য কোন স্থানে আপনার স্বাস্থ্য পরীক্ষা করেছিলেন কি? Did a health care provider or a traditional birth attendant check on your health after the delivery of your recent pregnancy, either at a health facility, home or other location?	হ্যাঁ Yes..... 1 না No 2	→ F01
E45	ডেলিভারীর কত সময় পর প্রথমবার আপনার স্বাস্থ্য পরীক্ষা করানো হয়েছিল? [যদি এক দিনের কম হয়, তাহলে 0 বৃত্তায়িত করে ঘন্টায় রেকর্ড করুন, যদি এক থেকে ছয় দিন হয়, তাহলে 1 বৃত্তায়িত করে দিনে রেকর্ড করুন, যদি ছয় দিনের বেশী হয়, তাহলে 2 বৃত্তায়িত করে সপ্তাহে রেকর্ড করুন] How long after the delivery did the first health check took place? If less than one day, circle 0 and record hours; if one to six days circle 1 and record days; if more than 6 days circle 2 and record weeks.	ঘন্টা Hours 0 দিন Days 1 সপ্তাহ Weeks 2 জানি না Don't know/can't remember 999	
E46	শেষ গর্ভের সময়, জন্মের/ ডেলিভারীর পর কে আপনার স্বাস্থ্য পরীক্ষা করেছিল? [মহিলাকে জিজ্ঞেস করুন] আরও কেউ? [মহিলার নিজেকে দেয়া সবগুলো উত্তরই বৃত্তায়িত করুন। উত্তরগুলো পড়ে শুনাবেন না। একাধিক উত্তর হতে পারে।] Who checked your health at that time? Do not read out the answers. ASK: Anyone else? Circle and write down all the answers	দক্ষ/প্রশিক্ষণ প্রাপ্ত স্বাস্থ্য কর্মী (Medically trained) পাশ করা ডাক্তার (MBBS doctor)..... A নার্স/দায়ী (Nurse/midwife) B প্যারামেডিক/মেডিকেল এসিস্টেন্ট/সাকমো (Paramedic/MA/SACMO)..... C পরিবার কল্যাণ পরিদর্শক (FWV)..... D সি,এস,বি,এ (CSBA) E অন্যান্য স্বাস্থ্য কর্মী (Other health worker) স্বাস্থ্য সহকারী/ পরিবার কল্যাণ সহকারী (HA /FWA) . F পুষ্টি কর্মী (CNP)..... G সুসমা কার্যক্রমের স্বেচ্ছাসেবী (Volunteer of SUSOMA prj)H অন্যান্য কমিউনিটি স্বাস্থ্য কর্মী - এনজিও কর্মী, স্বেচ্ছাসেবী (Other CHWs, NGO worker, volunteer) I অন্যান্য (Other) প্রশিক্ষণ প্রাপ্ত টিবিএ (প্রশিক্ষণ প্রাপ্ত ধনী, চাউনী, দাই) (TTBA) J প্রশিক্ষণহীন টিবিএ (ধনী, চাউনী, দাই) TBA(Dai/Dhorni/Chauni) K হোমিওপ্যাথ/হোমিওপ্যাথ ঔষধের দোকান (Homeopath/Homeopath drug store) L আয়ুর্বেদিক চিকিৎসক / আয়ুর্বেদিক ঔষধের দোকান /হেকিম/কবিরাজ (Ayurved/ Ayurvedic drug store /Hekim/Kabiraj) M গ্রাম ডাক্তার (Village doctor) N এলোপ্যাথী ঔষধের দোকান (Allopath drug store) ... O ইমাম/ঝাড় ফুক/ওঝা (Spiritual healer) P পরিবারের অন্যান্য সদস্য/আত্মীয়/ প্রতিবেশী/বন্ধু Family/relative/Neighbor/friend..... Q অন্যান্য Others X (নির্দিষ্ট করুন) জানি না/মনে নাই Don't know/can't remember Z	

No.	Questions And Filters	Coding Categories	Skip
E47	শেষ গর্ভের জন্মের/ ডেলিভারীর পর নিজের মেডিকেল চেক-আপের জন্য আপনি কোথায় দেখিয়েছিলেন/কোথায় করিয়েছিলেন? Where did you receive a health check after the delivery of your most recent pregnancy?	সরকারী স্বাস্থ্য কেন্দ্র (Govt Health center) মেডিকেল কলেজ হাসপাতাল (Medical College Hospital).....A জেলা/সদর হাসপাতাল (District /Sadar Hospital).....B মা ও শিশু স্বাস্থ্য কেন্দ্র (MCWC).....C উপজেলা স্বাস্থ্য কমপ্লেক্স (UHC).....D ইউনিয়ন স্বাস্থ্য ও পরিবার কল্যাণ কেন্দ্র/সাব সেন্টার/আরডি (FWC/SC/RD).....E কমিউনিটি ক্লিনিক (Community clinic).....F সেটেলাইট ক্লিনিক/ ইপিআই কেন্দ্র (Satellite clinic/EPI centre).....G অন্যান্য সরকারী স্বাস্থ্য কেন্দ্র (Other Govt Health facility) ..H বেসরকারী স্বাস্থ্য কেন্দ্র (Non Govt Health center) এনজিও হাসপাতাল (NGO hospital) I এনজিও স্থায়ী স্বাস্থ্য কেন্দ্র (NGO static health centre) J এনজিও সেটেলাইট ক্লিনিক (NGO satellite clinic).....K পুষ্টি কেন্দ্র (NNP centre).....L অন্যান্য বেসরকারী স্বাস্থ্য কেন্দ্র (Other NGO Health facility).....M প্রাইভেট (Private Health sector) হাসপাতাল/ ক্লিনিক (Hospital/clinic).....N স্বাস্থ্য কেন্দ্র /ডিসপেনসারী (Health centre/Dispensary) O এমবিবিএস ডাক্তারের চেম্বার (MBBS doctor's chamber) ...P গ্রাম ডাক্তারের চেম্বার (Village doctor's chamber).....Q প্যারামেডিক/মেডিকেল এসিস্টেন্ট/সাকমোর চেম্বার (Paramedic/MA/SACMO chamber).....R এলোপ্যাথী ঔষধের দোকান (Allopath drug store) S অন্যান্য প্রাইভেট স্বাস্থ্য কেন্দ্র (Other private Health facility)T বাড়ী (Home) নিজ বাড়ী, স্বামী/স্বশ্রুত বাড়ী (Own home, husband/father in laws house) U বাবার বাড়ী (My natal home) V অন্যান্য (Others X (নির্দিষ্ট করুন) জানি না/মনে নাই Don't know/can't remember Z	

Section F: Immediate newborn care

১ লা জানুয়ারী ২০১৩ সাল বা তার পরে গর্ভ ফলাফল হয়েছে এমন মহিলাকে এই প্রশ্নগুলো করতে হবে।

All questions are to be addressed to woman with pregnancy outcome since 01-January-2013

No.	Questions And Filters	Coding Categories	Skip
Immediate newborn care			
F01	১ লা জানুয়ারী ২০১৩ সাল বা তার পরের গর্ভের ফলাফল কি ছিল? What was the outcome of your pregnancy since 1 January 2013?	জীবিত জন্ম.....1 মৃত জন্ম.....2	→ F16a
F02	১ লা জানুয়ারী ২০১৩ সাল বা তার পরে জন্ম হয়েছে এমন শিশুর নাম কি, লিঙ্গ কি এবং তার জন্ম তারিখ কত? What is the date of the live birth that you had since January 1, 2013? What is the name and sex of the child?	জন্ম তারিখ / / Date of birth দিন মাস বছর নাম Name লিঙ্গ Sex ছেলে Male 1 মেয়ে Female 2	

F03	জন্মের পর (নাম)-এর নাড়ী কি দিয়ে কাটা হয়েছিল? [কেবলমাত্র একটি উত্তর হবে] What instrument was used to cut the cord after the birth? [Select only one answer]	ডেলিভারী ব্যাগ/কিট এর বেড Blade from the delivery kit... 01 নতুন বেড New razor blade..... 02 নতুন এবং গরম পানিতে ফুটানো বেড New and boiled razor blade 03 বাড়ীর পুরাতন বেড Used razor blade..... 04 ব্যবহৃত এবং গরম পানিতে ফুটানো বেড Used and boiled razor blade..... 05 নতুন কাঁচি Scissors 06 নতুন এবং গরম পানিতে ফুটানো কাঁচি New and boiled scissors..... 07 ব্যবহৃত কাঁচি Used scissors 08 ব্যবহৃত এবং গরম পানিতে ফুটানো কাঁচি Used and boiled scissors..... 09 ছুড়ি Knife 10 বাম্পের কক্ষ/বাতা/টল Bamboo strips/ bata/toll 11 অন্যান্য Others 97 (নির্দিষ্ট করুন) জানা নাই/মনে নাই Don't know/can't remember..... 99	
F04	নাড়ী কাটার আগে বা পরে (নাম)-এর নাড়ীতে কোন কিছু দেয়া হয়েছিল কি? Was anything placed on the umbilical cord of <Name> either before or after it was cut?	হ্যাঁ (Yes)..... 1 না (No) 2 জানা নাই/মনে নাই DK/can't remember..... 9	→ F06 → F06
F05	নাড়ী কাটার পর (নাম)-এর নাড়ীতে কি দেয়া হয়েছিল? [মহিলাকে জিজ্ঞেস করুন] আরও কিছু? [মহিলার নিজে থেকে দেয়া সবগুলো উত্তরই বৃত্তায়িত করুন। উত্তরগুলো পড়ে শুধাবেন না। একাধিক উত্তর হতে পারে।] What was placed on the cut cord? [Do not read out the answers], Ask: Anything else? Circle all the answers	গোবর Cowdung A যেকোন ধরনের তেল Any kind of oil..... B অ্যান্টিসেপটিক (ডেটল/স্যাভলন/হেক্সিসল) Antiseptic (Detol/savlon/hexisol)..... C ছাই Ash..... D অ্যান্টিবায়োটিক (পাউডার/মলম) Antibiotics (Powder / Ointment) E চিবানো চাল Chewed rice F হলুদের রস/গুড়া Turmeric juice/powder..... G আদার রস Ginger juice..... H সিঁদুর Shidur I বরিক পাউডার Boric powder J জেনসিয়ান ভায়োলেট/নীল কালি Gentian violet/Blue ink K ট্যালকম পাউডার Talcom Powder..... L চুলার পোড়া মাটি Dust of earth-burner M অন্যান্য Other X (নির্দিষ্ট করুন) জানা নাই/মনে নাই Don't know/can't remember..... Z	
F06	জন্মের পর পর অর্থাৎ ফুল পড়ার আগে (নাম)-কে মোছানো/শুকানো হয়েছিল কি? Was (NAME) dried (wiped) immediately after birth before the placenta was delivered?	হ্যাঁ (Yes)..... 1 না (No) 2 জানা নাই/মনে নাই DK/can't remember..... 9	→ F08 → F08
F07	জন্মের কতক্ষণ পর (নাম) কে মোছানো/শুকানো হয়েছিল? [এক ঘন্টার নিচে হলে মিনিটে লিখুন] How many minutes /hours after delivery of <Name> he/she was wiped/dried?	মিনিট Minutes 1 ঘন্টা Hours..... 2 জানি না Don't know/can't remember 999	
F08	জন্মের পর পর অর্থাৎ ফুল পড়ার আগে (নাম)-কে কাপড় দিয়ে মুড়িয়ে নেয়া হয়েছিল কি? Was (NAME) wrapped in a warm cloth or blanket immediately after birth before the placenta was delivered?	হ্যাঁ (Yes)..... 1 না (No) 2 জানা নাই/মনে নাই DK/can't remember..... 9	→ F10 → F10

No.	Questions And Filters	Coding Categories	Skip
F09	জন্মের কতক্ষণ পর (নাম) কে কাপড় দিয়ে মুড়িয়ে নেয়া হয়েছিল? [এক ঘণ্টার নীচে হলে মিনিটে লিখুন] How many minutes after delivery of <Name> was wrapped?	মিনিট Minutes 1 ঘণ্টা Hours..... 2 জানি না Don't know/can't remember 999	
F10	জন্মের এক ঘণ্টার মধ্যে (নাম) এর চোখে কোন মলম বা ঔষধের ফোটা দেয়া হয়েছিল কি? In the first hour after delivery, was (NAME) given eye ointment or drops in his/her eyes?	হ্যাঁ (Yes)..... 1 না (No)..... 2 জানা নাই/মনে নাই DK/can't remember..... 9	
F11	জন্মের কত সময় পর (নাম)-কে প্রথম গোসল করানো হয়েছিল? [যদি এক ঘণ্টার কম হয়, তাহলে 1 বৃত্তায়িত করুন এবং ঘণ্টার ঘরে 00 লিখুন, যদি এক দিনের কম হয়, তাহলে 1 বৃত্তায়িত করুন এবং ঘণ্টার ঘরে রেকর্ড করুন, যদি এক সপ্তাহের কম হয়, তাহলে 2 বৃত্তায়িত করুন এবং দিনের ঘরে রেকর্ড করুন। যদি এক সপ্তাহের বেশী হয়, তাহলে 3 বৃত্তায়িত করুন এবং সপ্তাহের ঘরে রেকর্ড করুন] How long after delivery was (NAME) bathed for the first time? [If less than 1 hour circle 1 and write 00 in the box, if less than 1 day circle 1 and record hours, if less than 1 week circle 2 and record days, if more than 1 week circle 3 and record weeks]	ঘণ্টা Hours..... 1 দিন Days 2 সপ্তাহ Weeks 3 গোসল করানো হয়নি Not bathed 997 জানি না/মনে নাই Don't know/can't remember 999	
F12	(নাম) এর ডেলিভারীর পর কোন স্বাস্থ্যকর্মী বা কোন প্রশিক্ষনহীন দাই (নাম) এর স্বাস্থ্য পরীক্ষা করেছিলেন কি? After (Name) was born, did any health care provider or traditional birth attendant check on (Name's) health?	হ্যাঁ (Yes)..... 1 না (No)..... 2 জানা নাই/মনে নাই DK/can't remember..... 9	→ F16 → F16
F13	জন্মের কত সময় পর প্রথমবার (নাম) এর স্বাস্থ্য পরীক্ষা করানো হয়েছিল? [যদি এক দিনের কম হয়, তাহলে 0 বৃত্তায়িত করে ঘণ্টায় রেকর্ড করুন, যদি এক থেকে ছয় দিন হয়, তাহলে 1 বৃত্তায়িত করে দিনে রেকর্ড করুন, যদি ছয় দিনের বেশী হয়, তাহলে 2 বৃত্তায়িত করে সপ্তাহে রেকর্ড করুন] How many hours, days or weeks after the birth of (Name) did the first health check take place? If less than one day, circle 0 and record hours; if one to six days circle 1 and record days; if more than 6 days circle 2 and record weeks.	ঘণ্টা Hours..... 0 দিন Days 1 সপ্তাহ Weeks 2 জানি না Don't know/can't remember 999	

No.	Questions And Filters	Coding Categories	Skip
F14	ডেলিভারীর পর কে (নাম) এর স্বাস্থ্য পরীক্ষা করেছিল? [মহিলাকে জিজ্ঞেস করুন] আরও কেউ? সবচেয়ে দক্ষ স্বাস্থ্যকর্মীর খোজ করুন [মহিলার নিজেকে থেকে দেয়া সবগুলো উত্তরই বৃত্তায়িত করুন। উত্তরগুলো পড়ে শুনাবেন না। একাধিক উত্তর হতে পারে।] Who checked on (Name's) health at that time? Anyone else? Probe for the most qualified person and record all mentioned.	<u>দক্ষ/প্রশিক্ষণ প্রাপ্ত স্বাস্থ্য কর্মী (Medically trained)</u> পাশ করা ডাক্তার (MBBS doctor)..... A নার্স/ধাত্রী (Nurse/midwife) B প্যারামেডিক/মেডিকেল এসিস্টেন্ট/সাকমো (Paramedic/MA/SACMO)..... C পরিবার কল্যাণ পরিদর্শক (FWV)..... D সি,এস,বি,এ (CSBA) E <u>অন্যান্য স্বাস্থ্য কর্মী (Other health worker)</u> স্বাস্থ্য সহকারী/ পরিবার কল্যাণ সহকারী (HA /FWA) . F পুষ্টি কর্মী (CNP)..... G সুসমা কার্যক্রমের স্বেচ্ছাসেবী (Volunteer of SUSOMA prj)H অন্যান্য কমিউনিটি স্বাস্থ্য কর্মী - এনজিও কর্মী, স্বেচ্ছাসেবী (Other CHWs, NGO worker, volunteer) I <u>অন্যান্য (Other)</u> প্রশিক্ষণ প্রাপ্ত টিবিএ (প্রশিক্ষণ প্রাপ্ত ধনী, চাউনী, দাই) (TBTA) J প্রশিক্ষণহীন টিবিএ (ধনী, চাউনী, দাই) TBA(Dai/Dhorni/Chauni) K হোমিওপ্যাথ/হোমিওপ্যাথ ঔষধের দোকান (Homeopath/Hemeopath drug store) L আয়ুর্বেদিক চিকিৎসক / আয়ুর্বেদিক ঔষধের দোকান /হেকিম/কবিরাজ (Ayurved/ Ayurvedic drug store /Hekim/Kabiraj) M গ্রাম ডাক্তার (Village doctor) N এলোপ্যাথী ঔষধের দোকান (Allopath drug store) ... O ইমাম/ঝাড় ফুক/ওঝা (Spiritual healer) P পরিবারের অন্যান্য সদস্য/আত্মীয়/ প্রতিবেশী/বন্ধু Family/relative/Neighbor/friend..... Q অন্যান্য Others X (নির্দিষ্ট করুন) জানি না/মনে নাই Don't know/can't remember Z	

No.	Questions And Filters	Coding Categories	Skip
F15	ডেলিভারীর পর কোথায় (নাম) এর স্বাস্থ্য পরীক্ষা করিয়েছিলেন? [মহিলার নিজে থেকে দেয়া সবগুলো উত্তরই বৃত্তায়িত করুন। উত্তরগুলো পড়ে শুনাবেন না। একাধিক উত্তর হতে পারে।] From where did you receive health checkup for name? Do not readout the answers. Ask anywhere else? Record all the answers	সরকারী স্বাস্থ্য কেন্দ্র (Govt Health center) মেডিকেল কলেজ হাসপাতাল (Medical College Hospital).....A জেলা/সদর হাসপাতাল (District /Sadar Hospital).....B মা ও শিশু স্বাস্থ্য কেন্দ্র (MCWC).....C উপজেলা স্বাস্থ্য কমপ্লেক্স (UHC).....D ইউনিয়ন স্বাস্থ্য ও পরিবার কল্যাণ কেন্দ্র/সাব সেন্টার/আরডি (FWC/SC/RD).....E কমিউনিটি ক্লিনিক (Community clinic).....F সেটেলাইট ক্লিনিক/ ইপিআই কেন্দ্র (Satellite clinic/EPI centre).....G অন্যান্য সরকারী স্বাস্থ্য কেন্দ্র (Other Govt Health facility) ..H বেসরকারী স্বাস্থ্য কেন্দ্র (Non Govt Health center) এনজিও হাসপাতাল (NGO hospital) I এনজিও স্থায়ী স্বাস্থ্য কেন্দ্র (NGO static health centre) J এনজিও সেটেলাইট ক্লিনিক (NGO satellite clinic).....K পুষ্টি কেন্দ্র (NNP centre).....L অন্যান্য বেসরকারী স্বাস্থ্য কেন্দ্র (Other NGO Health facility).....M প্রাইভেট (Private Health sector) হাসপাতাল/ ক্লিনিক (Hospital/clinic).....N স্বাস্থ্য কেন্দ্র /ডিসপেনসারী (Health centre/Dispensary) O এমবিবিএস ডাক্তারের চেম্বার (MBBS doctor's chamber) ...P গ্রাম ডাক্তারের চেম্বার (Village doctor's chamber).....Q প্যারামেডিক/মেডিকেল এসিসটেন্ট/সাকমোর চেম্বার (Paramedic/MA/SACMO chamber).....R এলোপ্যাথী ঔষধের দোকান (Allopath drug store) S অন্যান্য প্রাইভেট স্বাস্থ্য কেন্দ্র (Other private Health facility)T বাড়ী (Home) নিজ বাড়ী, স্বামী/খুশুড় বাড়ী (Own home, husband/father in laws house) U বাবার বাড়ী (My natal home) V অন্যান্য (Others X (নির্দিষ্ট করুন) জানি না/মনে নাই Don't know/can't remember Z	
F16	কখনও কখনও নবজাতক বাচ্চা একমাস বয়সের মধ্যেই খুব অসুস্থ হয়ে যায় এবং তখন তাদেরকে অবিলম্বে চিকিৎসার জন্য হাসপাতালে/ ডাক্তারের কাছে নিয়ে যেতে হয়। কি ধরনের লক্ষণ দেখলে আপনি আপনার নবজাতককে সাথে সাথেই চিকিৎসার জন্য হাসপাতালে বা ডাক্তারের কাছে নিয়ে যাবেন? [মহিলাকে জিজ্ঞেস করুন / আরও কোন সমস্যা/জটিলতা? [মহিলার নিজে থেকে দেয়া সবগুলো উত্তরই বৃত্তায়িত করুন। উত্তরগুলো পড়ে শুনাবেন না। একাধিক উত্তর হতে পারে।] Sometimes newborns, within the first month of life, have severe illness and should be taken immediately to a health facility. What types of symptoms would cause you to take your newborn to a health facility right away? ASK: Anything else? Do not read responses. Record all that are mentioned.	খিচুনি বা শরীর শক্ত হওয়া Convulsions..... A জ্বর/বাচ্চার শরীর গরম হওয়া Baby feels hot/Fever ... B বুকের দুধ চুষতে না পারা Poor suckling or feeding ... C কষ্টকর/দ্রুত শ্বাস নেয়া Difficult or fast breathing....D বাচ্চার শরীর ঠান্ডা হওয়া Baby feels cold E বাচ্চা খুব ছোট হওয়া Too small baby/too early..... F হাতের তালু/ পায়ের পাতা/চোখ হলুদ হওয়া/জন্ডিস Yellow palm/soles/eye color (jaundice) G পেট ফাঁপা বা ফোলা Sowllen abdomen H অজ্ঞান/হুঁশ না থাকা Unconsciousness I নাভির চারপাশ,চোখ অথবা চামড়া লাল হওয়া/পুঁজ বের হওয়া Pus or redness of the umbilical stump,eyes or skin..... J অন্যান্য Others X (নির্দিষ্ট করুন) জানা নাই (Don't know)..... Z	

F16a	আপনার শেষ গর্ভের সময়ে, শিশু-মাতৃ স্বাস্থ্য বিষয়ক সেবা পাওয়ার ব্যাপারে/সেবা নিতে যাওয়ার ক্ষেত্রে আপনি কোন বাধা পেয়েছিলেন? Did you encounter any difficulties accessing MNH services?	হ্যাঁ Yes 1 না No 2 প্রযোজ্য নয় 9	→ F17 → F17												
F16b	কি ধরনের বাধা পেয়েছিলেন? What sort of difficulties you encountered?	<table border="1"> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </table>													
তথ্যসংগ্রহকারীর জন্য নির্দেশিকা Instruction for interviewer: CHECK Questions															
F17	১ লা জানুয়ারী ২০১৩ সাল বা তার পরের গর্ভ ফলাফলের জন্য আপনাকে কি এই মহিলার নিকট হতে maternal cost module (Module III) এর জন্য খরচের তথ্য সংগ্রহ করতে বলা হয়েছে? Were you asked to collect information on costs for Maternal cost module (Module III) from this woman for the pregnancy outcome since 01-January-2013?	হ্যাঁ Yes 1 না No 2	→Module III												
F18	মহিলার সাথে বর্তমানে এমন কোন সন্তান বাস করে যাহার, ১ লা জানুয়ারী ২০১২ সাল বা তার পরে জন্ম (Q: C11 / Q.C16 –এ ‘1’ বৃত্তায়িত)? Is there any child born since 01-January-2012 currently live with the mother (‘1’ circled either in Q. C11 or Q. C16)?	হ্যাঁ Yes 1 না No 2	→Module IV												
F19	উত্তর দাতাকে ধন্যবাদ জানিয়ে সাক্ষাৎকার শেষ করুন। Thanks the mother for providing time and complete the interview.														

Module III

Maternal Cost module

Endline KPC Survey 2014

ALL QUESTIONS ARE TO BE ADDRESSED TO WOMEN WITH A PREGNANCY OUTCOME SINCE 1st JANUARY 2013

Name	Code	
CLUSTER/UNION		সাক্ষাৎকার শুরু হবার সময়: ____:____
UPAZILA		
VILLAGE		সাক্ষাৎকার শেষ করার সময়: ____:____
HOUSEHOLD ID		
WOMEN ID		

Section 1: Cost related to ANC

- [প্রশিক্ষণ প্রাপ্ত সেবা প্রদানকারীর <সেবা প্রদানকারীর কোড প্রশ্ন E04 এ A থেকে E এর মধ্যে হলে > কাছ থেকে গর্ভকালীন মেডিকেল চেক-আপ নিলে 101 নং প্রশ্ন থেকে জিজ্ঞেস করুন If ANC was taken from any trained provider then ask from 101 question] Y / N

- [প্রশিক্ষণহীন সেবা প্রদানকারীর <সেবা প্রদানকারীর কোড প্রশ্ন E04 এ F থেকে P এর মধ্যে হলে > কাছ থেকে গর্ভকালীন মেডিকেল চেক-আপ নিলে 106 নং প্রশ্ন থেকে জিজ্ঞেস করুন If ANC was taken from any un trained provider then ask from 106 question] Y / N

- [গর্ভকালীন সময় <সেবা প্রদানকারীর কোড প্রশ্ন E04 এ Q হলে > নিজে নিজে চিকিৎসা সেবা নিলে 107 নং প্রশ্ন থেকে জিজ্ঞেস করুন IF ANC was taken by herself then ask from 107 question] Y / N

		বাচা পেটে থাকার সময় সেবা ANC visits			
		1st visit Y / N	2 nd visit Y / N	2nd to last visit Y / N	Last visit Y / N
[সর্বোচ্চ চারটি গর্ভকালীন মেডিকেল চেক-আপের উল্লেখ করুন, প্রথমটি প্রথম column এ, ২য়টি ২য় column এ, সর্বশেষটি ৪র্থ column এ, সর্বশেষের আগেরটি ৩য় column - এ দিন. সর্বোচ্চ তিনটি গর্ভকালীন মেডিকেল চেক-আপ নিয়ে থাকলে, প্রথমটি প্রথম column এ, ২য়টি ২য় column এ, ৩য়টি ৪র্থ column -এ দিন]					
101 আপনি স্বাস্থ্যকেন্দ্রে যেতে এবং ফিরে আসতে কত টাকা খরচ হয়েছিল? How much money was spent for transportation for each visit?	খরচ (টাকায়) Spent amount (Tk)	Y / N 	Y / N 	Y / N 	Y / N
102 <সেবা প্রদানকারীর> কাছে যাবার পর, দেখানোর কাজ সারতে কত সময় লেগেছিল? (অপেক্ষার সময়ও হিসাবে অন্তর্ভুক্ত করুন) How much time did you need to get this service?	সময় Time	ঘণ্টা Hour			
		মিনিট minute			

		বাচচা পেটে থাকার সময় সেবা ANC visits				
		1st visit Y / N	2 nd visit Y / N	2nd to last visit Y / N	Last visit Y / N	
103 সেখানে যাওয়ার পথে অথবা সেখান থেকে ফিরে আসার পথে আপনাকে কোথাও রাত কাটাতে হয়েছিল কি? খাবার অথবা পানীয় কিনে খেতে কত টাকা লেগেছিল? চিকিৎসককে মোট কত টাকা দিয়েছিলেন (ভিজিট)? Did you have to spend the night away from home either going there or coming back? Did you spend money to buy food/drinks while you were away for the consultation?	রাত কাটাতে খরচ (টাকায়) Hotel cost (Tk)	Y / N [][][][]	Y / N [][][][]	Y / N [][][][]	Y / N [][][][]	
	খাবার খরচ (টাকায়) Food cost (Tk)	Y / N [][][][]	Y / N [][][][]	Y / N [][][][]	Y / N [][][][]	
	চিকিৎসক ভিজিট (টাকায়) Visit (Tk)	Y / N [][][][]	Y / N [][][][]	Y / N [][][][]	Y / N [][][][]	
104 রক্ত/মল/মূত্র পরীক্ষা করতে আপনার কোন টাকা খরচ হয়েছিল কি? How much did you spend for blood / stool / urine test?	রক্ত পরীক্ষা (টাকায়) Blood test (Tk)	Y / N [][][][]	Y / N [][][][]	Y / N [][][][]	Y / N [][][][]	
	মূত্র পরীক্ষা (টাকায়) Urine test (Tk)	Y / N [][][][]	Y / N [][][][]	Y / N [][][][]	Y / N [][][][]	
	মল পরীক্ষা (টাকায়) Stool test (Tk)	Y / N [][][][]	Y / N [][][][]	Y / N [][][][]	Y / N [][][][]	
	আলট্রাসোনোগ্রাম (টাকায়) Ultra sonogram (Tk)	Y / N [][][][]	Y / N [][][][]	Y / N [][][][]	Y / N [][][][]	
105 <সেবা প্রদানকারী> কোন ওষুধের, যেমন বড়ি, সিরাপ, ক্যাপসুল, অথবা ইনজেকশনের ব্যবস্থাপত্র (Prescription) দিয়েছিলেন কি? অথবা ওষুধ ব্যবহার করতে বলেছিলেন কি? কি কি ওষুধ খেয়ে ছিলেন? কি পরিমাণে (কত সিরাপ/বোতল, বড়ি/টেবলেট, ইনজেকশন, ইত্যাদি)? Did the PROVIDER prescribe any drug e.g. tablet, syrup or injection; or asked to use any? Please tell me which drugs did you take and in which amount (how many bottles, pills, tablets or injections), even if you did not take them.	প্রথম ওষুধ 1 st drug	ওষুধের নাম Drug name				
		ওষুধের ধরন ¹ Drug type	[]	[]	[]	[]
		পরিমাণ Quantity				
		টাকা Tk	[][][][]	[][][][]	[][][][]	[][][][]
	২য় ওষুধ 2 nd drug	ওষুধের নাম Drug name				
		ওষুধের ধরন Drug type	[]	[]	[]	[]
		পরিমাণ Quantity				
		টাকা Tk	[][][][]	[][][][]	[][][][]	[][][][]

¹ ওষুধের ধরন (Type of drug) :

সিরাপ/ বোতল Syrup/ bottle	1	মলম Balm	5
বড়ি/ টেবলেট Capsule/Tablet.....	2	ইনহেলার Inhaler.....	6
ইনজেকশন Injection.....	3	অন্তশিরা স্যালাইন IV saline.....	7
পাউডার Powder.....	4	খাবার স্যালাইন Oral saline.....	8

		বাচা পেটে থাকার সময় সেবা ANC visits			
		1st visit Y / N	2 nd visit Y / N	2nd to last visit Y / N	Last visit Y / N
[প্রশিক্ষণহীন সেবা প্রদানকারীর কাছ থেকে গর্ভকালীন মেডিকেল চেক-আপ নিলে জিজ্ঞেস করুন If ANC was taken from any untrained provider then ask the following question]					
106 গর্ভকালীন মেডিকেল চেক-আপের জন্য <সেবা প্রদানকারীর কোড F থেকে P এর মধ্যে হলে> কত টাকা খরচ করেছিলেন? How much did you spend for ANC taking from untrained provider?	যাতায়াত Transport (Tk)	Y / N [] [] [] []	Y / N [] [] [] []	Y / N [] [] [] []	Y / N [] [] [] []
	চিকিৎসক ভিজিট (টাকায়) Visit / Fee (Tk)	Y / N [] [] [] []	Y / N [] [] [] []	Y / N [] [] [] []	Y / N [] [] [] []
	ঔষধের খরচ (টাকায়) Medicine (Tk)	Y / N [] [] [] []	Y / N [] [] [] []	Y / N [] [] [] []	Y / N [] [] [] []
	খরচ টাকা Total cost (Tk)	[] [] [] []	[] [] [] []	[] [] [] []	[] [] [] []
[গর্ভকালীন সময়ে <সেবা প্রদানকারীর কোড Q হলে> নিজে নিজে চিকিৎসা সেবা নিলে 107 নং প্রশ্ন জিজ্ঞেস করুন IF ANC was taken by herself then ask 107 question]					
107 গর্ভকালীন সময়ে সেবার জন্য আপনি নিজে নিজে আর কোন ঔষধ (সিরাপ/বোতল, বড়ি/টেবলেট) নিয়েছিল/খেয়েছিলেন কি? যদি কোন ঔষধ খেয়ে থাকেন তবে আমাকে বলুন, কত টাকা খরচ করেছিলেন Did you take any other drugs during pregnancy that were not prescribed by a provider? Please tell me which drugs you taken and in which amount (how many bottles, pills, tablets)?	ঔষধের খরচ (টাকায়) Medicine (Tk)	প্রথম ঔষধ 1 st drug	[] [] [] []	[] [] [] []	[] [] [] []
		২য় ঔষধ 2 nd drug	[] [] [] []	[] [] [] []	[] [] [] []
		৩য় ঔষধ 3 rd drug	[] [] [] []	[] [] [] []	[] [] [] []

Section 2: Cost related to Delivery Care:

- স্বাস্থ্যকেন্দ্রে / হাসপাতালে ডেলিভারী হলে প্রশ্ন E32 এ 201 নং প্রশ্ন থেকে জিজ্ঞেস করুন For facility delivery ask from 201 question Y / N
- বাড়িতে ডেলিভারী হলে প্রশ্ন E32 এ 204 নং প্রশ্ন থেকে জিজ্ঞেস করুন For home delivery ask from 204 question.....Y / N

[সেবাকেন্দ্রে ডেলিভারী বিষয়ে প্রশ্ন (এই প্রশ্নগুলি প্রথমে মাকে জিজ্ঞেস করুন, তিনি উত্তর দিতে না পারলে নির্ভর যোগ্য কাউকে জিজ্ঞেস করুন)
Questions for facility delivery (Ask these questions to the women first; if she fails to answer then ask the husband / household head / important family member)]

201 আপনি বাড়ী থেকে স্বাস্থ্যকেন্দ্রে / হাসপাতালে (যেখানে ডেলিভারী হয়েছে) যাওয়ার এবং ফিরে আসতে যানবাহনের ভাড়া বাবদ কত খরচ হয়েছে? [মহিলার সাথে যারা যাতায়াত করেছে তাদের তথ্য নিন] What was the total transport cost for going to last health service centre from home?	[] [] [] [] [] Tk

202 ডেলিভারীর বিভিন্ন খাতে খরচের বিবরণ Breakdown of the total delivery cost.	বিভিন্ন খাত Breakdown	খরচ (টাকায়) Spent amount (Tk)
	a. ভর্তি ফিস Admission fees	_____
	b. ল্যাব টেস্ট বাবদ ফিস/ খরচ Laboratory test fees	_____
	c. অপারেশন থিয়েটারের খরচ Operation theatre fees	_____
	d. ডেলিভারী ফিস (ডাক্তার: ফিস, এনেসথেসিয়া, অন্যান্য) Delivery fee (Doctor fee, Anesthesia fee etc)	_____
	e. ঔষধ Medicine	_____
	f. হাসপাতাল চার্জ (বেড/ কেবিন চার্জ) Hospital charges (Bed/cabin charge)	_____
	g. হাসপাতালের অন্যান্য খরচ (স্যানিটারী প্যাড, তোয়ালে) Other expenditure in the hospital (e.g. sanitary pad, towels etc)	_____
	h. রক্ত দেয়ার জন্য খরচ Blood	_____
	i. অন্যান্য চিকিৎসা খরচ বাবদ Others, related to treatment	_____
	j. খাবার (মা এর জন্য খরচ) Food cost for pregnant women	_____
	k. বকশিশ/ দালালের খরচ Tips / Broker	_____
	l. অন্যান্য (উপহার / মিষ্টি) Others (gift / sweets)	_____
m. মোট খরচ (টাকায়) Total cost (Tk)	_____	

203 প্রসবকালীন সেবা নিতে সেবা কেন্দ্রে ভর্তি থাকার সময় আপনার সাথে যারা সার্বক্ষণিক অবস্থান করেছিল তাদের তথ্য।
Information about attendants who stayed with the pregnant woman at the health facility

নং Sl no.	মায়ের সাথে সম্পর্ক ^২ Relationship with mother	তার পেশা ^৩ Occupation of the attendant	কতক্ষণ ছিল দিন / ঘন্টা Length of stay Day / hour	সদীর মাসিক আয় (টাকায়) Monthly income (in Tk)	টাকায় খরচ (যাতায়াত, থাকা এবং খাবার) [যাতায়াত / থাকামহিলার সাথে করলে তাদের যাতায়াত তথ্য 0000 দিন] expenditure in Tk (transportation , accommodation , food) [If traveled / stayed with the women then write 0000]		
					যাতায়াত Transport	থাকা Accommodation	খাবার Food
1	_____	_____	_____	_____	_____	_____	_____
2	_____	_____	_____	_____	_____	_____	_____
3	_____	_____	_____	_____	_____	_____	_____

² সম্পর্ক Relation Code স্বামী Husband 1 বাবা/মা Father / Mother 2 স্বস্তর/স্বস্তরী Father / Mother in law 3 বোন Sister 4 ননদ/ভাবী /জা Sister in law 5 ভাই Brother 6 দুলাভাই Brother in law 7 অন্যান্য, নির্দিষ্ট করবে Other, specify 8	^৩ পেশা Occupation code: কৃষিকাজ Farming.....01 দিন মজুর Daily labor.....02 ক্ষেত মজুর Agricultural farmer..03 মাঝি Boatman..... 04 জেলে Fisherman 05 চাকুরী Service holder..... 06 ব্যবসা Business.....07 কুটির শিল্পের কাজ Handicrafts..08	গার্মেন্টস চাকুরী Garments labor..... 09 অন্যের বাড়িতে কাজ Serve other house..... 10 গাড়ি চালক Driver (Bus, truck, taxi)..... 11 গৃহিণী Housewife..... 12 বেকার Unemployed..... 13 অন্যান্য Other, specify..... 14

[বাড়িতে ডেলিভারী হলে সে বিষয়ে প্রশ্ন মা অথবা নির্ভরযোগ্য কাউকে জিজ্ঞেস করুন
Questions for Home delivery (Ask these questions to the household head)]

204 বাড়িতে ডেলিভারীর বিভিন্ন খাতে খরচের বিবরণ Breakdown of the total home delivery cost.	বিভিন্ন খাত Breakdown	খরচ (টাকায়) Spent amount (Tk)
	a. সেবাদানকারীর খরচ (যাতায়াত, ফিস বাবদ, উপহার) Expenditure for TBA / health provider (fee, transport)	_____
	b. ঔষধ Medicines	_____
	c. নিরাপদ ডেলিভারী কিট Safe delivery kit	_____
	d. মার সাথে যে ছিল, তার জন্য মোট খরচ Expenditure to attendant (transport, food)	_____
	e. বকশিশ Tips	_____
	f. অন্যান্য (উপহার সামগ্রী / মিষ্টি ইত্যাদি) Others (Gift / sweets).....	_____
	মোট খরচ (টাকায়) Total cost (Tk)	_____

Section 3: Cost related to routine PNC

- <প্রশিক্ষণ প্রাপ্ত সেবা প্রদানকারীর <সেবা প্রদানকারীর কোড প্রশ্ন E46 এ A থেকে E এর মধ্যে হলে> কাছ থেকে প্রসবপরবর্তী চিকিৎসা নিলে 301 নং প্রশ্ন থেকে জিজ্ঞেস করুন If PNC was taken from any trained provider then ask from 301 question]	Y / N
- <প্রশিক্ষণহীন সেবা প্রদানকারীর <সেবা প্রদানকারীর কোড প্রশ্ন E46 এ F থেকে P এর মধ্যে হলে> কাছ থেকে প্রসবপরবর্তী চিকিৎসা নিলে 306 নং প্রশ্ন থেকে জিজ্ঞেস করুন If PNC was taken from any un trained provider then ask from 306 question]	Y / N
- <নিজে নিজে চিকিৎসা সেবা নিলে <সেবা প্রদানকারীর কোড প্রশ্ন E46 এ Q হলে> 307 নং প্রশ্ন থেকে জিজ্ঞেস করুন IF PNC was taken by herself then ask from 307 question]	Y / N

		প্রসবপরবর্তী সেবা PNC visits			
		1st visit Y / N	2nd visit Y / N	3rd visit Y / N	4th visit Y / N
301 আপনি স্বাস্থ্যকেন্দ্রে যেতে এবং ফিরে আসতে কত টাকা খরচ হয়েছিল? How much money was spent for transportation for each visit?	খরচ (টাকায়) Spent amount (Tk)	Y / N _____	Y / N _____	Y / N _____	Y / N _____
302 <সেবা প্রদানকারীর> দেখানোর কাজ সারতে কত সময় লেগেছিল? (অপেক্ষার সময়ও অন্তর্ভুক্ত করুন) How much time did you need to get this service?	সময় Time				
	ঘণ্টা Hour	____	____	____	____
	মিনিট minute	____	____	____	____
303 সেখানে যাওয়ার পথে অথবা সেখান থেকে ফিরে আসার পথে আপনাকে কোথাও রাত কাটাতে হয়েছিল কি? খাবার অথবা পানীয় কিনে খেতে কত টাকা লেগেছিল? চিকিৎসককে মোট কত টাকা দিয়েছিলেন (ভিজিট)? Did you spend the night away from home either going there or coming back? Did you spend money to buy food/drinks while you were away for the consultation?	রাত কাটাতে খরচ (টাকায়) Hotel cost (Tk)	Y / N _____	Y / N _____	Y / N _____	Y / N _____
	খাবার খরচ (টাকায়) Food cost (Tk)	Y / N _____	Y / N _____	Y / N _____	Y / N _____
	চিকিৎসক ভিজিট (টাকায়) Visit / Fee (Tk)	Y / N _____	Y / N _____	Y / N _____	Y / N _____

		প্রসবপরবর্তী সেবা PNC visits				
		1st visit Y / N	2nd visit Y / N	3rd visit Y / N	4th visit Y / N	
304 রক্ত/মল/মূত্র পরীক্ষা করতে আপনার কোন টাকা খরচ হয়েছিল কি? How much did you spend for blood /stool / urine test?	রক্ত পরীক্ষা (টাকায়) Blood test (Tk)	Y / N [] [] [] []	Y / N [] [] [] []	Y / N [] [] [] []	Y / N [] [] [] []	
	মূত্র পরীক্ষা (টাকায়) Urine test (Tk)	Y / N [] [] [] []	Y / N [] [] [] []	Y / N [] [] [] []	Y / N [] [] [] []	
	মল পরীক্ষা (টাকায়) Stool test (Tk)	Y / N [] [] [] []	Y / N [] [] [] []	Y / N [] [] [] []	Y / N [] [] [] []	
	আলট্রাসোনোগ্রাম (টাকায়) Ultrasograph (Tk)	Y / N [] [] [] []	Y / N [] [] [] []	Y / N [] [] [] []	Y / N [] [] [] []	
305 <সেবা প্রদানকারী> কোন ওষুধের, যেমন বড়ি, সিরাপ, ক্যাপসুল, অথবা ইনজেকশনের ব্যবস্থাপত্র (Prescription) দিয়েছিলেন কি? অথবা ওষুধ ব্যবহার করতে বলেছিলেন কি? কি কি ওষুধ খেয়ে ছিলেন? কি পরিমাণে (কত সিরাপ/বোতল, বড়ি/ টেবলেট, ইনজেকশন, ইত্যাদি)? Did the PROVIDER prescribe any drug e.g. tablet, syrup or injection; or asked to use any? Please tell me which drugs did you take and in which amount (how many bottles, pills, tablets or injections), even if you did not take them.	প্রথম ওষুধ 1 st drug	ওষুধের নাম Drug name				
		ওষুধের ধরন Drug type	[]	[]	[]	[]
		পরিমাণ Quantity				
		টাকা Tk	[] [] [] []	[] [] [] []	[] [] [] []	[] [] [] []
	২য় ওষুধ 2 nd drug	ওষুধের নাম Drug name				
		ওষুধের ধরন Drug type	[]	[]	[]	[]
		পরিমাণ Quantity				
		টাকা Tk	[] [] [] []	[] [] [] []	[] [] [] []	[] [] [] []
[প্রশিক্ষণহীন সেবা প্রদানকারীর কাছ থেকে চিকিৎসা নিলে জিজ্ঞেস করুন If PNC was taken from any un trained provider then ask the following question]						
306 প্রসব পরবর্তী চিকিৎসা সেবার জন্য প্রশিক্ষণহীন সেবা প্রদানকারীর কাছ থেকে আপনি চিকিৎসা নিতে কত টাকা খরচ করেছিলেন? How much did you spend for PNC taking from untrained provider?	যাতায়াত Transport (TK)	Y / N [] [] [] []	Y / N [] [] [] []	Y / N [] [] [] []	Y / N [] [] [] []	
	সেবা প্রদানকারীর ভিজিট (টাকা) Visit / Fee (Tk)	Y / N [] [] [] []	Y / N [] [] [] []	Y / N [] [] [] []	Y / N [] [] [] []	
	ওষুধের খরচ (টাকায়) Medicine (Tk)	Y / N [] [] [] []	Y / N [] [] [] []	Y / N [] [] [] []	Y / N [] [] [] []	
	খরচ টাকা Total cost (Tk)	[] [] [] []	[] [] [] []	[] [] [] []	[] [] [] []	
[নিজে নিজে চিকিৎসা সেবা নিলে 307 নং প্রশ্ন জিজ্ঞেস করুন If PNC was taken by herself then ask 109 question]						
307 প্রসবপরবর্তী চিকিৎসা সেবার জন্য আপনি নিজে নিজে আর কোন ওষুধ (সিরাপ/বোতল, বড়ি/ টেবলেট) নিয়েছিল/ খেয়েছিলেন কি? যদি কোন ওষুধ খেয়ে থাকেন তবে আমাকে বলুন, কত টাকা খরচ করেছিলেন? Did you take any other drugs during pregnancy that were not prescribed by a provider? Please tell me which drugs you taken and in which amount (how many bottles, pills, tablets)?	ওষুধের খরচ (টাকায়) Medicine (Tk)	প্রথম ওষুধ 1 st drug	[] [] [] []	[] [] [] []	[] [] [] []	[] [] [] []
		২য় ওষুধ 2 nd drug	[] [] [] []	[] [] [] []	[] [] [] []	[] [] [] []
		৩য় ওষুধ 3 rd drug	[] [] [] []	[] [] [] []	[] [] [] []	[] [] [] []

Section 4: Cost related to complications

- গর্ভকালীন / প্রসব পরবর্তী জটিলতার জন্য 401 নং প্রশ্ন থেকে জিজ্ঞেস করুন

For pregnancy and delivery complication ask from 401 question] Y / N

	গর্ভকালীন / প্রসবপরবর্তী জটিলতা PNC visit				
	1 st visit	2 nd visit	3 rd visit	4 th visit	
401 গর্ভকালীন / প্রসব পরবর্তী জটিলতার জন্য আপনি স্বাস্থ্যকেন্দ্রে যেতে এবং ফিরে আসতে কত টাকা খরচ হয়েছিল? How much money was spent for transportation for each visit?	খরচ (টাকায়) Spent amount (Tk)	Y / N □ □ □ □	Y / N □ □ □ □	Y / N □ □ □ □	Y / N □ □ □ □
402 <সেবা প্রদানকারী> দেখানোর কাজ সারতে কত সময় লেগেছিল? (অপেক্ষার সময়ও অন্তর্ভুক্ত করুন) How much time did you need to get this service?	ঘন্টা Hour	□ □	□ □	□ □	□ □
	মিনিটে minute	□ □	□ □	□ □	□ □
403 সেখানে যাওয়ার পথে অথবা সেখান থেকে ফিরে আসার পথে আপনাকে কোথাও রাত কাটাতে হয়েছিল কি? খাবার অথবা পানীয় কিনে খেতে কত টাকা লেগেছিল? চিকিৎসককে মোট কত টাকা দিয়েছিলেন (ভিজিট)? Did you spend night away from home either going there or coming back? Did you spend money to buy food/drinks while away for the consultation?	রাত কাটাতে খরচ (টাকায়) Hotel cost (Tk)	Y / N □ □ □ □	Y / N □ □ □ □	Y / N □ □ □ □	Y / N □ □ □ □
	খাবার খরচ (টাকায়) Food cost (Tk)	Y / N □ □ □ □	Y / N □ □ □ □	Y / N □ □ □ □	Y / N □ □ □ □
	চিকিৎসক ভিজিট (টাকায়) Visit / Fee (Tk)	Y / N □ □ □ □	Y / N □ □ □ □	Y / N □ □ □ □	Y / N □ □ □ □
404 রক্ত/মল/মূত্র পরীক্ষা করাতে আপনার কোন টাকা খরচ হয়েছিল কি? How much did you spend for blood / stool / urine test?	রক্ত পরীক্ষা (টাকায়) Blood test (Tk)	Y / N □ □ □ □	Y / N □ □ □ □	Y / N □ □ □ □	Y / N □ □ □ □
	মূত্র পরীক্ষা (টাকায়) Urine test (Tk)	Y / N □ □ □ □	Y / N □ □ □ □	Y / N □ □ □ □	Y / N □ □ □ □
	মল পরীক্ষা (টাকায়) Stool test (Tk)	Y / N □ □ □ □	Y / N □ □ □ □	Y / N □ □ □ □	Y / N □ □ □ □
	আলট্রাসোনোগ্রাম Ultrasograph (Tk)	Y / N □ □ □ □	Y / N □ □ □ □	Y / N □ □ □ □	Y / N □ □ □ □
	অন্যান্য Others	Y / N □ □ □ □	Y / N □ □ □ □	Y / N □ □ □ □	Y / N □ □ □ □
405 <সেবা প্রদানকারী> কোন ওষুধের, যেমন বড়ি, সিরাপ, ক্যাপসুল, অথবা ইনজেকশনের ব্যবস্থাপত্র (Prescription) দিয়েছিলেন কি? অথবা ওষুধ ব্যবহার করতে বলেছিলেন কি? কি কি ওষুধ খেয়ে ছিলেন? কি পরিমাণে (কত সিরাপ/বোতল, বড়ি/টেবলেট, ইনজেকশন, ইত্যাদি)? Did the PROVIDER prescribe any drug e.g. tablet, syrup or injection; or asked to use any? Please tell me which drugs did you take and in which amount (how many bottles, pills, tablets or injections), even if you did not take them.	প্রথম ওষুধ 1 st drug	ওষুধের নাম Drug name	_____	_____	_____
		ওষুধের ধরন Drug type	□ □	□ □	□ □
		পরিমাণ Quantity	_____	_____	_____
		টাকা Tk	□ □ □ □	□ □ □ □	□ □ □ □
	২য় ওষুধ 2 nd drug	ওষুধের নাম Drug name	_____	_____	_____
		ওষুধের ধরন Drug type	□ □	□ □	□ □
		পরিমাণ Quantity	_____	_____	_____
		টাকা Tk	□ □ □ □	□ □ □ □	□ □ □ □

		গর্ভকালীন / প্রসবপরবর্তী জটিলতা PNC visit			
		1 st visit	2 nd visit	3 rd visit	4 th visit
৩য় ওষুধ 3 rd drug	ওষুধের নাম Drug name				
	ওষুধের ধরন Drug type	☐	☐	☐	☐
	পরিমাণ Quantity				
	টাকা Tk				

406 গর্ভকালীন/ প্রসবপরবর্তী জটিলতার জন্য সেবা কেন্দ্রে ভর্তি থাকার সময় আপনার সাথে যারা সার্বক্ষণিক অবস্থান করেছিল তাদের তথ্য।
Information about attendants who stayed with the pregnant women at the health facility

নং Sl no.	মায়ের সাথে সম্পর্ক Relationship with mother	তার পেশা Occupation of the attendant	কতক্ষন ছিল দিন / ঘন্টা Length of stay Day / hour	সঙ্গীর মাসিক আয় (টাকায়) Monthly income (in Tk)	টাকায় খরচ (যাতায়াত, থাকা এবং খাবার) [যাতায়াত / থাকামহিলার সাথে করলে তাদের যাতায়াত তথ্য ০০০০ দিন] expenditure in Tk (transportation , accommodation , food) [If traveled / stayed with the women then write 0000]		
					যাতায়াত Transport	থাকা Accommodation	খাবার Food
1	☐	☐	☐	☐	☐	☐	☐
2	☐	☐	☐	☐	☐	☐	☐
3	☐	☐	☐	☐	☐	☐	☐

তথ্যসংগ্রহকারীর জন্য নির্দেশিকা Instruction for interviewer: **CHECK Questions**

407	মহিলার সাথে বর্তমানে এমন কোন সন্তান বাস করে যাহার, ১ লা জানুয়ারী ২০১২ সাল বা তার পরে জন্ম (Q. C11 / Q.C16 -এ '1' বৃত্তায়িত)? Is there any child born since 01-January-2012 currently live with the mother ('1' circled either in Q. C11 or Q. C16)?	হ্যাঁ Yes 1 না No..... 2	→ Module IV
408	উত্তর দাতাকে ধন্যবাদ জানিয়ে সাক্ষাৎকার শেষ করুন। Thanks the mother for providing time and end the interview.		

Module IV

Child module

Endline KPC Survey 2014

Name	Code	
CLUSTER/UNION		সাক্ষাৎকার শুরু হবার সময়: ____:____
UPAZILA		
VILLAGE		সাক্ষাৎকার শেষ করার সময়: ____:____
HOUSEHOLD ID		
WOMEN ID		

Section G: Child Section

১ লা জানুয়ারী ২০১২ সাল বা তার পরে জন্ম নেয়া এবং সাথে থাকে এমন শিশুর জন্য মাকে এই প্রশ্নগুলো করতে হবে।

All questions are to be addressed to mothers with a child born since 01-January-2012 and live with mother

No.	Questions And Filters	Coding Categories	Skip
	Breast feeding/ Infant and young child feeding		
G01	আপনার সর্বশেষ বাচ্চার অর্থাৎ সবচেয়ে ছোট জীবিত বাচ্চা, যে আপনার সাথে থাকে, তার নাম কি, লিঙ্গ কি এবং তার জন্ম তারিখ কত? What is the name, sex, date of birth of your youngest child that you gave birth to and that is still alive and live with you?	সর্বশেষ বাচ্চা Youngest Child নাম Name _____ লিঙ্গ Sex ছেলে Male 1 মেয়ে Female 2 জন্ম তারিখ _____ Date of birth _____ দিন _____ মাস _____ বছর	
G02	(নাম) কে কখনও বুকের দুধ খাইয়েছিলেন কি? Did you ever breastfed (NAME)?	হ্যাঁ Yes 1 না No 2	→ G04
G03	জন্মের কতক্ষণ পর (নাম)-কে প্রথম বুকের দুধ দিতে শুরু করেছিলেন? [জন্মের 1 ঘন্টার মধ্যে হলে 000 বৃত্তায়িত করুন। 24 ঘন্টার মধ্যে হলে 1 বৃত্তায়িত করে বাক্সে সঠিক ঘন্টা লিখুন। 24 ঘন্টা বা তার অধিক হলে কোড 2 বৃত্তায়িত করে উত্তর দিনে লিখুন।] How long after birth did you first put (NAME) to the breast? [If less than 1 hour circle 00, if less than 24 hours circle 1 and record hours, if more than 24 hours circle 2 and record days.]	জন্মের পর পর Immediately 000 ঘন্টা Hours 1 _____ দিন Days 2 _____ জানি না/ মনে নাই Don't know/can't remember 999	
G04	(নাম)-কে জন্মের পর শাল দুধ খাওয়ানো হয়েছিল কি? Did you give (NAME) the first milk (Colostrum) that came from your breast?	হ্যাঁ Yes 1 না No 2 জানি না/ মনে নাই Don't know/Can't remember 9	
G05	জন্মের তিন দিনের মধ্যে (নাম)-কে বুকের দুধ ছাড়া অন্য কোন খাবার বা তরল খাওয়ানো হয়েছিল কি? In the first three days after delivery was (NAME) given anything to drink other than breast milk?	হ্যাঁ Yes 1 না No 2 জানি না/ মনে নাই Don't know/Can't remember 9	→ G07 → G07

No.	Questions And Filters	Coding Categories	Skip
G06	জন্মের তিন দিনের মধ্যে (নাম)-কে বুকের দুধ ছাড়া অন্য কি খাবার বা তরল (নাম)-কে খাওয়ানো হয়েছিল? What was (NAME) given to drink in the first three days after birth? Ask: Anything else? Record all liquids mentioned.	দুধ, বুকের দুধ ছাড়া অন্য দুধ Milk other than breast milk A শুধু পানি Plain water B চিনির পানি Sugar/glucose water C গ্রাইপ ওয়াটার Gripe water D চিনি লবনের শরবত Sugar-salt-water solution..... E ফলের রস Fruit juice..... F টিনজাত দুধ/শিশু খাদ্য (বেবী ফর্মুলা) Infant formula G চা Tea..... H মধু Honey..... I অন্যান্য Other X (নির্দিষ্ট করুন)	
G07	শিশুকে গত 24 ঘন্টার মধ্যে বুকের দুধ ছাড়া অন্য কোন খাবার বা পানীয় খাওয়ানো হয়েছে কি? Did you give (Name) anything else to drink or eat beside breast milk in the last 24 hours?	হ্যাঁ Yes 1 না No 2	→ G10
G08	(নাম) গত 24 ঘন্টার মধ্যে যে পানীয় ও খাবার খেয়েছে এখন সেগুলোর ব্যাপারে কিছু জানতে চাই। যদি এগুলো অন্যান্য খাবারের সাথে দেয়া হয়, তা হলেও আমি তা জানতে চাই। (নাম) _____ খেয়েছিল কি? (নিচের লিস্ট থেকে গড়ে তুলুন) বুকের দুধ দিয়ে শুরু করুন। [প্রতিটির জন্য ডান পাশে প্রযোজ্য কোড বৃত্তায়িত করুন] Now I would like to ask about the food that you gave (Name) to drink or eat in the last 24 hours? [Readout from the list provided below and for each circle the appropriate code. Start with breast milk]	Yes No DK A. বুকের দুধ Breast milk..... 1 2 9 B. শুধু পানি Plain water..... 1 2 9 GROUP 1: DAIRY C. ছোট বাচ্চাদের জন্য কোটার/ টিনের দুধ Commercially produced infant formula 1 2 9 D. দুধ যেমন, টিনজাত/ পাউডার/তাজা দুধ Tinned, powdered, or fresh animal milk..... 1 2 9 E. পনির, দই, অথবা অন্যকোন দুগ্ধজাত সামগ্রী Cheese, yogurt, or other milk products..... 1 2 9 GROUP 2: GRAIN F. শিশু খাদ্য, যেমন সেরেলাক Any fortified, commercially available infant and young Child food (e.g. Cerelac)? 1 2 9 G. সাবু অথবা লেই/লোদ Any (other) porridge or gruel?..... 1 2 9 H. রুটি, ভাত, নুডলস, অথবা ধান/ গম হতে প্রস্তুত খাদ্য Bread, rice, noodles, or other foods made from grains 1 2 9 I. আলু অথবা আলু/কন্দ হতে প্রস্তুত খাদ্য White potatoes, or any other foods made from roots..... 1 2 9 GROUP 3: VITAMIN A RICH VEGETABLES J. কুমড়া, গাজর, অথবা মিষ্টি আলু যা ভিতরে হলুদ অথবা কমলা Pumpkin, carrots, squash, or sweet potatoes that are yellow or orange inside 1 2 9 K. গাঢ় সবুজ পাতায়ুক্ত শাক-সবজী Any dark green leafy vegetables 1 2 9 L. পাকা আম, পেপে Ripe mangoes, papayas 1 2 9 GROUP 4: OTHER FRUITS/VEGETABLES M. অন্যকোন ফল অথবা সবজী যেমন কমলা, আঙ্গুর অথবা আনারস ইত্যাদি Any other fruits or vegetables like oranges, grapefruit or pineapple?..... 1 2 9	

No.	Questions And Filters	Coding Categories	Skip
	GROUP 5: EGGS N. ডিম Eggs 1 2 9 GROUP 6: MEAT, POULTRY, FISH O. যকৃত, বৃক্ক, হৃদপিণ্ড অথবা অন্য কোন অঙ্গ Liver, kidney, heart or other organ meats?... 1 2 9 P. কোন মাংস যেমন গরু, শূকর, ভেড়া, খাশী, মুরগী অথবা হাঁস Any meat, such as beef, pork, lamb, goat, chicken, or duck? 1 2 9 Q. তাজা অথবা শুকনো মাছ Fresh or dried fish ? 1 2 9 GROUP 7: LEGUMES/NUTS R. সীম, মটর, ডাল অথবা বাদাম জাতীয় খাবার Any foods made from beans, peas, lentils, or nuts? 1 2 9 GROUP 8: OILS/FATS S. তেল, চর্বি, মাখন/ঘি দ্বারা তৈরী খাবার Foods made with oils, fats, or butter? 1 2 9 GROUP 9: OTHER FOODS T. চা অথবা কফি Tea or coffee? 1 2 9 U. অন্য কোন তরল Any other liquids? 1 2 9 V. কোন চিনি জাতীয় খাবার যেমন চকলেট, লজেন্স, মিষ্টি, প্যাস্ট্রী, কেক, বিস্কুট Any Sugary foods, such as chocolates, candy, sweets, pastries, cakes, or biscuits? 1 2 9 W. আর কোন শক্ত অথবা নরম খাবার Any other solid or soft food? 1 2 9		
G09	গত 24 ঘন্টায় শিশুকে বুকের দুধ ছাড়া মোট কতবার শক্ত বা আধা শক্ত খাবার খেয়েছে ? (7 বার বা তার অধিকবার হলে বক্সে 7 লিখুন, উত্তর না হলে অর্থাৎ না খাওয়ালে বক্সে 0 লিখুন) How many times did (Name) eat solid, semi-solid, liquid food other than breast milk in last 24 hours? [IF 7 OR MORE TIMES , RECORD 7 IF NONE , RECORD 0]	24 ঘন্টায় শক্ত বা আধা শক্ত খাবার বার Solid or semisolid food in 24 hours, times	
	Vitamin A supplementation		
G10	(নাম) কে কি কখনও ভিটামিন 'এ' ক্যাপসুল খাওয়ানো হয়েছিল? (ভিটামিন 'এ' ক্যাপসুল দেখান) Has (Name) ever received a Vitamin A dose (like this/any of these)? SHOW COMMON TYPES OF CAPSULES	হ্যাঁ (Yes) 1 না (No) 2 জানা নাই/মনে নাই DK/can't remember 9	→ G12 → G12
G11	গত 6 মাসের মধ্যে <নাম>-কে কি এ ধরনের ভিটামিন 'এ' ক্যাপসুল খাওয়ানো হয়েছিলো? Did (Name) receive a Vitamin A dose within the last 6 months?	হ্যাঁ (Yes) 1 না (No) 2 জানা নাই/মনে নাই DK/can't remember 9	
	Child Immunizations		
G12	(নাম) এর টিকা কার্ড আছে? হ্যাঁ হলে, জিজ্ঞাসা করুন: আমি কি কার্ডটি দেখতে পারি? Is there a vaccination card for (NAME)? IF 'YES' ASK 'May I see it please	কার্ড দেখিয়েছেন YES, vaccination card seen by interviewer 1 কার্ড দেখাতে পারেননি (হারিয়ে গেছে/ অন্য কোন খানে/বাড়িতে নেই not available (lost/misplaced, not in home) 2 কখনও কার্ড ছিলনা never had a card 3	→ G15 → G15

No.	Questions And Filters	Coding Categories			Skip							
		দিন Day	মাস Month	বছর Year								
G13	টিকা কার্ড হতে ডিপিটি ১/পেন্টা ১, ডিপিটি ৩/পেন্টা ৩, হাম এবং ভিটামিন 'এ' টিকা প্রাপ্তির তারিখগুলো এখানে লিখুন। যদি টিকার কার্ডে তারিখ লেখা না থাকে তাহলে 99/99/9999 লিখুন Copy vaccination date for Vitamin-A, DPT1/Penta1, DPT3/Penta3 and measles from the card. If vaccines are not recorded in child health card or booklet, fill in 99/99/9999.	ডিপিটি ১ DPT 1	-	|	|	-	|	|	|	|	|	|
		ডিপিটি ৩ DPT 3	-	|	|	-	|	|	|	|	|	|
		অথবা OR										
		পেন্টা ১ Penta 1	-	|	|	-	|	|	|	|	|	|
		পেন্টা ৩ Penta 3	-	|	|	-	|	|	|	|	|	|
		হাম Measles	-	|	|	-	|	|	|	|	|	|
		ভিটামিন 'এ' Vit-A	-	|	|	-	|	|	|	|	|	|
G14	টিকা কার্ডে লেখা টিকাগুলোর বাইরে (নাম) কি আর কোন টিকা পেয়েছিলো, এমনকি টিকা ক্যাম্পেইনে প্রাপ্ত টিকাও? Has (NAME) received any vaccinations that are not recorded on this card, including vaccinations given during immunization campaigns?	হ্যাঁ (Yes).....	1									
		না (No).....	2									
		জানা নাই/মনে নাই DK/can't remember.....	9									
G15	(নাম) -কে কি DPT/Penta টিকা দেয়া হয়েছিল, অর্থাৎ যে ইনজেকশন উরুর মাংস পেশীতে দেয়া হয় এবং মাঝে মাঝে পোলিও ড্রপের সাথে একই সময়ে দেয়া হয়? Has (NAME) received "DPT/Penta vaccination injections" – that is, an injection given in the thigh, sometimes at the same time as polio drops?	হ্যাঁ (Yes).....	1									
		না (No).....	2									
		জানা নাই/মনে নাই DK/can't remember.....	9									
G16	কত বার How many times?	বার number of times.....	|	|								
G17	<নাম> -কে কি হাম প্রতিরোধের জন্য কোনো টিকা টিকা দেয়া হয়েছিল যা 9 মাস বা তার বেশি বয়সী শিশুদের হাতে দেয়া হয়? Did (NAME) ever receive an injections in the arm at the age of 9 months or older - to prevent him/her from getting measles?	হ্যাঁ (Yes).....	1									
		না (No).....	2									
		জানা নাই/মনে নাই DK/can't remember.....	9									
G18	<নাম> কে কি কখনও কৃমির ঔষধ খাওয়ানো হয়েছিল? [নমুনা দেখান] Has <NAME> ever received De-Worming Tablet like this one? [Show a sample of tablet]	হ্যাঁ Yes.....	1									
		না No.....	2									
		জানি না/মনে নাই Don't know/CR.....	9									
G19	গত 6 মাসে <নাম> কে কি কৃমির ঔষধ খাওয়ানো হয়েছিল? Did <NAME> receive De-worming tablet in the last 6 months?	হ্যাঁ Yes.....	1									
		না No.....	2									
		জানি না/মনে নাই Don't know/CR.....	9									
Two Weeks Morbidity Module												
Malaria – treatment of fever of child												
G20	গত দুই সপ্তাহে কখনও কি (নাম) অসুস্থ হয়েছিল যাতে তার জ্বর হয়েছিল? Has (Name) been ill with fever at any time in the last 2 weeks?	হ্যাঁ (Yes).....	1									
		না (No).....	2									
		জানা নাই/মনে নাই DK/can't remember.....	9									
G21	<নাম> এর যখন জ্বর ছিল, আপনি তখন তার কোন চিকিৎসা করিয়েছেন / চিকিৎসা সেবা নিয়েছিলেন? Did you seek advice or treatment for the fever?	হ্যাঁ (Yes).....	1									
		না (No).....	2									

No.	Questions And Filters	Coding Categories	Skip
G22	<নাম> এর জ্বর হবার কতদিন পর আপনি প্রথমবারের মত ঐ জ্বরের জন্য চিকিৎসা নিতে গিয়েছিলেন? How many days after the fever began did you first seek treatment for (Name)?	ঐদিনই Same day..... 0 পরের দিন Next day 1 দুই দিন বা তারও পরে Two or more days later 2	
G23	জ্বর নিরূপনের ক্ষেত্রে ম্যালেরিয়ার জন্য বিশেষ দ্রুত সনাক্তকারী পরীক্ষা (রেপিড ডায়াগনস্টিক টেস্ট) বা অন্য কোন পরীক্ষা করিয়েছিলেন কি? Did you do Rapid Diagnostic Test for malaria or any other test to diagnose the fever?	হ্যাঁ (Yes)..... 1 পরীক্ষার নাম _____ না (No)..... 2 জানা নাই/মনে নাই DK/can't remember..... 9	
G24	অসুস্থতার সময়ে (নাম) কি জ্বরের জন্য কোন ঔষধ খেয়েছিল? At any time during the illness did (Name) take any drugs for the fever?	হ্যাঁ (Yes)..... 1 না (No)..... 2 জানা নাই/মনে নাই DK/can't remember..... 9	→ G26 → G26
G25	অসুস্থতার সময়ে (নাম) জ্বরের জন্য কি ঔষধ খেয়েছিল? [জিজ্ঞাস করুন] অন্য কোন ঔষধ? মহিলার নিজে থেকে দেয়া সবগুলো উত্তরই বৃত্তায়িত করুন। কি ঔষধ খেয়েছে বলতে না পারলে ঔষধটি দেখতে চান। এইভাবেও ঔষধটি জানতে না পারলে উত্তরদাতাকে ম্যালেরিয়ার ঔষধ দেখান। প্রতিটি ম্যালেরিয়ার ঔষধের ক্ষেত্রে জিজ্ঞাসা করুন জ্বর শুরু হওয়ার কত সময় পর থেকে (নাম) ঔষধ খাওয়া শুরু করেছিল? অতপর উপযুক্ত কোড বৃত্তায়িত করুন: ঐদিনই হলে 0, পরের দিন হলে 1, দুই দিন বা তারও পরে হলে 2 প্রযোজ্য নয় হলে 8 এবং জানিনা বললে 9 বৃত্তায়িত করুন What drugs did (Name) take? Any other drugs? RECORD ALL MENTIONED. Ask to see drug(s) if type of drug is not known. if type of drug is still not determined, show typical antimalarial drugs to respondent For each antimalarial medicine ask: how long after the fever started did (name) start taking the medicine? CIRCLE THE APPROPRIATE CODES: Same day = 0 Next day after the fever = 1 Two or more days after the fever = 2 Not applicable = 8 Don't know = 9	ম্যালেরিয়া প্রতিষেধক Anti-Malarial ফেনসিডার SP/Fansidar 0 1 2 8 9 ক্লোরোকুইন Chloroquine 0 1 2 8 9 এমোডিয়াকুইন Amodiaquine 0 1 2 8 9 কুইনাইন Quinine 0 1 2 8 9 আরটেমিসিনি কম্বিনেশন থেরাপী ACT 0 1 2 8 9 কালাজ্বরের ঔষধ Anti Kalazar 0 1 2 8 9 অন্যান্য ঔষধ Other Drugs এসপিরিন Aspirin 0 1 2 8 9 প্যারাসিটামল Paracetamol 0 1 2 8 9 অন্যান্য Other 0 1 2 8 9	
Control of Diarrhoea			
G26	গত দুই সপ্তাহে কখনও কি (নাম) এর ডায়রিয়া হয়েছিল? Has (Name) had diarrhoea in the last two weeks?	হ্যাঁ (Yes)..... 1 না (No)..... 2 জানা নাই/মনে নাই DK/can't remember..... 9	→ G29 → G29

No.	Questions And Filters	Coding Categories	Skip
G27	এই ডায়রিয়ার সময় আপনি <নাম> -কে কখনও নিম্নলিখিত খাবার/পানীয় গুলো খাইয়েছিলেন কি? উত্তরগুলো পড়ে শুনাবেন প্যাকেট স্যালাইন ? বাসায় বানানো স্যালাইন ? চালের গুড়ার স্যালাইন ? চিড়ার পানি, ভাতের মাড় ? জিংক ট্যাবলেট? জিংক সিরাপ? Was s/he given any of the following to drink at any time since s/he started having diarrhoea: READ CHOICES ALOUD: -A fluid made from a special packet called (local name for ORS packet)? -Homemade sugar-salt-water solution (Laban gur)? -Rice Saline? -Government recommended homemade fluid? -Zinc tablet? -Zinc syrup? SHOW LOCALLY AVAILABLE ORS PACKAGE OR PICTURE.	YES NO DK প্যাকেট স্যালাইন ORS packet..... 1..... 2..... 9 ↓ ↓ →→→→→ লবন গুড়ের স্যালাইন Salt-sugar-water fluid 1..... 2..... 9 চালের গুড়ার স্যালাইন Rice saline..... 1..... 2..... 9 চিড়ার পানি, ভাতের মাড়, ভাবের পানি Recommended homemade fluid 1..... 2..... 9 জিংক ট্যাবলেট Zinc tablets 1..... 2..... 9 জিংক সিরাপ Zinc syrup 1..... 2..... 9	→ G29 → G29 → G29 → G29 → G29 → G29
G28	আপনি কোথা থেকে/ কার কাছ থেকে ORS স্যালাইনের প্যাকেট সংগ্রহ করেছিলেন? Fromwhere/ whom did you get the ORS packet?	স্বাস্থ্য কেন্দ্র Health facility A কমিউনিটি স্বাস্থ্য কর্মী (স্বাস্থ্য সহকারী/পরিবার কল্যাণ সহকারী/এনজিও স্বাস্থ্য কর্মী) Community based health worker (HA/FWA/NGO health worker) B ঔষধের দোকান / অন্য কোন দোকান (Allopath drug store/ Shop)..... C কমিউনিটি সদস্য (পুষ্টি কর্মী/ সুসমা সেচ্ছাসেবী) Community member (NNP worker, Sushoma volunteer)..... D অন্যান্য Others X (নির্দিষ্ট করুন) জানা নাই/মনে নাই DK/can't remember Z	
ARI/Pneumonia			
G29	গত দুই সপ্তাহে কখনও কি (নাম) এর ঠাণ্ডা- কাশি ছিল? Has (Name) had cough and cold in last two weeks?	হ্যাঁ (Yes)..... 1 না (No) 2 জানা নাই/মনে নাই DK/can't remember..... 9	→ G34 → G34
G30	(নাম) এর যখন কাশি ছিল তখন তার কি শ্বাস-কষ্ট বা দ্রুত শ্বাস-প্রশ্বাস হয়েছিল? When (Name) had an illness with a cough, did he/she have trouble breathing or breathe faster than usual with short, fast breaths?	হ্যাঁ (Yes)..... 1 না (No) 2 জানা নাই/মনে নাই DK/can't remember..... 9	
G31	এটি কি তার বুকের কোন সমস্যার জন্য হয়েছে/হয়েছিল না কি তার নাক বন্ধ থাকার কারণে হয়েছে/হয়েছিল? Were the symptoms due to a problem in the chest or a blocked nose?	বুকের সমস্যার জন্য for Chest Problems 1 বন্ধ নাকের জন্য for Blocked nose..... 2 উভয় Both..... 3 অন্যান্য Others 7 (নির্দিষ্ট করুন) জানেন না Don't know..... 9	

No.	Questions And Filters	Coding Categories	Skip
G38	এই অসুখ বা স্বাস্থ্য সমস্যার জন্য কোথা থেকে পরামর্শ বা চিকিৎসা নিয়েছেন/ চিকিৎসা কয়েছিলেন? [মহিলাকে জিজ্ঞেস করুন] আরও কোথাও? [মহিলার নিজে থেকে দেয়া সবগুলো উত্তরই বৃত্তায়িত করুন। উত্তরগুলো পড়ে শুনাবেন না। একাধিক উত্তর হতে পারে।] [মহিলা যেখান থেকে সেবা পেয়েছেন, সেই স্বাস্থ্যকেন্দ্রের নাম লিখুন। যদি একাধিক জায়গা থেকে সেবা নিয়ে থাকেন, তাহলে সবগুলো জায়গারই নাম এবং কোড লিখুন।] Code : [] নাম Name: [] Code : [] নাম Name: [] Code : [] নাম Name: [] From where did you seek advice or treatment for the illness? Do not read out the answers. Ask: Anything else? Circle all the answers	<u>সরকারী স্বাস্থ্য কেন্দ্র (Govt Health center)</u> মেডিকেল কলেজ হাসপাতাল (Medical College Hospital)....A জেলা/সদর হাসপাতাল (District /Sadar Hospital).....B মা ও শিশু স্বাস্থ্য কেন্দ্র (MCWC).....C উপজেলা স্বাস্থ্য কমপে- ব্র (UHC).....D ইউনিয়ন স্বাস্থ্য ও পরিবার কল্যাণ কেন্দ্র/সাব সেন্টার/আরডি (FWC/SC/RD).....E কমিউনিটি ক্লিনিক (Community clinic).....F সেটেলাইট ক্লিনিক/ ইপিআই কেন্দ্র (Satellite clinic/EPI centre).....G অন্যান্য সরকারী স্বাস্থ্য কেন্দ্র (Other Govt Health facility) ..H <u>বেসরকারী স্বাস্থ্য কেন্দ্র (Non Govt Health center)</u> এনজিও হাসপাতাল (NGO hospital) I এনজিও স্থায়ী স্বাস্থ্য কেন্দ্র (NGO static health centre) J এনজিও সেটেলাইট ক্লিনিক (NGO satellite clinic).....K পুষ্টি কেন্দ্র (NNP centre).....L অন্যান্য বেসরকারী স্বাস্থ্য কেন্দ্র (Other NGO Health facility).....M <u>প্রাইভেট (Private Health sector)</u> হাসপাতাল/ ক্লিনিক (Hospital/clinic).....N স্বাস্থ্য কেন্দ্র/ডিসপেনসারী (Health centre/Dispensary) O এমবিবিএস ডাক্তারের চেম্বার (MBBS doctor's chamber) ...P গ্রাম ডাক্তারের চেম্বার (Village doctor's chamber).....Q প্যারামেডিক/মেডিকেল এসিস্টেন্ট/সাকমোর চেম্বার (Paramedic/MA/SACMO chamber).....R এলোপ্যাথী ঔষধের দোকান (Allopath drug store) S অন্যান্য প্রাইভেট স্বাস্থ্য কেন্দ্র (Other private Health facility)T <u>বাড়ী (Home)</u> নিজ বাড়ী, স্বামী/স্বশুড় বাড়ী (Own home, husband/father in laws house) U বাবার বাড়ী (My natal home) V অন্যান্য (Others X (নির্দিষ্ট করুন) জানি না/মনে নাই Don't know/can't remember Z	
Feeding during illness episodes			
G39	<নাম> -এর যখন অসুখ চলছিল, সে কি তখন স্বাভাবিকের তুলনায় অনেক কম তরল/পানীয় (বুকের দুধ বা অন্য দুধ সহ) খেয়েছিল, নাকি স্বাভাবিকের তুলনায় বেশি খেয়েছিল, নাকি মোটামুটি স্বাভাবিক পরিমাণেই খেয়েছিল? যদি কম হয় তাহলে জিজ্ঞাসা করুন: কিছু কম নাকি বেশী কম? During (NAME'S) illness, did he/she drink (including breastmilk/ other milk) much less, about the same, or more than usual? IF LESS, PROBE: Was he/she offered much less than usual to drink or somewhat less?	কিছুই না Nothing 1 স্বাভাবিকের তুলনায় অনেক কম Much less 2 স্বাভাবিকের তুলনায় কিছু কম Less than normal 3 মোটামুটি স্বাভাবিকের পরিমাণে About the same 4 স্বাভাবিকের তুলনায় বেশি More than normal 5 অসুস্থ ছিলনা Was not sick..... 6 জানেন না Doesn't know 9	→ G41

No.	Questions And Filters	Coding Categories	Skip
G40	<নাম> -এর যখন অসুখ চলছিল, সে কি তখন স্বাভাবিকের তুলনায় অনেক কম খাবার (বুকের দুধ বা অন্য দুধ সহ) খেয়েছিল, নাকি স্বাভাবিকের তুলনায় বেশি খেয়েছিল, নাকি মোটামুটি স্বাভাবিক পরিমাণেই খেয়েছিল? যদি কম হয় তাহলে জিজ্ঞাসা করুন: কিছু কম নাকি বেশী কম? When (NAME) had diarrhoea, did he/she eat (including breastmilk/ other milk) less, about the same, or more food than usual? IF LESS, PROBE: Much less or a little less?	কিছুই না Nothing 1 স্বাভাবিকের তুলনায় অনেক কম Much less 2 স্বাভাবিকের তুলনায় কিছু কম Less than normal 3 মোটামুটি স্বাভাবিকের পরিমাণে About the same 4 স্বাভাবিকের তুলনায় বেশি More than normal 5 জানেন না Doesn't know 9	
Water and sanitation			
G41	আপনি পান করার জন্য নিরাপদ পানি পাওয়ার ক্ষেত্রে কোন ব্যবস্থা গ্রহণ করেন কি? Do you treat your water in any way to make it safe for drinking?	হ্যাঁ (Yes)..... 1 না (No) 2	→ G43
G42	হ্যাঁ হলে, নিরাপদ পানি পাওয়ার ক্ষেত্রে আপনি কি ব্যবস্থা গ্রহণ করেন? [একাধিক উত্তর হতে পারে] If yes, what do you usually do to the water to make it safer to drink? Only check more than one response if several methods are usually used together, for example, cloth filtration and chlorine.	থিতানো Let it stand and settle/sedimentation A কাপড় দিয়ে ছাকি Strain it through cloth..... B সিদ্ধ করি Boil..... C বিচ/ক্লোরিন দেই add bleach/chlorine..... D ফিল্টার করি water filter (ceramic, sand, composite) . E সৌরতাপ দেই solar disinfection..... F অন্যান্য Others X (নির্দিষ্ট করুন) জানিনা don't know Z	
G43	আপনি সাধারণত কোথায় হাত ধোঁত করেন এবং হাত ধোয়ার ক্ষেত্রে আপনি কি ব্যবহার করেন তা আমাকে দেখাবেন কি? নিজে লক্ষ্য করুন Can you show me where you usually wash your hands and what you use to wash hands? ASK TO SEE AND OBSERVE	শৌচাগারের ভিতরে/কাছাকাছি Inside/Near Toilet Facility..... 1 রান্নাঘরের ভিতরে/কাছাকাছি Inside/Near Kitchen/Cooking Place..... 2 উঠানের কোন এক স্থানে elsewhere in yard 3 উঠানের বাইরে outside yard..... 4 নির্দিষ্ট কোন স্থান নেই no specific place..... 5 দেখার অনুমতি দেয়া হয়নি no permission to see 8	→ G45 → G45
G44	লক্ষ্য করুন: সাবান বা ডিটারজেন্ট পাইডার বা স্থানীয় কোন পরিষ্কারক আছে কিনা? এই পরিষ্কারক উপাদানগুলো হাত ধোয়ার স্থানে থাকতে হবে অথবা দেখতে চাওয়ার এক মিনিটের মধ্যে উত্তরদাতাকে উপস্থিত করতে পারতে হবে। এক মিনিটের মধ্যে দেখাতে না পারলে 5 বৃত্তায়িত করুন। OBSERVATION ONLY: IS THERE SOAP OR DETERGENT OR LOCALLY USED CLEANSING AGENT? This item should be either in place or brought by the interviewee within one minute. if the item is not present within one minute CIRCLE 5, even if brought out later.	সাবান Soap..... 1 ডিটারজেন্ট পাইডার Detergent..... 2 ছাই Ash..... 3 কাদামাটি / বালি mud/sand..... 4 কিছুইনা None..... 5 অন্যান্য Other 7 (নির্দিষ্ট করুন)	
Malaria ITN use			
G45	আপনাদের খানায় কোন মশারি আছে কি যা ঘুমের সময় ব্যবহার করা হয়? Does your household have any mosquito nets that can be used while sleeping?	হ্যাঁ (Yes)..... 1 না (No) 2	→ G50

No.	Questions And Filters	Coding Categories	Skip
G46	মশারিটি কোথা থেকে পেয়েছেন/ যোগাড় করেছেন? From where was this mosquito net obtained?	দোকান থেকে কিনেছি Bought from shop 1 স্বাস্থ্য কেন্দ্র/ডিসপেনসারী/ হাসপাতাল Health centre, dispensary or hospital..... 2 বাড়িতে দিয়ে গিয়েছে Distributed at home 3 অন্যান্য (Others) 7 (নির্দিষ্ট করুন) জানি না Don't know/can't remember 9	
G47	গত রাতে কে কে মশারির ভিতর ঘুমিয়েছিল? (নাম) ছাড়া অন্য কেউ ঘুমিয়ে থাকলে কোড 2 বৃত্তায়িত করুন। Who slept under a bed net last night? If anyone other than the child is mentioned, record other.	কেউ না no one 0 <নাম> child (NAME) 1 অন্যান্য other 2	→ G50 → G50
G48	যে মশারিটির ভিতরে (নাম) গতরাতে ঘুমিয়েছিল সেই মশারিটি কখনো কোন কীটনাশকে চুবানো হয়েছিল কি? Was the bed net that (Name) slept under last night ever soaked or dipped in a liquid treated to repel mosquitoes or bugs?	হ্যাঁ Yes..... 1 না No 2 জানি না/মনে নাই Don't know/CR..... 9	→ G50 → G50
G49	মশারিটি সর্বশেষ কবে কীটনাশকে চুবানো হয়েছিল? [1 মাস পুরা না হলে 00 লিখুন, 2 বছরের কম হলে মাসে রেকর্ড করুন, যদি 12 মাস বা 1 বছর আগে হয়ে থাকে তাহলে ভালভাবে জিজ্ঞাসা করে সঠিক মাসের সংখ্যা লিখুন] How long ago was the net last soaked or dipped in a liquid treated to repel mosquitoes or bugs? If less than 1 month ago, record 00 months. if less than 2 years ago, record months ago. if 12 months ago or 1 year ago, probe for exact number of months.	মাস আগে Months ago 2 বছরের বেশী more than 2 years ago..... 95 জানা নাই don't know 99	
HIV AIDS			
G50	এখন আমি অন্য কিছু বিষয় নিয়ে আলোচনা করতে চাই। আপনি কি এইডস নামের কোন অসুখের কথা শুনেছেন? Now I would like to talk about something else. Have you ever heard of an illness called AIDS?	হ্যাঁ Yes..... 1 না No..... 2 জানি না/মনে নাই Don't know/CR..... 9	→ G52 → G52
G51	একজন মানুষ কিভাবে এইডস রোগে আক্রান্ত হতে পারে? [মহিলাকে জিজ্ঞেস করুন] আর কিভাবে? [মহিলার নিজে থেকে দেয়া সবগুলো উত্তরই বৃত্তায়িত করুন। উত্তরগুলো পড়ে শুনাবেন না। একাধিক উত্তর হতে পারে।] How one can get AIDS? Do not read out the answers. Ask: Anything else?	একজন এইডস আক্রান্ত ব্যক্তির সাথে যৌন সম্পর্ক স্থাপন করলে Having sex with an infected sex partner A মশার কামড়ের মাধ্যমে Mosquito bites B আক্রান্ত ব্যক্তির সাথে খাবার খেলে Sharing food C আক্রান্ত ব্যক্তির জিনিষপত্র ব্যবহার করলে Sharing common utensils D আক্রান্ত ব্যক্তির শৌচাগার ব্যবহার করলে Sharing toilet ... E আক্রান্ত ব্যক্তি যে পুকুরে গোসল করে সেই একই পুকুরে গোসল করলে Bathing at common pond F অনিরাপদ সিরিঞ্জ বা সূঁচ ব্যবহার করলে Using unsterilized syringe or needles G অনিরাপদ রক্ত সঞ্চালনের মাধ্যমে Through unsafe blood transfusion..... H এইডস আক্রান্ত মা থেকে বাচ্চাতে From mother to child . I অন্যান্য [নির্দিষ্ট করুন] Others (specify) X1 অন্যান্য [নির্দিষ্ট করুন] Others (specify) X2 জানি না/মনে নাই Don't know/CR..... Z	

No.	Questions And Filters	Coding Categories	Skip
G52	এইডস রোগের ভাইরাস কি _____ একজন মা (সময়) থেকে তার বাচ্চাকে সংক্রমিত করতে পারে? a. গর্ভকালীন সময়ে b. ডেলিভারীর সময়ে c. বাচ্চাকে বুকের দুধ খাওয়ানোর সময়ে Can the virus that causes AIDS be transmitted from a mother to a child: a. During pregnancy? b. During delivery? c. By breastfeeding?	YES NO DK a. গর্ভকালীন সময়ে During pregnancy 1 2 9 b. ডেলিভারীর সময়ে During delivery 1 2 9 c. বাচ্চাকে বুকের দুধ খাওয়ানোর সময়ে By breastfeeding 1 2 9	
G53	এইডস আক্রান্ত মা থেকে তার বাচ্চার কাছে এইডস রোগের ভাইরাসের সংক্রমণের ঝুঁকি কমানোর জন্য এমন কোন ঔষধ আছে কি যা একজন ডাক্তার বা নার্স দিতে পারেন? Are there special drugs that a doctor or nurse can give a women infected by the virus that causes AIDS to reduce the risk of transmission to her baby?	হ্যাঁ Yes 1 না No 2 জানি না/মনে নাই Don't know/CR 9	
Contraception and birth spacing			
G54	আপনার যাতে বাচ্চা না হয় বা দেরীতে হয় সে জন্য আপনি বা আপনার স্বামী কি বর্তমানে কোন পরিবার পরিকল্পনা পদ্ধতি ব্যবহার করছেন বা ন্য কোন কিছু করছেন? Are you currently doing something or using any method to delay or avoid getting pregnant?	হ্যাঁ (Yes) 1 না (No) 2 বর্তমানে গর্ভবতী (Pregnant now) 3 বর্তমানে বিবাহিত নয় (বিধবা, বিচ্ছিন্না, তালাকপ্রাপ্ত) (Currently widowed, separated, divorced) 4	→ G56 → G56 → G56
G55	বর্তমানে আপনারা কোন পদ্ধতি ব্যবহার করছেন? উত্তরগুলো পড়ে ওনাবেন না। [কেবলমাত্র একটি উত্তর হবে] - যদি একাধিক পদ্ধতির কথা উল্লেখ করেন তাহলে জিজ্ঞাসা করুন যে তারা প্রধানত কোন পদ্ধতি ব্যবহার করেন। - যদি উত্তরদাত্রী কনডম এবং নিরাপদ দিন উভয় পদ্ধতির কথা উল্লেখ করেন তাহলে কোড 12 বৃত্তায়িত করুন। - যদি উত্তরদাত্রী বাচ্চাকে বুকের দুধখাওয়ানো পদ্ধতির কথা উল্লেখ করেন তাহলে অন্যান্য কোড 15 বৃত্তায়িত করুন এবং নির্ধারিত স্থানে ' বাচ্চাকে বুকের দুধখাওয়ানো' কথাটি লিখুন। - যদি উত্তরদাত্রী ঝুঁকিপূর্ণ সময়ে আলাদা থাকা বা বিরত থাকা পদ্ধতির কথা উল্লেখ করেন তাহলে অন্যান্য কোড 15 বৃত্তায়িত করুন এবং নির্ধারিত স্থানে উত্তরটি লিখুন। Which method are you (or your husband/ partner) using? DO NOT READ RESPONSES. CODE ONLY ONE RESPONSE. IF MORE THAN ONE METHOD IS MENTIONED, ASK, - What is your MAIN method that you (or your husband/ partner) use to delay or avoid getting pregnant?" - If respondent mentions both condoms and standard days method, code "12" for standard days method. - If respondent mentions breastfeeding, code "15" for other and record breastfeeding. - If respondent mentions abstinence or isolation, code "15" for other and record response in space provided.	মহিলা বন্ধ্যাকরন Female Sterilization 01 পুরুষ বন্ধ্যাকরন Male Sterilization 02 খাবার বড়ি Pill 03 আই ইউ ডি IUD 04 ইনজেকশন Injectables 05 ইমপ্লান্ট/নরপ্লান্ট Implants 06 কনডম Condom 07 মহিলাদের কনডম Female Condom 08 ডায়াফ্রাম Diaphragm 09 ফোম/জেলী Foam/Jelly 10 বুকের দুধ খাওয়ানোর মাধ্যমে প্রসব পরবর্তী কালে পরিবার পরিকল্পনা LAM 11 আদর্শ দিন পদ্ধতি Standard Days Method/ Cyclebeads 12 নিরাপদকাল/দিন গণনা Rhythm Method (Other Than Standard Days) 13 প্রত্যাহার পদ্ধতি Withdrawal 14 অন্যান্য 15 ***** (নির্দিষ্ট করুন)	

No.	Questions And Filters	Coding Categories	Skip
G56	একটি বাচ্চা হওয়ার পর পুনরায় গর্ভবতী হওয়ার আগে আপনি কতটা সময় অপেক্ষা করবেন? How long should you wait after the birth of your child before you try to become pregnant again?*	দুই বছরের কম সময় Less than 2 years 1 দুই থেকে পাঁচ বছর 2 পাঁচ বছরের বেশী সময় More than 5 years 3 জানি না Don't know/can't remember 9	
G57	একটি বাচ্চা হওয়ার পর খুব কম সময়ের মধ্যে পুনরায় গর্ভবতী হলে একজন মা কি কি ঝুঁকির সম্মুখীন হতে পারেন? What are the risks of getting pregnant too soon after the birth of a child?	বাচ্চাটি খুব ছোট হতে পারে/ কম ওজন নিয়ে জন্মাতে পারে Baby born too small/low birth weight baby A বাচ্চাটি সময় পূর্ণ হওয়ার আগেই জন্মাতে পারে Baby born too early B মায়ের মৃত্যু হতে পারে Mother can die C গর্ভের বাচ্চা নষ্ট হয়ে যেতে পারে Mother can have miscarriage D মায়ের রক্তশূন্যতা হতে পারে Mother can suffer anemia E অন্যান্য Others X (নির্দিষ্ট করুন) জানি না Don't know/can't remember Z	
Anthropometrics			
G58	আমি কি আপনার ওজন নিতে পারি? May I weigh you (mother)?	হ্যাঁ Yes 1 | | | . | | KILOGRAMS না No 2	
G59	আমি কি (নাম) এর ওজন নিতে পারি? May I weigh (Name)?	হ্যাঁ Yes 1 | | | . | | KILOGRAMS না No 2	→ G61
G60	কেন ওজন নেয়া সম্ভব হয়নি? Why weighing was not possible? Reason	..... | | | ..... | | | ..... | | |	
G61	প্রশ্ন G20, G26, G29, G34 চেক করুন। প্রশ্নগুলোর যেকোন একটিতে 1 ব্যতীত হয়েছে অর্থাৎ (নাম) গত দুই সপ্তাহে কোন অসুখ বা স্বাস্থ্য সমস্যা ভুগছিল? Check G20, G26, G29 and G34. Whether 1 was circled for any question/ was <NAME> suffering from any illness in the last two weeks?	হ্যাঁ Yes 1 না No 2	→ Section H
G62	উত্তর দাতাকে ধন্যবাদ জানিয়ে সাক্ষাৎকার শেষ করুন Thanks the mother for providing time and end the interview.		

Section H: Child Illness Cost Module

Cost related to Child illness:

- [সেবা প্রদানকারীর কাছে গিয়ে চিকিৎসা নিলে 101 নং প্রশ্ন থেকে জিজ্ঞেস করুন
If they went to any service provider then ask from 101 question].....Y / N

- [সেবা প্রদানকারী বাড়ীতে আসলে 106 নং প্রশ্ন থেকে জিজ্ঞেস করুন
If the service provider came to home then ask from 106 question].....Y/N

- [নিজে নিজে সেবা নিলে 107 নং প্রশ্ন থেকে জিজ্ঞেস করুন
If service was taken by own decision then ask from 107 question].....Y/N

		1st Visit	2nd Visit	3rd Visit	4th Visit
101 আপনি স্বাস্থ্যকেন্দ্রে যেতে এবং ফিরে আসতে কত টাকা খরচ হয়েছিল? How much money was spent for transportation for each visit?	খরচ (টাকায়) Spent (Tk)	Y / N [][][][]	Y / N [][][][]	Y / N [][][][]	Y / N [][][][]
102 <সেবা প্রদানকারীর> কাছে যাবার পর, দেখানোর কাজ সারতে কত সময় লেগেছিল? (অপেক্ষার সময়ও অন্তর্ভুক্ত করুন) How much time did you need to get this service?	ঘণ্টা Hour	[][]	[][]	[][]	[][]
	মিনিটে minute	[][]	[][]	[][]	[][]
103 শিশুকে সেবা প্রদানকারীকে দেখানোর জন্য আপনারা কোন টাকা দিয়েছিলেন কি (ভিজিট)? Did you pay the <PROVIDER> for the consultation of the child?	খরচ (টাকায়) Spent (Tk)	Y / N [][][][]	Y / N [][][][]	Y / N [][][][]	Y / N [][][][]
104 সেখানে যাওয়ার পথে অথবা সেখান থেকে ফিরে আসার পথে আপনাকে কোথাও রাত কাটাতে হয়েছিল কি? ক্লিনিক বা হাসপাতালে রাত কাটাতে হয়েছিল কি? খাবার অথবা পানীয় কিনে খেতে কত টাকা লেগেছিল? Did you spend the night away from home? Did you spend money to buy food while you were away for this?	রাত কাটাতে খরচ (টাকায়) Hotel cost (Tk)	Y / N [][][][]	Y / N [][][][]	Y / N [][][][]	Y / N [][][][]
	খাবার খরচ (টাকা) Food cost (Tk)	Y / N [][][][]	Y / N [][][][]	Y / N [][][][]	Y / N [][][][]
	ভর্তি ফিস Admission fees	Y / N [][][][]	Y / N [][][][]	Y / N [][][][]	Y / N [][][][]
105 রক্ত/মল/মূত্র পরীক্ষা করতে আপনার কোন টাকা খরচ হয়েছিল কি? How much did you spend for blood /stool / urine test?	রক্ত পরীক্ষা (টাকা) Blood test (tk)	Y / N [][][][]	Y / N [][][][]	Y / N [][][][]	Y / N [][][][]
	মূত্র পরীক্ষা (টাকা) Urine test (Tk)	Y / N [][][][]	Y / N [][][][]	Y / N [][][][]	Y / N [][][][]
	মল পরীক্ষা (টাকা) Stool test (Tk)	Y / N [][][][]	Y / N [][][][]	Y / N [][][][]	Y / N [][][][]
	অন্যান্য Other (Tk)	Y / N [][][][]	Y / N [][][][]	Y / N [][][][]	Y / N [][][][]
106 সেবা প্রদানকারী বাড়ীতে আসলে শিশুকে দেখার জন্য আপনারা কোন টাকা পয়সা < সেবা প্রদানকারীকে > দিয়েছিলেন কি (ভিজিট)? কত টাকা দিয়েছিলেন? If service provider came to home, did you pay him / her for the consultation of the child?	চিকিৎসক ভিজিট Spent (Tk)	Y / N [][][][]	Y / N [][][][]	Y / N [][][][]	Y / N [][][][]

- 107 [শিশু যেসব ওষুধ খেয়েছিল সেগুলির প্রতি ওষুধের জন্য জিজ্ঞাসা করুন: ওষুধের নাম কি? এগুলি বিনামূল্যে পেয়েছিলেন, নাকি কিনতে হয়েছিল অথবা সংগ্রহ করেছেন? বিনামূল্যে পেয়ে থাকলে কোথা থেকে পেয়েছিলেন? কেনা হয়ে থাকলে ওষুধ কেনার জন্য কত টাকা লেগেছিল ও কোথা থেকে কিনেছিলেন?
- সংগ্রহ করা হলে কি পরিমাণে (কত বোতল, বড়ি/টেবলেট, ইনজেকশন, ইত্যাদি)? প্রতিটি ওষুধের জন্য নিচে একটি করে 'ছক' পূরণ করুন
- Please tell me which drugs were taken and in which amount (how many bottles, pills, tablets or injections). For each drug, ask: Did you/they get it for free or did you/they buy it? If free: From where do you/they get it? If purchased: How much did it cost for the drugs and from where did they buy it? If collected: How many bottles, pills or injections were collected? (For each drug/medicine fill up the chart below)

1st Drug:

ওষুধের নাম Name: _____

কে ব্যবস্থাপত্র দিয়েছিলেন Who Prescribed _____

জায়গা Location _____

কিনেছে Purchased.....1 → দাম Cost: _____ Taka

কোথা থেকে From where: _____

বিনামূল্যে Free.....2 → কোথা থেকে From where: _____

যে পরিমাণ পাওয়া গেছে/কেনা হয়েছেঃ Amount received/purchased : _____

ওষুধের ধরন (Type of drug) : _____

দিনে কতবার (Times per day) : _____

2nd Drug:

ওষুধের নাম Name: _____

কে ব্যবস্থাপত্র দিয়েছিলেন Who Prescribed _____

জায়গা Location _____

কিনেছে Purchased.....1 → দাম Cost: _____ Taka

কোথা থেকে From where: _____

বিনামূল্যে Free.....2 → কোথা থেকে From where: _____

যে পরিমাণ পাওয়া গেছে/কেনা হয়েছেঃ Amount received/purchased : _____

ওষুধের ধরন (Type of drug) : _____

দিনে কতবার (Times per day) : _____

3rd Drug:

ওষুধের নাম Name: _____

কে ব্যবস্থাপত্র দিয়েছিলেন Who Prescribed _____

জায়গা Location _____

কিনেছে Purchased.....1 → দাম Cost: _____ Taka

কোথা থেকে From where: _____

বিনামূল্যে Free.....2 → কোথা থেকে From where: _____

যে পরিমাণ পাওয়া গেছে/কেনা হয়েছেঃ Amount received/purchased : _____

ওষুধের ধরন (Type of drug) : _____

দিনে কতবার (Times per day) : _____

4th Drug:	
ওষুধের নাম Name:	
কে ব্যবস্থাপত্র দিয়েছিলেন Who Prescribed	
জায়গা Location	
কিনেছে Purchased.....1 → দাম Cost:	Taka
	কোথা থেকে From where:
বিনামূল্যে Free.....2 →	কোথা থেকে From where:
যে পরিমাণ পাওয়া গেছে/কেনা হয়েছেঃ Amount received/purchased :	
ওষুধের ধরন (Type of drug) :	
দিনে কতবার (Times per day) :	
5th Drug:	
ওষুধের নাম Name:	
কে ব্যবস্থাপত্র দিয়েছিলেন Who Prescribed	
জায়গা Location	
কিনেছে Purchased.....1 → দাম Cost:	Taka
	কোথা থেকে From where:
বিনামূল্যে Free.....2 →	কোথা থেকে From where:
যে পরিমাণ পাওয়া গেছে/কেনা হয়েছেঃ Amount received/purchased :	
ওষুধের ধরন (Type of drug) :	
দিনে কতবার (Times per day) :	
6th Drug:	
ওষুধের নাম Name:	
কে ব্যবস্থাপত্র দিয়েছিলেন Who Prescribed	
জায়গা Location	
কিনেছে Purchased.....1 → দাম Cost:	Taka
	কোথা থেকে From where:
বিনামূল্যে Free.....2 →	কোথা থেকে From where:
যে পরিমাণ পাওয়া গেছে/কেনা হয়েছেঃ Amount received/purchased :	
ওষুধের ধরন (Type of drug) :	
দিনে কতবার (Times per day) :	

উত্তর দাতাকে ধন্যবাদ জানিয়ে সাক্ষাৎকার শেষ করুন।

Thanks the mother for providing time and complete the interview.

**Improving maternal, newborn, and child health
through building public-private partnerships
(SUSOMA)**

**Baseline Survey for Social Capital Measurement
2012**

Household Questionnaire

World Renew

icddr,b

IMCI section of DGHS

USAID

খানার প্রশ্নপত্র (Household Questionnaire)

সাক্ষাৎকার শুরু করার সময় (start time of interview)

ঘন্টা

মিনিট

সাক্ষাৎকার শেষ হবার সময় (end time of interview)

ঘন্টা

মিনিট

১. নির্ধারিত খানা সনাক্তকরণ (identification of household)

১.১. জেলা (district)

.....

১.২. সাব-জেলা/উপজেলা (sub-district/ Unazila)

.....

১.৩. ইউনিয়ন: (Union)

.....

১.৪. শহর/গ্রাম (city/ village)

.....

১.৫. ওয়ার্ড (Ward)

.....

১.৬. পাড়া/মহল্লা (nara/ moholla)

.....

১.৭. রাস্তা (road)

.....

১.৮. খানা নাম্বার (Household number)

.....

১.৯. অন্যান্য বিস্তারিত (Others)

.....

২.০. এলাকার ধরন (type of the area)

শহর (Urban)

গ্রাম(আদিবাসী নয়) (village/ not indigenous)

আদিবাসী (indigenous)

প্রত্যন্ত অঞ্চল (remote)

সাক্ষাৎগ্রহণকারীর নাম (Interviewer)

.....

সপারভাইজার নাম (Supervisor)

.....

NO.	QUESTIONS	CODING CATEGORIES	SKIP
2. বাড়ির বৈশিষ্ট্য			
HOUSING CHARACTERISTICS AND HOUSEHOLD ROSTER			
2.1	বাড়ির ধরন(শুধুমাত্র দেখে) Type of house (observation only)	একক বাড়ি Individual house আঙ্গিনা সহ অস্থায়ী ছাদ(টিন, খর)..... Open roof and patio অ্যাপার্টমেন্ট..... Apartment বড় বাড়ির একটি রুম..... Room within a larger house অন্যান্য(উল্লেখ করুন)..... Other (specify)	1 2 3 4
2.2	নির্মাণ উপকরণ: ঘর বা ভবনের বাহিরের দেয়ালগুলোর জন্য সাধারণত কি ব্যবহার হয়? What construction material is used for the majority of the exterior walls of the house or building?	ইট/পাথর/কংক্রিট/সিমেন্ট..... Brick/stone/concrete/cement কাঠ..... Wood টিন..... Tin বেত/খড়/পাটকাঠি/বাঁশ..... Cane/straw/sticks পলিথিন Polythene দেয়াল নাই..... No walls	1 2 3 4 5 6

NO.	QUESTIONS	CODING CATEGORIES	SKIP
2. বাড়ির বৈশিষ্ট্য			
HOUSING CHARACTERISTICS AND HOUSEHOLD ROSTER			
		অন্যান্য(উল্লেখ করুন)	
		Other (specify)	
2.3	বাড়ির ছাদের উপকরণ কি ? What is the construction material of most of the roof of this house?	কংক্রিট/সিমেন্ট..... Concrete/cement	1
		টাইলস..... Tiles	2
		ধাতু(দস্তা/অ্যালুমিনিয়াম/টিন/অন্যান্য)..... Metal (zinc, aluminum, tin, etc.)	3
		কাঠ..... Wood	4
		খড় বা তালপাতা..... Straw or thatch	5
		অন্যান্য(উল্লেখ করুন)	
		Other (specify)	
2.4	বাড়ির মেঝের উপকরণ কি ? What is the construction material of most of the floor of this house?	কংক্রিট/সিমেন্ট..... Concrete/cement	1
		টাইলস/ইট/গ্রানাইট	2
		Tiles, brick, granite	
		কাঠ	3
		Wood	
		রেস্লিন ম্যাট..... Vinyl	4

NO.	QUESTIONS	CODING CATEGORIES		SKIP
2. বাড়ির বৈশিষ্ট্য				
HOUSING CHARACTERISTICS AND HOUSEHOLD ROSTER				
		মাটি/বালি	5	
		Earth, sand		
		বেত.....	6	
		Cane		
		অন্যান্য(উল্লেখ করুন)		
		Other (specify)		
2.5	এই বাড়ির কয়টি রুম শুধুমাত্র ঘুমানোর জন্য ব্যবহার হয় ? How many rooms are used by this household for sleeping only	টি		
2.6	এই বাড়িতে কোন ধরনের পায়খানা ব্যবহার হয় ? What type of sanitary services does this household use?	পয়নিষ্কাশন ব্যবস্থার সাথে যুক্ত.....	1	
		Connected to sewage system		
		সেপটিক ট্যাংকির সাথে যুক্ত.....	2	
		Connected to septic tank		
		লেট্রিন(স্লাব)	3	
		Latrine		
2.7		নাই.....	4	
		None		
		অন্যান্য(উল্লেখ করুন)		
		Other (specify)		
2.7		সাপ্লাই পানি.....	1	
		Piped water system		
		নিজস্ব কুয়া	2	
		Private well		

NO.	QUESTIONS	CODING CATEGORIES	SKIP
2. বাড়ির বৈশিষ্ট্য			
HOUSING CHARACTERISTICS AND HOUSEHOLD ROSTER			
	এই বাড়ির পানির প্রাথমিক উৎস কি ? What is the primary source of water for this household?	সরকারি কুয়া..... Public well	3
		সবার জন্য উন্মুক্ত কল..... Open tap or faucet	4
		ছোট নদী বা পুকুর..... River or stream	5
		টিউবওয়েল..... Tube well	6
		অন্যান্য(উল্লেখ করুন) Other (specify)	
2.8	এই বাড়ির ময়লা-আবর্জনা কোথায় ফেলা হয় ? How does this household dispose of most of its garbage?	সরকারি ব্যবস্থায় Public garbage service	A
		বেসরকারী ব্যবস্থায়..... Private garbage service	B
		খোলা যায়গায় ছুড়ে ফেলা..... Throw in vacant lots	C
		নদী/খালে/ পুকুরে ফেলা..... Throw in river/canal/ pond	D
		পুড়িয়ে বা পুতে ফেলা/গর্তে ফেলা..... Burn and/or bury	E
		অন্যান্য(উল্লেখ করুন) Other (specify)	

NO.	QUESTIONS	CODING CATEGORIES	SKIP
2. বাড়ির বৈশিষ্ট্য			
HOUSING CHARACTERISTICS AND HOUSEHOLD ROSTER			
2.9	এই বাড়িতে কি ধরনের আলো ব্যবহার করে ? What type of lighting does this household use?	বিদ্যুৎ (সরকারী ব্যবস্থায়) Electricity (public source) বিদ্যুৎ (বে-সরকারীব্যবস্থায়) Electricity (private source) শুধুমাত্র কেরোসিন, গ্যাস, মোমবাতি..... Only kerosene, gas, candles অন্যান্য(উল্লেখ করুন) Other (specify)	A B C
2.10	এই বাড়িটির (মালিকানা- হচ্ছে Ownership pattern of this house is.....	নিজস্ব মালিকানাধীন / পুরো দাম দিয়ে কেনা..... Owned (completely paid for) বন্ধক দেয়া হয়েছে..... Owned with a mortgage ভাড়া বাড়ি..... Rented সেবার বিনিমিয়ে দেয়া(কোয়ার্টার এ থাকে) Given in exchange for services দখলকৃত জমিতে বাসা..... Squatter অন্যান্য(উল্লেখ করুন) Other (specify)	1 2 3 4 5

- নির্দেশনা: প্রথমে খানা সদস্যদের নাম লিস্ট করুন এবং প্রশ্ন জিজ্ঞাসা করুন ২.১২-২.২০ ।
- খানা : যেসব সদস্য একই সাথে বসবাস করে , একই চুলার রান্না করা খাবার খায় এবং খরচ বহন করে

No.	২.১১:খানার প্রত্যেক সদস্যদের নাম লিখুন (Name of all the members in the household) (প্রথমে খানা প্রধানের নাম) নাম (Name)	২.১২:খানা প্রধানের সাথে সম্পর্ক কি ? (relationship with the household head) (কোড ব্যবহার করুন) (use code) কোড	২.১৩: লিঙ্গ (sex) পুরুষ...1 (Male) মহিলা... 2 (female)	২.১৪: বয়স (age) বৎসর (years)	২.১৫:বৈবাহিক অবস্থা (Marital Status) বিবাহিত... 1 (Married) ডিভোর্সড... 2 (divorced) বিধবা/বিপত্নিক... 3 (Widow/ widower) বিচ্ছিন্ন..... 4 (seperated) অবিবাহিত.....5 (Bachelor/ single)	২.১৬:...স্বামী বা স্ত্রী কি বর্তমানে এই খানার সদস্য? যদি হ্যাঁ হয়, স্বামী বা স্ত্রীর ঘরের নম্বর লিখুন , না হলে 99লিখুন। Is “_____”’s Spouse currently a member of the household? yes, use number of spouse no, write 99	২.১৭: পেশা (কোড ব্যবহার করুন) (Occupation) কোড	২.১৮:বর্তমানে চাকুরিরত (Currently Employed) হ্যাঁ.....1 (yes) না..... 2 (no)	২.১৯: শিক্ষা (education) (কোড ব্যবহার করুন)	২.২০:কতদিন ধরে এই এলাকায় থাকেন (How long have you lived in this community) বৎসর (years)	২.২১: এখানে আসার আগে আপনি কোথায় ছিলেন? জেলার নাম লিখুন। (where have you been before you came here?) Write down the name the district.)
1											
2											
3											
4											
5											
6											

7											
8											
9											
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11											
12											
13											
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16											

২.১২ এর জন্য কোড	২.১৭এর জন্য কোড	২.১৯ এর জন্য কোড
খানা প্রধান 01 (Household Head)	চাচা/চাচী-মামা/মামা/মামী.....14 (uncle/aunt)	কৃষক.....1 (farmer)
স্বামী/স্ত্রী.....02 (Husband/wife)	কাজিন 15 (cousin)	জেলে.....2 (fisherman)
ছেলে/মেয়ে..... 03 (daughter/son)	অন্যান্য আত্মীয়..... 16 (other relatives)	ব্যবসায়ী.....3 (business)
বাবা/মা 04 (father/mother)	অন্য বাড়ির শিশু... ..17 (child from another home)	উৎপাদক: (producer)
ভাই/বোন.....05 (siblings)	ভাড়াটিয়া..... 18 (tenant)	কারিগর.....4 (technician)
সৎ ছেলে/সৎ মেয়ে.. ..06 (step son/daughter)	অন্যান্য..... 19 (other)	শিল্প.....5 (industry)
সৎ বাবা/মা 07 (step parents)		বেসরকারী: (non-GO/ private)
নাতী/নাত্নী 08 (grand daughter/ grand son)		অদক্ষ.....6 (Unskilled)
দাদা/দাদী-নানা/নানী.....09 (grandfather/grandmothe)		দক্ষ.....7 (skilled)
শ্বশুর/শাশুড়ী.....10 (monther/father in law)		সরকারী : (Public)
		স্বাক্ষরজ্ঞানহীন/ স্কুলে যায়নি.....1 (Illiterate, no schooling)
		স্বাক্ষরজ্ঞান সম্পন্ন/ স্কুলে যায়নি.....2 (Literate, no schooling)
		প্রাইমারী অসম্পূর্ণ.....3 (Primary incomplete)
		প্রাইমারী সম্পূর্ণ.....4 (Primary complete)
		মাধ্যমিক অসম্পূর্ণ.....5 (Secondary incomplete)
		মাধ্যমিক সম্পূর্ণ.....6 (Secondary complete)
		কারিগরি কলেজ.....7 (Vocational college)
		ইউনিভার্সিটি 8 (University)
		অন্যান্য 9 (others)

ছেলের বউ/মেয়ের জামাই.....11	অদক্ষ.... 8	
(daughter-in-law/ son-in-law)	(Unskilled)	
দেবর/ননদ.....12	দক্ষ..... 9	
(brother/sister-in-law)	(Skilled)	
ভতিজা/ভতিজি-ভাগনে/ভাগনি ...13	অন্যান্য.....10	
(nephew/niece)	(others)	

3. জেনোগ্রাম

Instruction:

Try to understand:

1. Does the informant live in the same household with his/her parents?
2. How many siblings does the informant have? Are they living in the same household with the informant or in other areas? Who else is living with them? Who is living with whom?
3. Is there anyone living with them as a member of the household but not a kin?
4. Are all of them alive?
5. What type of relationship is present there? Married? Divorced? Married for more than once?

নির্দেশিকা:

বুঝতে চেষ্টা করুন:

১. তথ্যদাতা কি তার বাবা-মা'র সাথে একই খানায় থাকেন?
২. তথ্যদাতা'র কয়জন ভাই-বোন আছেন? তারা কি তথ্যদাতা'র সাথে একই খানায় থাকেন বা অন্যকোথাও থাকেন? অন্য কে কে তাদের সাথে থাকেন? কে কার সাথে থাকেন?
৩. এমন কেউ কি আছেন যিনি একই খানায় থাকেন কিন্তু পরিবারের সদস্য নন?
৪. সবাই কি জীবিত?
৫. কি ধরনের সম্পর্ক আছে সবার মধ্যে? বিবাহিত? তালাকপ্রাপ্ত? একাধিকবার বিয়ে করেছেন এমন?

জেনোথামের প্রতীক



পুরুষ(male)



পুরুষ তথ্যদাতা (male informant)



মৃত পুরুষ(deceased male)



মহিলা (female)



মহিলা তথ্যদাতা (female informant)



মৃত মহিলা (deceased female)

= আইনগত বিবাহ

b.19---জন্ম তারিখ(date of birth)

≠ তালাক প্রাপ্ত

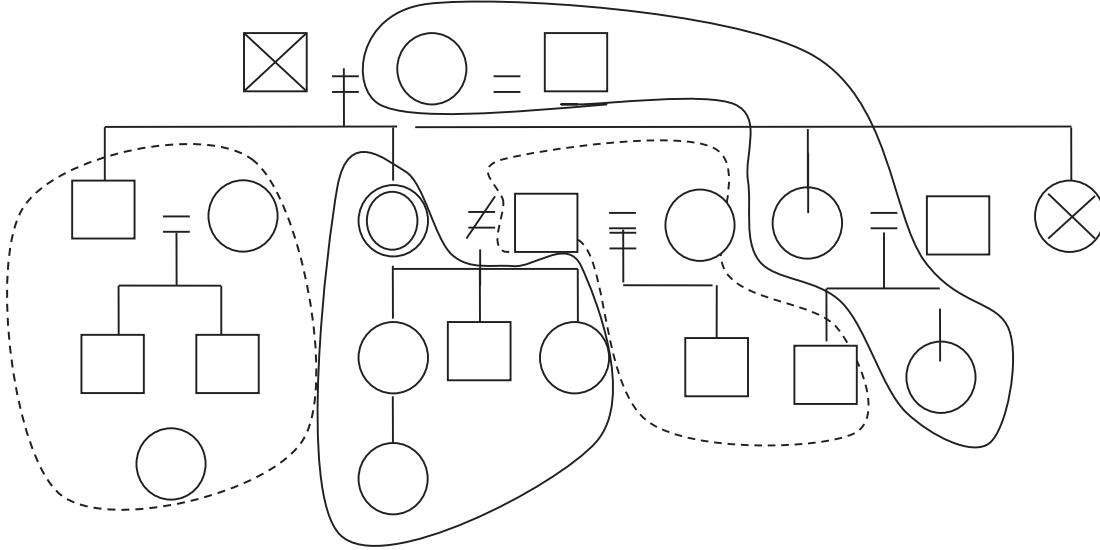
d.19--- মৃত্যু তারিখ (date of death)



তথ্যদাতার বাড়িতে বসবাসরত লোকজন



তথ্যদাতার বাড়ির বাইরে বসবাসরত তথ্যদাতার আত্মীয়



এই উদাহরণটি এমন একজন তালাকপ্রাপ্ত ভদ্রমহিলা'র অবস্থা দেখায়, যার খানায় তিনজন ছেলেমেয়ে ও একজন নাতনি আছে। একই খানায় তার মা (যিনি স্বামীর মৃত্যুর পর আবার বিয়ে করেছেন), সৎবাবা, সৎবোন ও তার ভাগ্নি থাকেন। আরেক সৎবোন কিছুদিন আগে মারা গেছেন। তথ্যদাতার আগের স্বামী আরেকটি জায়গায় থাকেন। ঐ স্বামীর বাড়িতে তার স্ত্রী, ছেলে, ও তথ্যদাতার ভাগ্নে থাকেন। তথ্যদাতার ভাই, তার স্ত্রী, দুই ছেলে ও রক্তের সম্পর্ক নেই এমন একটি মেয়ে থাকে।

This example represents the situation of a divorced woman whose household includes her three children and granddaughter. In a household within the same community live her mother (a remarried widow); her step father, her half-sister; and her niece. Another half-sister died some time ago. The respondent's former husband resides in another community. His household consists of his wife, their son, and the respondent's nephew. The respondent's brother lives with his wife two sons and child, a girl, who is not a blood relation.

Please, draw and describe it here. (এখানে এঁকে জেনোগ্রাম আকুন ও বর্ণনা করুন।)

NO.	QUESTIONS	CODING CATEGORIES		SKIP
4. STRUCTURAL SOCIAL CAPITAL				
Now I would like to ask you some questions about how you feel about this village/neighborhood, and how you take part in the community activities. By community, I mean _____ [insert consensus definition from community profile].				
4.A.	Organizational Density and Characteristics			
4A.1	আপনি বা আপনার বাড়ীর কেউ কি কোনো সংগঠনের বা গ্রুপের সদস্য?	হ্যাঁ	১	
	Are you or is someone in your household a member of any groups or organizations?	(yes)		
		না.....	২	
		(No)		
4A.2	আপনি বা আপনার বাড়ীর কেউ কি এসব সংগঠনের বা গ্রুপের সক্রিয় সদস্য?	নেতা	১	
		(Leader)		
	Do you consider yourself/household member to be active in the group?	খুব সক্রিয়	২	
		(Very Active)		
		কম সক্রিয়.....	৩	
		(Somewhat Active)		
		সক্রিয় নয়.....	৪	
		(Not active)		
4A.3	এই দলগুলোর মধ্যে কোনটি আপনার খানায় সবচেয়ে গুরুত্বপূর্ণ? নাম ও ধরণ লিখুন। (Which of these groups is the most important to your household? Write down the Name and type)	দল ১ (Group 1):.....		
		দল ২(Group 2):		
		দল ৩ (Group 3):		
4A.4	এই তিনটি ভিন্ন ধরনের দলের সদস্যরা কি একই লোক?	কম মিল	১	
	(Are the same people members of these three different groups?)	(Little overlap)		
		কিছু মিল.....	২	
		(Some overlap)		

NO.	QUESTIONS	CODING CATEGORIES						SKIP		
4. STRUCTURAL SOCIAL CAPITAL										
		অনেক মিল..... Much overlap				৩				
4A.5	দলের অধিকাংশ সদস্য কি একই বর্ধিত পরিবারেরও সদস্য? (Are group members mostly of the same extended family)	দল ১ ২ ৩								
		হ্যাঁ (Yes)...১								
4A.6	সদস্যদের অধিকাংশই কি একই ধর্মের? (Are members mostly of the same religion?)	হ্যাঁ (Yes)...১								
		না (No).....২								
4A.7	সদস্যদের অধিকাংশই কি একই লিঙ্গের? (Are members mostly of the same gender?)	হ্যাঁ (Yes)...১								
		না (No).....২								
4A.8	সদস্যদের অধিকাংশই কি একই রাজনৈতিক দৃষ্টিভঙ্গি বা তারা কি একই রাজনৈতিক দল থেকে এসেছে? (Are members mostly of the same political viewpoint or do they belong to the same political party?)	হ্যাঁ (Yes)...১								
		না (No).....২								
4A.9	সদস্যদের অধিকাংশই কি একই পেশার? (Do members mostly have the same occupation?)	হ্যাঁ (Yes)...১								
		না (No).....২								
4A.10	সদস্যদের অধিকাংশই কি একই বয়সের? (Are members mostly from the same age group?)	হ্যাঁ (Yes)...১								
		না (No).....২								
4A.10	সদস্যদের অধিকাংশই কি একই রকম শিক্ষিত ? (Are members mostly from the same education level?)	হ্যাঁ (Yes)...১								
		না (No).....২								
4A.12							১	২	৩	

NO.	QUESTIONS	CODING CATEGORIES				SKIP
4. STRUCTURAL SOCIAL CAPITAL						
	দল সচরাচর কিভাবে সিদ্ধান্ত নেয়? (How does the group usually make decisions?)	নেতা সিদ্ধান্ত নেয় এবং অন্যান্যদের জানায় (The leader decides and informs the other group members)	1			
		দলের সদস্যরা কি ভাবছে তা নেতা জিজ্ঞেস করে এবং তারপর সিদ্ধান্ত নেয় (The leader asks group members what they think and then decides)	2			
		দলের সদস্যরা আলোচনা করে এবং একত্রে সিদ্ধান্ত নেয় (The group members hold a discussion and decide together)	3			
		অন্যান্য (উল্লেখ করুন) Other (specify)	4			
4A.13	সর্বপরি,দলের নেতৃত্ব কতটা কার্যকরী? (Overall, how effective is the group’s leadership?)					
		হ্যাঁ (Yes)	1			
		না (No)	2			

4B.Networks and Mutual Support Organizations

এখন আমি আপনাকে কমিউনিটির কার্যক্রম ও সমস্যাসমূহ নিয়ে কিছু প্রশ্ন জিজ্ঞেস করব.

(Now I would like to ask you some questions about community functions and dealing with problems.)

	Questions	Coding Categories		Skip
4B.1	যদি এই গ্রাম/পাড়ার প্রাইমারী স্কুল অনেক সময় ধরে শিক্ষক ছাড়া চলত ,ধরুন ছয় মাস বা তার বেশী,তখন আপনার মতে এই গ্রাম/পাড়ার কারা এক্ষেত্রে একত্রিত হয়ে পদক্ষেপ নিতেন? (If the primary school of this village/neighborhood went without a teacher for a long time, say six months or more, which people in this village/neighborhood do you think would get together to take some action about)			(if yes go question 4B.3)
		হ্যাঁ Yes	না No	
	গ্রামের/প্রতিবেশীদের কেউই একত্রিত হতোনা (No one in the village/neighborhood would get together)	১	২	
	স্থানীয়/টপৌর সরকার (Local/municipal government)	১	২	
	গ্রাম/পাড়া সমিতি (Village/neighborhood association)	১	২	
	স্কুলের শিশুদের বাবা-মা (Parents of school children)	১	২	
	সম্পূর্ণ গ্রাম/পাড়া (The entire village/ neighborhood)	১	২	
	অন্যান্য(উল্লেখ করুন) Other (specify)			

	Questions	Coding Categories		Skip
4B.2	কে উদ্যোগ নিতেন(নেতার ভূমিকায়) {Who would take the initiative (act as leader)?}			
4B.2	সেখানে একটি সমস্যা হলো যা সম্পূর্ণ গ্রাম/পাড়াকে ক্ষতিগ্রস্ত করল,উদাহরণস্বরূপ(গ্রামে:শস্য নষ্ট হওয়া;শহরে:নির্যাতন),এই অবস্থাকে আয়ত্তে আনার জন্য কারা একত্রিত হয়ে কাজ করত বলে আপনি মনে করেন? (If there were a problem that affected the entire village/neighborhood, for instance(RURAL: “crop disease”; URBAN: “violence”), who do you think would work together to deal with the situation?)			(if yes, go to section 4C)
		হ্যাঁ Yes	না No	
	প্রত্যেক ব্যক্তি/খানা কি সতন্ত্রভাবে সমস্যা নিয়ে কাজ করত (Each person/household would deal with the problem individually)	১	২	
	প্রতিবেশীরা নিজেরাই Neighbors among themselves	১	২	
	স্থানীয় সরকার/পৌর রাজনৈতিক নেতা Local government/municipal political leaders	১	২	

	Questions	Coding Categories		Skip
	সকল কমিউনিটি নেতা একত্রে কাজ করত All community leaders acting together	১	২	
	সম্পূর্ণ গ্রাম/পাড়া The entire village/ neighborhood	১	২	
	অন্যান্য(উল্লেখ করুন) Other differences (specify)			
4B.4	কে উদ্যোগ নিতেন ? (নেতার ভূমিকায়) (Who would take the initiative (act as leader?))	.....		

	Questions	Coding Categories			Skip
4C.1	একই গ্রাম/পাড়ায় বসবাসরত ব্যক্তিদের মধ্যে পার্থক্য থাকে। নিম্নের কোন কোন ক্ষেত্রের পার্থক্য আপনার গ্রাম/পাড়ার লোকজনকে বিভক্ত করেছে? (Differences often exist between people living in the same Village/ neighborhood. To what extent do differences such as the following tend to divide people in your village/neighborhood?)				
		<u>Not at all</u>	<u>Somewhat</u>	<u>Very Much</u>	
	শিক্ষা (Education)	1	2	3	
	সম্পদা (Wealth/ material possessions)	1	2	3	
	জমি মালিকানা (Landholdings)	1	2	3	
	সামাজিক অবস্থান (Social status)	1	2	3	
	নারী-পুরুষে বিভিন্নতা (Differences between men and women)	1	2	3	
	প্রজন্মের বিভিন্নতা (Differences between younger and older generations)	1	2	3	

	Questions	Coding Categories			Skip	
	দীর্ঘমেয়াদী ও নতুন অধিবাসীদের মধ্যে বিভিন্নতা (Difference between long-time inhabitants and new settlers)	1	2	3		
	রাজনৈতিক দল (Political party affiliations)	1	2	3		
	ধর্মীয় বিশ্বাস (Religious beliefs)	1	2	3		
	জাতিগত পটভূমি (Ethnic background)					
	অন্যান্য (উল্লেখ করুন) Others (specify)	1	2	3		
4C.2	এই বিভিন্নতাগুলো কি কোন সমস্যা তৈরী করে? (Do these differences cause problems?)	হ্যাঁ..... Yes			১	(go to question 4C.5)
		না No			২	
4C.3	এই সমস্যাগুলো সাধারণত কিভাবে সামলানো হয়? How are these problems usually handled?	হ্যাঁ	না			
A	লোকজন নিজেরাই ঠিই করে People work it out between themselves	১	২			

	Questions	Coding Categories		Skip
B	পরিবার/খানার সদস্যরা মধ্যস্থতা করে Family/household members intervene	১	২	
C	প্রতিবেশীরা মধ্যস্থতা করে Neighbors intervene	১	২	
D	কমিউনিটি নেতারা মধ্যস্থতা করে Community leaders mediate	১	২	
E	ধর্মীয় নেতারা মধ্যস্থতা করে Religious leaders mediate	১	২	
F	বিচারক নেতারা মধ্যস্থতা করে Judicial leaders mediate	১	২	
4C.4	এই সমস্যাগুলো কি নির্যাতনের দিকে ধাবিত হয়? Do such problems ever lead to violence?	হ্যাঁ yes		১
		না No		২
4C.5	এমন কোন সেবা ব্যবস্থা আছে কি ,যেখানে আপনি আপনার খানার সদস্যদের সেবা নেয়া মানা বা সীমিত সুযোগ রয়েছে? (Are there any services where you or members of your household are occasionally denied service or have limited opportunity to use?)			
		হ্যাঁ Yes	না No	
a	শিক্ষা/স্কুল (Education/schools)	১	২	

	Questions	Coding Categories		Skip
b	স্বাস্থ্যসেবা/ক্লিনিক (Health services/clinics)	১	২	
C	বাড়ী বানানো (Housing assistance)	১	২	
D	চাকুরি প্রশিক্ষণ/নিয়োগ (Job training/employment)	১	২	
e	ঋণ (Credit)	১	২	
F	যানবাহন (Transportation)	১	২	
G	পানি বন্টন (Water distribution)	১	২	
H	স্বাস্থ্যসেবা ব্যবস্থাসমূহ (Sanitation services)	১	২	
I	কৃষি (Agricultural extension)	১	২	
J	ন্যায়বিচার/দ্বন্দ্বের সমাধান (Justice/conflict resolution)	১	২	
K	নিরাপত্তা/পুলিশ সেবা (Security/police services)	১	২	
4C.6		হ্যাঁ..... (Yes)	1	

	Questions	Coding Categories		Skip
	আপনি কি মনে করেন যে এই কমিউনিটিতে আরো অন্যান্য খানা রয়েছে যাদের একই ধরনের অসুবিধা রয়েছে? (Do you think that there are other households in this community that have such access problems?)	না (No)	2	
4C. 7	তারা কি এসব ক্ষেত্র থেকে বঞ্চিত হন? Are they excluded from the following sectors?	হ্যাঁ Yes	না No	
A	শিক্ষা/বিদ্যালয়.(Education/school)	১	২	
B	স্বাস্থ্যসেবা/ক্লিনিক(Health service/clinics)	১	২	
C	বাড়ী বানানো (Housing assistance)	১	২	
D	কাজের প্রশিক্ষণ/চাকুরী (Job trining/employment)	১	২	
E	ঋণ (Credit)	১	২	
F	পানির বন্টন(Water distribution)	১	২	
G	পয়নিষ্কাশন ব্যবস্থা(Sanitation service)	১	২	
H	কৃষি সেবা(Agricultural extension)	১	২	
I	ন্যায় বিচার/দ্বন্দ্ব সমাধান(Justice/conflict resolution)	১	২	
J	নিরাপত্তা/নীতি ব্যবস্থা(Security/policy service)	১	২	

	Questions	Coding Categories		Skip
4C.8	এই ধরনের সেবাসমূহ থেকে কিছু লোককে বাদ দেয়ার কারণগুলো কি কি? (What are the reasons or criteria why some people are excluded from these services?)			
A.	আয় (Income level)	১	২	
B.	পেশা (Occupation)	১	২	
C.	সামাজিক অবস্থান(জাতি, বর্ণ)[Social status (class, caste)]	১	২	
D.	বয়স(Age)	১	২	
E.	লিঙ্গ (Gender)	১	২	
F.	জাতি/জাতিসত্তা (Race/ethnicity)	১	২	
G.	ভাষা (Language)	১	২	
H	ধর্মীয় বিশ্বাস (Religious beliefs)	১	২	
I	রাজনৈতিক সংযোগ (Political affiliation)	১	২	
J	শিক্ষার অভাব (Lack of education)	১	২	
4D.1	গত বছরে, এই গ্রাম/পাড়ার সদস্যরা কি প্রায় একত্রিত হতো এবং সরকারী কর্মচারী বা রাজনৈতিক নেতাদের সাথে যৌথভাবে গ্রামের উন্নয়নে আবেদন করত? (In the past year, how often have members of this village/neighborhood gotten together and jointly petitioned government officials or political leaders with village development as their goal?)	কখনো না Never	১	
		একবার Once	২	
		কয়েকবার A couple of times	৩	
		বারবার Frequently	৪	

	Questions	Coding Categories		Skip
4D.2	এই কাজ/এই কাজগুলোর কোনটি কি সফল হয়েছে? (Was this action/were any of these actions successful?)	হ্যাঁ, সবগুলো সফল হয়েছে Yes, all were successful	১	
		কিছু সফল হয়েছে, কিছু হয়নি Some were successful and others not	২	
		না, কোনটি সফল হয়নি No, none were successful	৩	
4D.3	গত বছর আপনি কিভাবে এই গ্রাম/পাড়ার অন্যান্যদের সাথে কোন সাধারণ বিষয়ে সম্মুখে একত্রিত হয়েছেন ? (How often in the past year have you joined together with others in the village/neighborhood to address a common issue?)	কখনো না Never	১	
		একবার Once	২	
		কয়েকবার A couple of times	৩	
		বারবার Frequently	৪	
4D.4	বিগত তিন বছরে আপনি নিচের কোনটি করেছেন কি? (In the last three years have you personally done any of the following things)	হ্যাঁ (Yes)	না (No)	
A.	নির্বাচনে ভোট দেয়া Voted in the elections	১	২	
B.	কোনো সংস্থায় সক্রিয় অংশগ্রহণ Actively participated in any association	১	২	
C.	প্রভাবশালী লোকের সাথে ব্যক্তিগত যোগাযোগ Made a personal contact with influential person	১	২	
D.	কোন সমস্যায় গণমাধ্যমকে আগ্রহী করে তোলা Made the media interested in a problem	১	২	

	Questions	Coding Categories		Skip
E.	তথ্য প্রচারে সক্রিয় অংশগ্রহণ Actively participated in an information campaign	১	২	
F.	নির্বাচনী প্রচারণায় সক্রিয় অংশগ্রহণ Actively participated in an election campaign	১	২	
G.	প্রতিবাদী আন্দোলনে অংশগ্রহণ Taken part in a protest march or demonstration	১	২	
H.	নির্বাচনী প্রতিনিধির সাথে যোগাযোগ Contacted your elected representative	১	২	
I.	জোরদখলের প্রতিবাদে অংশগ্রহণ Attend to protest forceful possession	১	২	
J.	সরকারি বৈঠক/অফিস Taken part in government meetings/ offices	১	২	
K.	এলাকার অন্যান্যদের সাথে সমস্যা নিয়ে কথা বলা Talked with other people in your area about a problem	১	২	
L.	আদালত বা পুলিশ কে সমস্যা সম্পর্কে জানানো Notified the court or police about a problem	১	২	
M.	আর্থিক বা দয়ার দান Made a monetary or in-kind donation	১	২	
N.	দাতা সংস্থার স্বেচ্ছাসেবক Volunteered for a charitable organization	১	২	
		হ্যাঁ (Yes)	হাঁ (No)	

	Questions	Coding Categories		Skip
4D.5	আপনি কি গত তিন বছরে ব্যক্তিগতভাবে কারোর সম্মুখীন হয়েছেন যিনি আপনাকে নিচের যেকোনটি করতে বলেছেন: Have you been approached by someone personally during the last three years who asked you to do any of the following:			
A	নির্বাচনে ভোট দেয়া Voted in the elections	১	২	
B	সংস্থায় সক্রিয় অংশগ্রহণ Actively participated in an association	১	২	
C	প্রভাবশালী লোকের সাথে ব্যক্তিগত যোগাযোগ Made a personal contact with an influential person	১	২	
D	কোন সমস্যায় গণমাধ্যমকে আগ্রহী করে তোলা Made the media interested in a problem	১	২	
E	তথ্য প্রচারে সক্রিয় অংশগ্রহণ Actively participated in an information campaign	১	২	
F	নির্বাচনী প্রচারণায় সক্রিয় অংশগ্রহণ Actively participated in an election campaign	১	২	
G	প্রতিবাদী আন্দোলনে অংশগ্রহণ Taken part in a protest march or demonstration	১	২	
H	নির্বাচনী প্রতিনিধির সাথে যোগাযোগ Contacted your elected representative	১	২	
I	জোরদখলের প্রতিবাদে অংশগ্রহণ Attend to protest forceful possession	১	২	

	Questions	Coding Categories		Skip
J	সরকারি বৈঠক/অফিস Taken part in a sit-in or disruption of government meetings/ offices	১	২	
K	এলাকার অন্যান্যদের সাথে সমস্যা নিয়ে কথা বলা Talked with other people in your area about a problem	১	২	
L	আদালত বা পুলিশ কে সমস্যা সম্পর্কে জানানো Notified the court or police about a problem	১	২	
M	আর্থিক বা দয়ার দান Made a monetary or in-kind donation	১	২	
N	দাতা সংস্থার স্বেচ্ছাসেবক Volunteered for a charitable organization	১	২	
4D.6	যদি এই গ্রামে/পাড়ায় কিছু সিদ্ধান্ত উন্নয়ন প্রকল্পের সাথে জড়িত হয়, আপনি কি মনে করেন তখন পুরো গ্রাম/পাড়াকে কি সিদ্ধান্ত গ্রহণের জন্য ডেকে আনা হবে অথবা কমিউনিটি নেতারা নিজেরাই সিদ্ধান্ত নেবে? (If some decision related to a development project needed to be made in this village/ neighborhood, do you think the entire village/ neighborhood would be called upon to decide or would the community leaders make the decision themselves?)	কমিউনিটি নেতারা সিদ্ধান্ত নেবে The community leaders would decide	১	
		পুরো গ্রাম/পাড়া সিদ্ধান্ত নেবে The whole village/ neighborhood would be called	২	
4D.7		খুব কম..... Very low	1	

	Questions	Coding Categories	Skip
	আপনি এই গ্রামের /পাড়ার অংশগ্রহণের উদ্যমকে কিভাবে মূল্যায়ন করবেন? (Overall, how would you rate the spirit of participation in this village/neighborhood?)	কম..... Low মোটামুটি..... Average বেশী..... High খুব বেশী Very high	2 3 4 5
4D.8	আপনি নিজে কি মনে করেন এই গ্রাম/পাড়া বেচে থাকার জন্য অপেক্ষাকৃত ভালো হলে জনগন কি তা পছন্দ করবে? (How much influence do you think people like yourself can have in making this village/neighborhood a better place to live?)	অনেক..... A lot কিছুটা Some খুব বেশী নয়..... Not very much একেবারেই না None	1 2 3 4

5. COGNITIVE SOCIAL CAPITAL

5A. সামাজিক বন্ধন (Solidarity)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP

5.A1	মনে করেন, এই গ্রামে/পাড়ায় কারো দুর্ভাগ্যজনক কিছু ঘটেছে যেমন-বাবার হঠাৎ মৃত্যু। এই অবস্থায় তারা কার কাছে সাহায্যের জন্য আসত বলে আপনি মনে করেন? (প্রথম তিনটি রেকর্ড করুন।) Suppose someone in the village/neighborhood had something unfortunate happen to them, such as a father's sudden death. Who do you think they could turn to for help in this situation? (Record first three mentioned.)	<table><tr><td>1</td><td>2</td><td>3</td></tr><tr><td></td><td></td><td></td></tr></table>	1	2	3				
		1	2	3					
		কেউই সাহায্য করত না.....1 No one would help পরিবার.....2 Family প্রতিবেশীগণ.....3 Neighbors বন্ধুরা.....4 Friends ধর্মীয় নেতা বা দল.....5 Religious leader or group কমিউনিটি নেতা.....6 Community leader ব্যবসায়ী নেতা.....7 Business leader পুলিশ.....8 Police পারিবারিক আদালত.....9 Family court judge পৃষ্ঠপোষক/নিয়োগকর্তা/উপকারী.....10 Patron/employer/benefactor রাজনৈতিক নেতা.....11 Political leader পারস্পরিক সহায়তা দেয় এমন দল যেখানে তিনি সদস্য 12							

		Mutual support group to which s/he belongs সহায়তাকারী সংস্থা যেখানে তিনি সদস্য নন 13 Assistance organization to which s/he does not belong অন্যান্য(উল্লেখ করুন) 14 Other (specify)	

5.A2	মনে করুন আপনার প্রতিবেশী আর্থিক ক্ষতির শিকার হয়েছিল যেমন(গ্রামে:শস্য নষ্ট”;শহরে:চাকরি হারানো)।এই অবস্থায় তাকে আর্থিকভাবে কে সহায়তা করত বলে আপনি মনে করেন? (প্রথম তিনটি রেকর্ড করুন।) Suppose your neighbor suffered an economic loss, say (RURAL: “crop failure”; URBAN “job loss”). In that situation, who do you think would assist him/her financially? (Record first three mentioned.)	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="width: 33.33%; text-align: center;">1</td> <td style="width: 33.33%; text-align: center;">2</td> <td style="width: 33.33%; text-align: center;">3</td> </tr> <tr> <td style="height: 30px;"></td> <td></td> <td></td> </tr> </table> কেউই সাহায্য করত না.....1 No one would help পরিবার.....2 Family প্রতিবেশীগণ.....3 Neighbors বন্ধুরা.....4 Friends ধর্মীয় নেতা বা দল.....5 Religious leader or group কমিউনিটি নেতা.....6 Community leader ব্যবসায়ী নেতা.....7 Business leader পুলিশ.....8 Police পারিবারিক আদালত.....9 Family court judge পৃষ্ঠপোষক/নিয়োগকর্তা/উপকারী.....10 Patron/employer/benefactor রাজনৈতিক নেতা.....11 Political leader পারস্পরিক সহায়তা দেয় এমন দল যেখানে তিনি সদস্য 12 Mutual support group to which s/he belongs	1	2	3				
1	2	3							

		সহায়তাকারী সংস্থা যেখানে তিনি সদস্য নন 13 Assistance organization to which s/he does not belong অন্যান্য(উল্লেখ করুন) 14 Other (specify)	

5B. বিশ্বাস ও সহায়তা (Trust and Cooperation)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES		SKIP
5B.1	আপনি কি মনে করেন এই গ্রামে/পাড়ায় জনগন সাধারণত ধার দেয়া ও ধার নেয়ার ব্যাপারে একে অপরকে বিশ্বাস করে? Do you think that in this village/ neighborhood people generally trust one another in matters of lending and borrowing?	বিশ্বাস করে Do trust	1	
		বিশ্বাস করে না Do not trust	2	
5B.2	আপনি কি মনে করেন, গত কয়েক বছর ধরে এই বিশ্বাসের ধরনের কোন পরিবর্তন হয়েছে ? Do you think over the last few years this level of trust has gotten better, gotten worse, or stayed about the same?	তুলনামূলক ভালো পরিবর্তন হয়েছে Better	1	
		একই The same	2	
		তুলনামূলক খারাপ পরিবর্তন হয়েছে Worse	3	
5B.3	অন্যান্য গ্রামসমূহ/পাড়াসমূহের তুলনায় এই গ্রামের/পাড়ার জনগন ধার দেয়া এবং ধার নেয়ার ব্যাপারে কতটুকু একে অপরকে বিশ্বাস করে? How much do the people in this area believe each other in terms of lending/ taking loan?	কম Less	1	
		একই The same	2	
		বেশী More	3	

5B.4	মনে করেন গ্রাম/পাড়ার কাউকে তাদের পরিবারসহ কিছু সময়ের জন্য দূরে যেতে হলো। কার উপর ভরসা করে তারা চলে যায় (গ্রামে: তাদের শস্যক্ষেত; শহরে: তাদের আত্মীয়ের বাড়ি)? (প্রথম তিনটি রেকর্ড করুন) If someone from the village/ neighborhood had to go away for a while, along with their family. In whose charge could they leave (RURAL: “their fields”; URBAN: “their relatives’ house”)? (Record first three mentioned.)	<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="width: 33.33%;">1</th> <th style="width: 33.33%;">2</th> <th style="width: 33.33%;">3</th> </tr> </thead> <tbody> <tr> <td style="height: 30px;"></td> <td></td> <td></td> </tr> </tbody> </table> পরিবারের অন্যান্য সদস্য.....1 Other family member প্রতিবেশী 2 Neighbor একই উদ্দেশ্যে গ্রাম/পাড়ার যে কেউ.....3 Anyone from the village/neighborhood for this purpose কেউ না.....4 No one অন্যান্য(উল্লেখ করুন) Other (specify)	1	2	3				
1	2	3							

5B.5	যদি আপনাকে হঠাৎ একদিন বা দুইদিনের জন্য দূরে যেতে হতো, আপনি আপনার ছেলেমেয়ের দেখাশুনার জন্য কাকে ঠিক করতেন ?(প্রথম তিনটি রেকর্ড করুন।) If you suddenly had to go away for a day or two, whom could you count on to take care of your children? (Record first three mentioned.)	<table border="1" style="width: 100%;"> <tr> <td style="width: 33%; text-align: center;">1</td> <td style="width: 33%; text-align: center;">2</td> <td style="width: 33%; text-align: center;">3</td> </tr> <tr> <td style="height: 30px;"></td> <td></td> <td></td> </tr> </table> পরিবারের অন্যান্য সদস্য.....1 Other family member প্রতিবেশী 2 Neighbor একই উদ্দেশ্যে গ্রাম/পাড়ার যে কেউ.....3 Anyone from the village/neighborhood for this purpose কোন ছেলেমেয়ে নেই.....4 Don't have children অন্যান্য(উল্লেখ করুন) 4 Other (specify)		1	2	3				
1	2	3								
5B.6	জনগণ গ্রামের কল্যাণের চেয়ে তাদের পরিবারের কল্যাণে সচেতন থাকে ,এ বিষয়ে আপনার মতামত । Do you think that people in this area are more concerned about family welfare than village welfare?	সম্পূর্ণ ভাবে একমত Strongly agree একমত agree দ্বিমত Disagree একদমই মানেন না Strongly disagree	1 2 3 4							
5B.7		সময় দিবে না Will not contribute time	1							

	আপনার প্রতিবেশি কোন প্রজেক্ট থেকে সরাসরি উপকার পায়না কিন্তু গ্রামের অন্যান্যরা উপকার পায়,সেক্ষেত্রে কি আপনার প্রতিবেশি এই প্রজেক্টে সময় দিবে ? If a community project does not directly benefit your neighbor but has benefits for others in the village/neighborhood, then do you think your neighbor would contribute time for this project?	সময় দিবে Will contribute time	2			
5B.8	আপনার প্রতিবেশি কোন প্রজেক্ট থেকে সরাসরি উপকার পায়না কিন্তু গ্রামের অন্যান্যরা উপকার পায়,সেক্ষেত্রে কি আপনার প্রতিবেশি এই প্রজেক্টে টাকা দিবে? If a community project does not directly benefit your neighbor but has benefits for others in the village/neighborhood, then do you think your neighbor would contribute money for this project?	টাকা দিবে না Will not contribute money	1			
		টাকা দিবে Will contribute money	2			
5B.9	দয়া করে বলুন আপনি কি সাধারণত নিম্নলিখিত বিবৃতিগুলোর সাথে সম্মত নাকি অসম্মত : Do you agree or disagree:	সম্পূর্ণ ভাবে একমত strongly agree	একমত Agree	দ্বিমত disagree	একদমই মানেন না strongly disagree	
A	এই গ্রামের/পাড়ার অধিকাংশ জনগন মূলত সৎ এবং বিশ্বাস করা যেতে পারে Most people in this village/ neighborhood are basically honest and can be trusted	১	২	৩	৪	
B	জনগন সবসময় শুধুমাত্র নিজস্ব কল্যাণে আগ্রহী People are always interested only in their own welfare	১	২	৩	৪	
C	গ্রামের/পাড়ার সদস্যরা অন্যান্যদের তুলনায় বেশী বিশ্বাসযোগ্য Members of this village/neighbor- hood are more trustworthy than others	১	২	৩	৪	
D	এই গ্রামের/পাড়ায়,যে কাউকে সতর্ক থাকতেই হবে,নতুবা কেউ সুযোগ নিতে পারে In this village/ neighborhood, one has to be alert or someone is likely to take advantage of you.	১	২	৩	৪	

E	যদি আপনি সমস্যায় পড়েন, আপনাকে সবসময় সহযোগিতা করার জন্য কেউ আছেন? If I have a problem, there is always someone to help me	১	২	৩	৪	
F	আপনি গ্রামের/পাড়ার অন্যান্য সদস্যদের মতামতের গুরুত্ব দেন না I do not pay attention to the opinions of Gothers in the village/ neighborhood	১	২	৩	৪	
I	এই গ্রামের/পাড়ার অধিকাংশ জনগন আপনার প্রয়োজনে সহায়তা করতে ইচ্ছুক Most people in this village/neighborhood are willing to help if you need it.	১	২	৩	৪	
J	গত পাঁচ বছরে এই গ্রামের/পাড়ার উন্নতি হয়েছে This village/neighborhood has prospered in the last five years	১	২	৩	৪	
K	আপনি নিজেকে এই গ্রামের/পাড়ার সদস্য মনে করেন I feel accepted as a member of this village/ neighborhood	১	২	৩	৪	
L	গ্রামে: যদি আপনি একটি শূকর অথবা একটি ছাগল হারান, গ্রামের কেউ কি তা খুঁজতে আপনাকে সহায়তা করবে বা আপনাকে ফেরত দিবে RURAL: If you lose a pig or a goat, someone in the village would help look for it or would return it to you.	১	২	৩	৪	৯৯
M	শহরে: যদি আপনি আশেপাশে আপনার ব্যাগ বা ওয়ালেট ফেলে দেন, কেউ তা দেখবে এবং আপনাকে ফেরত দেবে URBAN: If you drop your purse or wallet in the neighborhood, someone will see it and return it to you.	১	২	৩	৪	৯৯

5C. দ্বন্দ্বের সমাধান (Conflict Resolution)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES		SKIP
5C.1	আপনার মতে, এই গ্রাম/পাড়া কি সাধারণত শান্তিপূর্ণ বা দ্বন্দ্বপূর্ণ? In your opinion, is this village/neighborhood generally peaceful or conflictive?	শান্তিপূর্ণ Peaceful	১	
		দ্বন্দ্বপূর্ণ conflictive	২	
5C.2	অন্যান্য গ্রামসমূহ /পাড়াসমূহের তুলনায় এই গ্রামে/পাড়ায় কি দ্বন্দ্ব কম বা বেশী? Compared with other villages/neighborhoods, is there more or less conflict in this village/neighborhood?	বেশী More	১	
		একই same	২	
		কম Less	৩	
5C.3	এলাকাবাসী কি সাধারণ উন্নয়নের লক্ষ্যে সময় এবং টাকা দেয়? Do people in this village/neighborhood contribute time and money toward common development goals?	তারা কিছুটা বা বেশী দেয় They contribute some or a lot.	১	
		তারা খুব কম দেয় বা দেয় না They contribute very little or nothing	২	
5C.4	অন্যান্য গ্রামসমূহ /পাড়াসমূহের তুলনায় এই গ্রামে/পাড়ায় জনগন সাধারণ উন্নয়নের লক্ষ্যে কতটুকু সময় এবং টাকা দেয়? Compared with other villages/neighborhoods, to what extent do people of this village/neighborhood contribute time and money toward common development goals?	কম দেয় less	১	
		একই রকম The same	২	
		বেশী দেয় More	৩	
5C.5		কেউ না;লোকজন নিজেরাই করে No one; people work it out between themselves	১	
		পরিবার/খানার সদস্যরা Family/household members	২	

দু'জন ব্যক্তির মধ্যে মারাত্মক দ্বন্দ্ব হলো আপনার মতে কে প্রাথমিকভাবে দ্বন্দ্ব মেটাতে এগিয়ে আসবে ? Suppose two people in this village/neighborhood had a fairly serious dispute with each other. Who do you think would primarily help resolve the dispute?	প্রতিবেশী Neighbors	৩	
	কমিউনিটি নেতারা Community leaders	৪	
	ধর্মীয় নেতারা Religious leaders	৫	
	বিচারক নেতারা Judicial leaders	৬	
	অন্যান্য (উল্লেখ করুন) Other (specify)		

**Improving maternal, newborn, and child health
through building public-private partnerships
(SUSOMA)**

**Baseline Survey for Social Capital Measurement
2012**

Community Questionnaire

World Renew

icddr,b

IMCI section of DGHS

USAID

খানার প্রশ্নপত্র (Household Questionnaire)

সাক্ষাৎকার শুরুর সময় (start time of interview)

 ঘন্টা

 মিনিট

সাক্ষাৎকার শেষ হবার সময় (end time of interview)

 ঘন্টা

 মিনিট

১. নির্ধারিত খানা সনাক্তকরণ (identification of household)

- ১.১. জেলা (district)
- ১.২. সাব-জেলা/উপজেলা (sub-district/ Unazila)
- ১.৩. ইউনিয়ন: (Union)
- ১.৪. শহর/গ্রাম (city/ village)
- ১.৫. ওয়ার্ড (Ward)
- ১.৬. পাড়া/মহল্লা (nara/ moholla)
- ১.৭. রাস্তা (road)
- ১.৮. খানা নম্বর (Household number)
- ১.৯. অন্যান্য বিস্তারিত (Others)
- ২.০. এলাকার ধরন (type of the area)
- শহর (Urban)

- গ্রাম(আদিবাসী নয়) (village/ not indigenous)

- আদিবাসী (indigenous)

- প্রত্যন্ত অঞ্চল (remote)

সাক্ষাৎগ্রহনকারীর নাম (Interviewer)

সপারভাইজার নাম (Supervisor)

1. B কমিউনিটির প্রশ্নপত্র (Community questionnaire)

1. কমিউনিটি বৈশিষ্ট্য সমূহ (Community Characteristics)

SL#	Questions	Coding Category	Skip
1.1	কত বছর এই কমিউনিটি টি আছে ? How many years has the community been in existence?	২০ বৎসরের বেশী 1 More than 2years ১০ থেকে ২০ বৎসরের পর্যন্ত 2 Between 10 and 20 year 10এর কম 3 Fewer than 10 years	
1.2	এই কমিউনিটিতে কতগুলো খানা আছে? How many households are in this community?	25 এর কম..... 1 Fewer than 25 ২৫ থেকে ৪৯ পর্যন্ত..... 2 Between 25 and 49 ৫০ থেকে ৯৯ পর্যন্ত..... 3 Between 50 and 99 ১০০ থেকে ২৪৯ পর্যন্ত 4 Between 100 and 249 ২৫০এর বেশী 5 More than 250	
1.3	গত তিন বৎসরের, এই কমিউনিটিতে জনসংখ্যার কোন পরিবর্তন হয়েছে কি ? In the last three years, the number of people living in this community has:	বৃদ্ধি পেয়েছে 1 Increased কমে গিয়েছে 2 Decreased একই রকম আছে 3 Remained the same	

1.4	বৃদ্ধি পাওয়া ,কমে যাওয়া অথবা পরিবর্তনের দুইটি প্রধান কারণ কি কি ? What are the two main reasons for the increase, decrease, or lack of change?	(a) _____ (b) _____	
1.5	এই কমিউনিটিতে পুরুষদের জন্য অর্থ উপার্জনের দুইটি প্রধান কাজ কি কি ? What are the two principal economic activities for men in this community?	(a) _____ (b) _____	
1.6	এই কমিউনিটিতে মহিলাদের জন্য অর্থ উপার্জনের দুইটি প্রধান কাজ কি কি ? What are the two principal economic activities for women in this community?	(a) _____ (b) _____	
1.7	এই কমিউনিটির বসবাসকারীরা যাতায়াতের জন্য কি ধরনের রাস্তা ব্যবহার করে বর্ষাকালে এবং শুকনামৌসুমে ? What is the main route that inhabitants use to reach this community, both during rainy season and dry season?	(a) বৃষ্টির সময় (b) খরা পাকা রাস্তা 1 Paved road কাঁচা রাস্তা 2 Dirt road 3 রাস্তা মিলে 3 Mixed paved and dirt পানি পথ 4 Water ways Ab`vb` (D#j-L Ki`b) (specify) Other	

1.8	গত তিন বৎসরের মধ্যে, এই কমিউনিটির প্রধান রাস্তার কোন পরিবর্তন হয়েছে কি ? Has there been any changes in the roads in this community in the last three years?	উন্নতিকরেছে 1 Improved খারাপ হয়েছে 2 Worsened একই রকম আছে..... 3 Remained the same	
1.9	গত তিন বৎসরের মধ্যে,এই কমিউনিটিতে বসতবাড়ীর গুণগত মান কেমন হয়েছে ? In the last three years, the quality of housing in this community has:	উন্নতিকরেছে 1 Improved খারাপ হয়েছে 2 Worsened একই রকম আছে..... 3 Remained the same	
1.10	গত তিন বৎসরে এই কমিউনিটিতে বসতবাড়ী উন্নত /খারাপ / একই রকম থাকার প্রধান দুইটি কারণ কি ? What are the two main reasons that housing in the community has improved/ worsened/ remained the same during the last three years?	(a) _____ (b) _____	
1.11	গত তিন বৎসরের মধ্যে , এই কমিউনিটিতে জনগনের জীবন-যাপনের মানের কোন পরিবর্তন হয়েছে কি ? (চাকরির সুযোগ-সুবিধা,নিরাপত্তা, পরিবেশ, আবাসন) In the last three years, the overall quality of life of the people living in this community has: (consider job availability, safety and security, environment, housing, etc.	উন্নতিকরেছে 1 Improved খারাপ হয়েছে 2 Worsened একই রকম আছে..... 3 Remained the same	
1.12	গত তিন বৎসরে এই কমিউনিটিতে জনগনের জীবন-যাপনের মানের পরিবর্তন হওয়ার প্রধান	(a) _____	

	দুইটি কারন কি ? What are the two main reasons for the overall quality of life?	(b) _____	
1.13	এই কমিউনিটির অধিকাংশ বসবাসকারী কেমন ? (অবস্থার দিক থেকে) Overall, the level of living of this community may be characterized as:	ধনী 1 Wealthy সচ্ছল..... 2 Well-to-do মোটামুটি 3 Average গরীব 4 Poor খুব গরীব..... 5 Very poor	
1.14	এই কমিউনিটির জনগন সাধারণত: ধারদেয়া এবং ধার নেয়ার ব্যাপারে একে অপরকে বিশ্বাস করে ? Do people in this community generally trust one another in matters of lending and borrowing?	হ্যাঁ 1 Yes না 2 No	
1.15	গত তিন বৎসরে এই বিশ্বাসের ধরনের কোন পরিবর্তন হয়েছে কি ? In the last three years, has the level of trust improved, worsened, or stayed the same?	উন্নতকরেছে 1 Improved খারাপ হয়েছে 2 Worsened একই রকম আছে..... 3 Remained the same	
1.16	অন্য কমিউনিটির সংগে তুলনা করলে এই কমিউনিটির জনগন ধার দেয়া এবং ধার নেয়ার ব্যাপারে একে অপরকে কতটা বিশ্বাস করে? Compared with other communities, how much do people in this	বেশী বিশ্বাস করে..... 1 More trust একই রকম.....2 Same as	

	community trust each other in matters of lending and borrowing?	কম বিশ্বাস করে 3 Less trust	
1.17	জনগন কমিউনিটির কল্যানের চেয়ে নিজের পরিবারের কল্যানের জন্য সচেতন থাকে : এতে আপনার মত কি ?	সম্পূর্ণ ভাবে একমত..... 1 Strongly agree একমত 2 agree দ্বিমত..... 3 Disagree	
SL#	Questions	Coding Category	Skip
২. PRINCIPAL SERVICES			
২ A. Electricity			
২ A.1	এই খানাগুলোতে সবসময় বিদ্যুৎ থাকে ? Is electricity available here for households?	হ্যাঁ 1 Yes না 2 No	→ 2B
২ A.2	গত তিন বৎসরের মধ্যে এই কমিউনিটিতে বিদ্যুৎ এর সেবার অবস্থা কেমন ছিল? In the last three years, the electrical service to this community has:	উন্নতিকরেছে 1 Improved খারাপ হয়েছে 2 Worsened একই রকম আছে..... 3	

		Remained the same	
২ A.3	বর্তমানে এই এলাকার বিদ্যুতের সেবার মান কেমন ? Currently, the quality of electrical service within the homes of community is:	খুব ভাল..... 1 Very good ভাল 2 Good মোটামুটি 3 Average খারাপ..... 4 Poor খারাপ..... 5 Very poor	
২ A.4	বিদ্যুৎ সেবার প্রধান দুইটি সমস্যা কি কি ? What are the two main problems with the electrical service?	a) _____ — (b) _____ —	

2B. Public Lighting

2B.1	এই এলাকায় রাস্তায় লাইটের ব্যবস্থা আছে কি? Does this community have street lights?	হ্যাঁ 1 Yes না 2 No	
2B.2	গত তিন বৎসরে পাবলিক লাইটের ব্যবস্থা কেমন ছিল ? In the last three years, the public lighting service has:	উন্নতিকরেছে 1 Improved খারাপ হয়েছে 2 Worsened একই রকম আছে..... 3	

		Remained the same	
2B.3	বর্তমানে পাবলিক লাইটের মান কেমন ? Currently, the quality of public lighting service is:	খুব ভাল..... 1 Very good ভাল 2 Good মোটামুটি 3 Average খারাপ..... 4 Poor খারাপ..... 5 Very poor	
2B.4	এই এলাকার পাবলিক লাইটের প্রধান দুইটি সমস্যা কি কি ? What are the two main problems with the public lighting in this community?	(a) _____ (b) _____	

2C. খাবার পানি. Drinking Water

2C.1	এই এলাকায় পাইপের/নলের মাধ্যমে পানির ব্যবস্থা আছে কি ? Is the community has pipe-borne water?	হ্যাঁ 1 Yes না 2 No	
2C.2	এলাকার কোন অংশে এই পাইপের/নলের মাধ্যমে পানির ব্যবস্থা আছে ? What part of the community has pipe-borne water?	সমগ্র কমিউনিটি.....1 The entire community অধিকাংশ কমিউনিটি..... 2 Most of the community প্রায় অর্ধেক কমিউনিটি 3	

		About half the community অর্ধেকের কম/খুব অল্প 4 Less than half/very few	
2C.3	এই এলাকাতে জনগনের জন্য সরকারী কলের ব্যবস্থা আছে কি ? Is the community has public Standpipes?	হ্যাঁ 1 Yes না 2 No	
2C.4	এই এলাকার কোন অংশে জনগনের জন্য সরকারী কলের ব্যবস্থা আছে ? What part of the community has access to public standpipes?	সমগ্র কমিউনিটি.....1 The entire community অধিকাংশ কমিউনিটি..... 2 Most of the community প্রায় অর্ধেক কমিউনিটি 3 About half the community অর্ধেকের কম/খুব অল্প 4 Less than half/very few	
2C.5	গত তিন বৎসরে খাবার পানির ব্যবস্থা কেমন ছিল? In the last three years, potable water service has been:	উন্নতকরেছে 1 Improved খারাপ হয়েছে 2 Worsened একই রকম আছে..... 3 Remained the same	
2C.6	বর্তমানে খাবার পানির ব্যবস্থা কেমন ?	খুব ভাল..... 1 Very good ভাল 2 Good মোটামুটি 3 Average	

		খারাপ..... 4 Poor খারাপ..... 5 Very poor	
2C.7	খাবার পানির দুইটি প্রধান সমস্যা কি কি ? What are the two main problems with the drinkable water service?	(a) _____ (b) _____	

2D. বাড়ীতে টেলিফোনের ব্যবস্থা Home Telephone Service

2D.1	এই এলাকার বাড়ীগুলোতে টেলিফোনের ব্যবস্থা আছে কি ? Is the home telephone service available in this community?	হ্যাঁ 1 Yes না 2 No	→ 2E
2D.2	এই এলাকাতে কতটুকু অংশে এই টেলিফোনের ব্যবস্থা আছে ? What fraction of the community has home telephone service?	সমগ্র কমিউনিটি.....1 The entire community অধিকাংশ কমিউনিটি..... 2 Most of the community প্রায় অর্ধেক কমিউনিটি 3 About half the community অর্ধেকের কম/খুব অল্প 4 Less than half/very few	

2D.3	বর্তমানে বাড়ীতে টেলিফোনের অবস্থা কেমন? Currently, the home telephone service is:	খুব ভাল..... 1 Very good ভাল 2 Good মোটামুটি 3 Average খারাপ..... 4 Poor খারাপ..... 5 Very poor	

2E. যোগাযোগ ব্যবস্থা Communication Services

2E.1	এই এলাকাতে সরকারী/পাবলিক টেলিফোনের ব্যবস্থা আছে কি ? Does this community have public telephones?	হ্যাঁ 1 Yes না 2 No _____	 2E.3
2E.2	এই এলাকাতে সরকারী/পাবলিক টেলিফোনের সংখ্যা কত? How many public telephones are in this community?	_____ টা (Number)	 2E.4
2E.3	এই এলাকায় নিকটতম সরকারী/পাবলিক টেলিফোনের দূরত্ব কত? What is the distance from this	দূরত্ব (পায়ে হেটে কতসময়লাগে) Distance (in walking minutes) _____	

	community to the nearest public telephone?		
2E.4	গত তিন বৎসরে এই এলাকায় সরকারী/পাবলিক টেলিফোনের সেবার মান কেমন ছিল? In the last three years, what was the scodition of public telephone in this community?	উন্নতিকরেছে 1 Improved খারাপ হয়েছে 2 Worsened একই রকম আছে..... 3 Remained the same	
2E.5	বর্তমানে এই এলাকায় সরকারী/পাবলিক টেলিফোনের সেবার মান কেমন? Currently, the condition for telephone service in this community:	খুব ভাল..... 1 Very good ভাল 2 Good মোটামুটি 3 Average খারাপ..... 4 Poor খারাপ..... 5 Very poor	
2E.6	এই এলাকায় সরকারী/পাবলিক টেলিফোনের সেবার প্রধান দুইটি সমস্যা কি কি ? What are the two main problems with the public telephone service in this community?	a)_____ (b)_____	
2E.7	এই এলাকায় পোস্টঅফিস আছে কি? Is there a post office in this	হ্যাঁ 1 Yes	→ 2E.9

	community?	না 2 No	
2E.8	এই এলাকায় নিকটতম পোস্টঅফিসের দূরত্ব কত? What is the distance from this community to the nearest post office?	দূরত্ব (পায়ে হেটে কত সময় লাগে Distance (in walking minutes) _____	
2E.9	গত তিন বৎসরে এই এলাকার পোস্টঅফিসের সেবার অবস্থা কেমন হয়েছে? In the last three years, what was the condition of post office?	উন্নতিকরেছে 1 Improved খারাপ হয়েছে 2 Worsened একই রকম আছে..... 3 Remained the same	
2E.1 0	বর্তমানে এই এলাকার পোস্টঅফিসের অবস্থা কেমন ? What is the current situation in the post office?	খুব ভাল..... 1 Very good ভাল 2 Good মোটামুটি 3 Average খারাপ..... 4 Poor খারাপ..... 5 Very poor	
2E.1 1	এই এলাকার পোস্টঅফিসের প্রধান দুইটি সমস্যা কি ? What are the two main problems with the mail service in this	a) _____ b) _____	

	community?		
2E.1 2	এই এলাকায় পাবলিক ইন্টারনেট সার্ভিসের ব্যবস্থা আছে কি ? Is there a public internet service in this community?	হ্যাঁ 1 Yes না 2 No	2E.15
2E.1 3	এই এলাকার কোন অংশে পাবলিক ইন্টারনেট সার্ভিসের ব্যবস্থা আছে ? What fraction of the community has access to public Internet service?	সমগ্র কমিউনিটি 1 The entire community অধিকাংশ কমিউনিটি 2 Most of the community প্রায় অর্ধেক কমিউনিটি 3 About half the community অর্ধেকের কম/খুব অল্প 4 Less than half/very few	
2E.1 4	কোথায় সবসময় পাবলিক ইন্টারনেট সার্ভিস পাওয়া যায়? Where are public Internet access services available?	স্থানীয় স্কুল 1 Local school লাইব্রেরী 2 Library কমিউনিটি সেন্টার 3 Community center ট্রেনিং সেন্টার 4 Training center ইন্টারনেট ক্যাফে 5 Internet café অন্যান্য (উল্লেখ করুন)..... 6 Other (specify)	→ 2F

2E.1 5	এই এলাকায় নিকটতম পাবলিক ইন্টারনেট সার্ভিসের দূরত্ব কত ? What is the distance from this community to the nearest public Internet access service?	দূরত্ব (পায়ে হেটে কত সময় লাগে) Distance (in walking minutes) _____	

2F. পয়ঃনিষ্কাশন ব্যবস্থা Sewage

2F.1	এই এলাকায় সরকারী পয়ঃনিষ্কাশন ব্যবস্থা ব্যবস্থা চালু আছে কি ? Is there a public internet service in this community?	হ্যাঁ 1 Yes না 2 No দূরত্ব (পায়ে হেটে কত সময় লাগে)) Distance (in walking minutes) _____ [] 2 (go to question 2F.6	⇒ 2F.6
2F.2	এই এলাকার কোন অংশে সরকারী পয়ঃনিষ্কাশন ব্যবস্থা আছে ? What fraction of the community is served by a public sewage system?	সমগ্র কমিউনিটি.....1 The entire community অধিকাংশ কমিউনিটি..... 2 Most of the community	

		প্রায় অর্ধেক কমিউনিটি 3 About half the community অর্ধেকের কম/খুব অল্প 4 Less than half/very few	
2F.3	গত তিন বৎসরে এই এলাকার সরকারী পয়ঃনিষ্কাশন ব্যবস্থা কেমন ছিল ? In the last three years, what was the condition for public sewage system?	উন্নতিকরেছে 1 Improved খারাপ হয়েছে 2 Worsened একই রকম আছে..... 3 Remained the same	
2F.4	বর্তমানে এই এলাকার সরকারী পয়ঃনিষ্কাশন ব্যবস্থা কেমন ? Currently, what is the condition for public sewage system?	খুব ভাল..... 1 Very good ভাল 2 Good মোটামুটি 3 Average খারাপ..... 4 Poor খারাপ..... 5 Very poor	
2F.5	এই এলাকার সরকারী পয়ঃনিষ্কাশন ব্যবস্থার প্রধান দুইটি সমস্যা কি ? What are the two main problems with the public sewage system in this community?	(a) _____ (b) _____	
2F.6	এই এলাকায় পয়ঃনিষ্কাশনের জন্য পর্যাপ্ত ড্রেন আছে ,যার দ্বারা অতিরিক্ত পানি ,বন্যা এবং বৃষ্টি প্রতিরোধ করা যায় ?	হ্যাঁ 1 Yes	

	Do the streets of this community have sufficient sewers and drains to handle excess water and prevent flooding when it rains?	না 2 No		
2F.7	এই এলাকাতে পয়ঃনিষ্কাশন ব্যবস্থার জন্য অন্য আর কি ব্যবস্থা আছে ? What other sewage and waste water systems are used in this community?		Yes	No
		a. পায়খানা(Latrine)	1	2
		b. সেপটিক ট্যান্ক(Septic tanks)	1	2
		c. নদী অথবা সমুদ্র(River or sea)	1	2
		d. অন্যান্য (উল্লেখ করুন) Other (specify)		

2G. ময়লা আর্বজনা সংগ্রহ Garbage Collection

2G.1	এই কমিউনিটিতে আবর্জনা সংগ্রহের ব্যবস্থা আছে কি ? Is there any garbage collection system in this community?	হ্যাঁ 1 Yes না 2 No	⇒ 2G.3
2G.2	এই এলাকার কোন অংশে আবর্জনা সংগ্রহের ব্যবস্থা আছে ? What fraction of the community is served by a garbage collection service?	সমগ্র কমিউনিটি.....1 The entire community অধিকাংশ কমিউনিটি..... 2 Most of the community	

		প্রায় অর্ধেক কমিউনিটি 3 About half the community অর্ধেকের কম/খুব অল্প 4 Less than half/very few	
2G.3	গত তিন বৎসরের মধ্যে এই এলাকার আবর্জনা ফেলার ব্যবস্থা কেমন ছিল? In the last three years, how was the system for garbage collection?	উন্নতকরেছে 1 Improved খারাপ হয়েছে 2 Worsened একই রকম আছে..... 3 Remained the same	
2G.4	যেবাড়ীতে আবর্জনা সংগ্রহের সেবা গ্রহন করে না, তারা আবর্জনা কি করে ? In the homes that do not receive garbage collection service, what is the main solid waste disposal method?	পুড়িয়ে ফেলে 1 Burn it নিজের জায়গায় ফেলে 2 Throw on own lot অন্যের জায়গায় ফেলে..... 3 Throw on others' lots নদী/সমুদ্র/পুকুরে ফেলে 4 Throw into river/sea/ pond পুতেঁ রাখে..... 5 Bury it অন্যান্য (উল্লেখ করুন) Other (specify)	

2H. পাবলিক মার্কেট Public Market

2H.1	এই কমিউনিটিতে কোন পাবলিক মার্কেট আছে কি ? Does this community have a public market?	হ্যাঁ 1 Yes না 2 No	➡ 2H.5
2H.2	কমিউনিটি থেকে নিকটতম মার্কেটে হেটে যেতে কতক্ষণ লাগে : The walking distance from the community to the nearest market is:	দূরত্ব (হেঁটে যেতে কত সময় লাগে) Distance (in walking minutes) _____	➡ 21
2H.3	কমিউনিটির কত জন মার্কেটে যায়? How many people in the community use the market?	সমগ্র কমিউনিটি 1 The entire community অধিকাংশ কমিউনিটি 2 Most of the community প্রায় অর্ধেক কমিউনিটি 3 About half the community অর্ধেকের কম/খুব অল্প 4 Less than half/very few	
2H.4	মার্কেট কবে খোলা থাকে : The market is open:	প্রত্যেকদিন 1 Every day সপ্তাহের কিছুদিন 2 Some days of the week প্রতি সপ্তাহের ১ দিন 3 One day per week অন্যান্য (উল্লেখ করুন) 4 Other (specify)	

2H.5	গত ৩ বৎসরে এই মার্কেটের মান ও সেবার অবস্থা কেমন হয়েছে ? In the last three years, what has been the situation of this market?	উন্নতকরেছে 1 Improved খারাপ হয়েছে 2 Worsened একই রকম আছে..... 3 Remained the same	

2I. যানবাহন (Transportation)

2I.1	এই কমিউনিটিতে কি পাবলিক পরিবহনের ব্যবস্থা আছে ? Is this community served by a public transport system?	হ্যাঁ 1 Yes না 2 No	 21.2
2I.2	পাবলিক পরিবহনের মাধ্যমে নিকটবর্তী কমিউনিটিতে যাওয়ার জন্য হাটার দূরত্ব কতটুকু: The walking distance to the nearest community with public transportation is:	দূরত্ব (হাটে কত মিনিট লাগে ?) Distance (in walking minutes) _____	 21.5
2I.3	পাবলিক পরিবহন সহজে পাওয়া যায় (Is public transportation is available easily?)	প্রত্যেকদিন 1 Every day সপ্তাহের কিছুদিন 2 Some days of the week প্রতি সপ্তাহের ১ দিন..... 3	

		One day per week অন্যান্য (উল্লেখ করুন)..... 4 Other (specify)			
2I.4	কারা পাবলিক পরিবহন ব্যবহার করে Public transportation is used by whom?	সমগ্র কমিউনিটি.....1 The entire community অধিকাংশ কমিউনিটি..... 2 Most of the community প্রায় অর্ধেক কমিউনিটি 3 About half the community অর্ধেকের কম/খুব অল্প 4 Less than half/very few			
2I.5	গত ৩ বৎসরে পাবলিক পরিবহনের মান ও সেবার অবস্থা কেমন হয়েছে ? In the last three years, was there any changes in quality of public transport?	উন্নতকরেছে 1 Improved খারাপ হয়েছে 2 Worsened একই রকম আছে..... 3 Remained the same			
2I.6	এই কমিউনিটির পাবলিক পরিবহনকে উন্নত করার জন্য প্রধান ২ টি পরিবর্তন কি হতে পারে ? What two main changes can be made to improve public transportation to this community?	(a) _____ (b) _____			
2I.7	এই কমিউনিটির লোকজন পাশের কমিউনিটিতে যাওয়ার জন্য আর কোন ধরনের যানবাহন ব্যবহার করে (সবচেয়ে গুরুত্বপূর্ণ ২টি নাম লিখুন).	(b) (a) <table border="1" style="margin-left: 10px;"> <tr> <td style="width: 50px; height: 20px;"></td> <td style="width: 50px; height: 20px;"></td> </tr> </table>			

	What other types of transportation do people in this community use to go to neighboring communities? (List the two most important ones).	হেটে(Walking) 1 সাইকেলে (Bicycle) 2 ঘোড়ায়(Horse) 3 গাড়ীতে (Car) 4 অন্যান্য উল্লেখ করুন (Other (specify)	

2J. বিনোদন (Recreation)

2J.1	এই এলাকাতে কি খেলার মাঠ এবং বিনোদনের জায়গা আছে ? Does this community have sports fields or recreational areas?	হ্যাঁ 1 Yes না 2 No	⇒ 2J.3
2J.2	গত ৩ বৎসরে এই এলাকার খেলার মাঠ এবং বিনোদনের জায়গাগুলোর অবস্থা কেমন হয়েছে ? In the last three years, the condition of the sports fields and recreational areas has:	উন্নতকরেছে 1 Improved খারাপ হয়েছে 2 Worsened একই রকম আছে..... 3 Remained the same	
2J.3	এই কমিউনিটিতে কি শিশুদের জন্য আলাদা খেলার মাঠ আছে ? Does this community have separate children's play areas?	হ্যাঁ 1 Yes না 2 No	⇒ 2K
2J.4	গত ৩ বৎসরে শিশুদের এই খেলার মাঠের অবস্থা কেমন হয়েছে ?	উন্নতকরেছে 1	

	In the last three years, the condition of these children's play areas has:	Improved খারাপ হয়েছে 2 Worsened একই রকম আছে..... 3 Remained the same	

2K. নিরাপত্তা (Security)

2K.1	এই কমিউনিটির কি নিরাপত্তা বা পুলিশ সেবার ব্যবস্থা আছে ? Does this community have a security or police force?	হ্যাঁ 1 Yes না 2 No	⇒ Section-3
2K.2	এই সেবাটা কারা দেয় ? This service is provided by	পুলিশ /আনসার 1 The police এলাকাসবাসী 2 The community প্রাইভেট কোম্পানী 3 A private company	
2K.3	এই নিরাপত্তা সেবাটা এলাকার কোন অংশে দেওয়া হয় ? This security service is provided to:	সমগ্র কমিউনিটি.....1 The entire community অধিকাংশ কমিউনিটি..... 2 Most of the community প্রায় অর্ধেক কমিউনিটি 3 About half the community অর্ধেকের কম/খুব অল্প 4 Less than half/very few	
2K.4	গত ৩ বৎসরে নিরাপত্তা সেবার মান কেমন হয়েছে ? In	উন্নতিকরেছে 1	

	the last three years, the quality of the security service has:	Improved খারাপ হয়েছে 2 Worsened একই রকম আছে..... 3 Remained the same	

3.শ্রম অভিবাসন.(LABOR MIGRATION)

3.1	এই কমিউনিটির সদস্যরা কি কাজ করার জন্য বৎসরের কিছু সময় অন্য স্থানে যায় ? Are there members of this community who go to other places to work during certain periods of the year?	হ্যাঁ 1 Yes না 2 No	⇒ 3.6
3.2	এই কমিউনিটির সদস্যদের মধ্যে কারা কাজের জন্য অন্যস্থানে বেশি যায় ? Do more women than men leave to work? Do more men than women leave to work? Or equal numbers of women and men?	পুরুষের চেয়ে মহিলারা বেশি..... 1 More women than men মহিলাদের চেয়ে পুরুষেরা বেশি 2 More men than women সমান সংখ্যক 3 Equal numbers	
3.3	প্রাথমিকভাবে কাজের জন্য তারা কোথায় যায় ? Where do they go to work primarily?	এই অঞ্চলের শহরে 1 To a city in this region অন্য অঞ্চলের শহরে..... 2 To a city in another region বিদেশের শহরে 3 To a city in another country	

		এই অঞ্চলের গ্রামে 4 To a rural area in this region অন্য অঞ্চলের গ্রামে 5 To a rural area in another region বিদেশের গ্রামে 6 To a rural area in another country	
3.4	মহিলারা মূলত: কি কি কাজের জন্য যায় ?(২টি পেশা লিখুন) What are the two principal jobs women leave for?	(a) _____ (b) _____	
3.5	পুরুষরা মূলত: কি কি কাজের জন্য যায় ?(২টি পেশা লিখুন) What are the two principal jobs men leave for?	(a) _____ (b) _____	
3.6	অন্য কমিউনিটির লোকজন কি এই কমিউনিটিতে কাজ করতে আসে ? Are there people from other communities who come to work in this community?	হ্যাঁ 1 Yes না 2 No	➡ Sec tion- 4
3.7	তারা কোন ২টি কাজের জন্য মূলত এই কমিউনিটিতে আসে ? What are the two principal jobs they come for?	(a) _____ (b) _____	

4. শিক্ষা (EDUCATION)

4A. প্রিঙ্কুল(Preschool)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
4A.1	এই কমিউনিটিতে কি সরকারী প্রিঙ্কুল আছে ? Does this community have a public preschool?	হ্যাঁ 1 Yes না 2 No	→ 4A.3 → Section-4B
4A.2	সবচেয়ে কাছের সরকারী প্রিঙ্কুলটি কমিউনিটি থেকে কত দূরে ? How far from the community is the nearest public preschool?	দূরত্ব (হেটে যেতে কত মিনিট লাগে) Distance (in walking minutes) _____	→
4A.3	এই এলাকায় ছোট বাচ্চাদের জন্য পর্যাপ্ত পরিমাণ প্রিঙ্কুল আছে কি ? Is the number of preschools in this community sufficient to serve the number of young children in the community?	হ্যাঁ 1 Yes না 2 No	
4A.4	এই এলাকায় ছোট শিশুদের জন্য প্রি-স্কুলে পর্যাপ্ত পরিমাণ শিক্ষক আছে কি ? Is the number of teachers in these preschools sufficient for the number of children?	হ্যাঁ 1 Yes না 2 No	
4A.5	প্রিঙ্কুলটির অবকাঠামো কেমন ? What is the physical condition of the preschool is?	খুব ভাল..... 1 Very good ভাল 2	

		Good মোটামুটি 3 Average থারাপ..... 4 Poor থারাপ..... 5 Very poor	
4A.6	ছোট শিশুদের মধ্যে কত শতাংশ সরকারী প্রিস্কুলগুলোতে যায় ? What percentage of young children attends public preschools?	সকল শিশু(All children)..... 1 অধিকাংশ শিশু(Most children)..... 2 প্রায় অর্ধেক শিশু(About half of the children) 3 অর্ধেকের কম(Less than half)..... 4 খুবই কম / কেউনা (Very few/none)..... 5	
4A.7	এই কমিউনিটির পাবলিক প্রিস্কুলগুলোতে ছোট শিশুদের অনুপস্থিতি প্রধান ২ টি কারণ কি কি ? What are the two principal reasons that young children from this community do not attend public preschool?	(a) _____ (b) _____	

4B.প্রাথমিক বিদ্যালয়(Primary School)

NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
4B.1	এই এলাকায় কোন সরকারী প্রাইমারী স্কুল আছে কি? Does this community have a public primary school?	হ্যাঁ 1 Yes না 2 No	→ 4b.3
4B.2	সবচেয়ে কাছের সরকারী প্রাইমারী স্কুলটি কমিউনিটি থেকে কত দূরে?	দূরত্ব (হেটে যেতে কত মিনিট লাগে) Distance (in walking minutes) _____	→

	How far from the community is the nearest public primary school?		
4B.3	এই এলাকায় স্কুলগামী শিশুদের জন্য পর্যাপ্ত সংখ্যক প্রাইমারী স্কুল আছে কি ? Is the number of primary schools in this community sufficient to serve the number of school-age children in the community?	হ্যাঁ 1 Yes না 2 No	
4B.4	এই স্কুলের ছাত্র/ছাত্রীদের জন্য পর্যাপ্ত সংখ্যক শিক্ষক আছে কি? Is the number of teachers in these schools sufficient for the number of students?	হ্যাঁ 1 Yes না 2 No	
4B.5	প্রাইমারী স্কুলটির অবকাঠামো কেমন ? What is the physical condition of the primary school ?	খুব ভাল..... 1 Very good ভাল 2 Good মোটামুটি 3 Average খারাপ..... 4 Poor খারাপ..... 5 Very poor	
4B.6	স্কুল গামী শিশুদের মধ্যে কত শতাংশ সরকারী প্রাইমারী স্কুলে উপস্থিত থাকে ? What percentage of eligible school-age children attends public primary schools?	সকল শিশু(All children)..... 1 অধিকাংশ শিশু(Most children)..... 2 প্রায় অর্ধেক শিশু(About half of the children).. 3 অর্ধেকের কম(Less than half)..... 4 খুবই কম / কেউনা(Very few/none)..... 5	
4B.7	এই এলাকায় ,স্কুল গামী শিশুদের পাবলিক প্রাইমারী স্কুলে অনুপস্থিতির প্রধান ২ টি কারণ কি		

	কি ? What are the two principal reasons that school-age children from this community do not attend public primary school?	(a) _____ (b) _____	

4C. মাধ্যমিক স্কুল

NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
4C.1	এই কমিউনিটিতে কি কোন সরকারী মাধ্যমিক স্কুল আছে ? Does this community have a public secondary school?	হ্যাঁ 1 Yes না 2 No	→ 4C.3
4C.2	সবচেয়ে কাছের সরকারী মাধ্যমিক স্কুলটি এলাকা থেকে কত দূরে ? How far from the community is the nearest public secondary school?	দূরত্ব (হেটে যেতে কত মিনিট লাগে) Distance (in walking minutes) _____	
4C.3	এই এলাকায় মাধ্যমিক স্কুলের স্কুলগামী ছাত্র/ছাত্রীদের জন্য পর্যাপ্ত সংখ্যক মাধ্যমিক স্কুল আছে কি ? Is the number of secondary schools in this community sufficient to accommodate the number of secondary-school-age students in the community?	হ্যাঁ 1 Yes না 2 No	
4C.4	এই মাধ্যমিক স্কুলে ছাত্র/ছাত্রীদের জন্য পর্যাপ্ত সংখ্যক শিক্ষক আছে কি ? Is the number of teachers in the secondary schools sufficient for the number of students?	হ্যাঁ 1 Yes না 2 No	
4C.5	মাধ্যমিক স্কুলের কার্ঠামোগত অবস্থা কেমন ? What is the physical condition of the secondary school ?	খুব ভাল..... 1 Very good ভাল 2 Good	

		মোটামুটি 3 Average খারাপ..... 4 Poor খারাপ..... 5 Very poor	
4C.6	ছাত্র/ছাত্রীদের কত শতাংশ সরকারী মাধ্যমিক স্কুলে উপস্থিত থাকে ? What percentages of secondary-school-age children attend public secondary schools?	সকল শিশু(All children)..... 1 অধিকাংশ শিশু(Most children)..... 2 প্রায় অর্ধেক শিশু(About half of the children).. 3 অর্ধেকের কম(Less than half)..... 4 খুবই কম / কেউনা(Very few/none)..... 5	→ Sec tion- 4D
4C.7	এই এলাকার সরকারী মাধ্যমিকস্কুলের ছাত্র/ছাত্রীদের অনুপস্থিতির প্রধান ২ টি কারণ কি কি ? What are the two principal reasons the secondary-school-age children from thisCommunity does not attend public secondary school?	(a) _____ (b) _____	

4D. বয়স্কশিক্ষা (Grown-up Education)

NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
4D.1	এই এলাকাতে বয়স্কশিক্ষার কোন ব্যবস্থা আছে কি ? Is there an grown-up literacy campaign or program for the community?	হ্যাঁ 1 Yes না 2 No	
4D.2	এই এলাকায় চাকুরির জন্য কোন প্রশিক্ষণের প্রোগ্রাম আছে কি ? Are there job training programs for this community?	হ্যাঁ 1 Yes না 2	

		No	

5. স্বাস্থ্য(HEALTH)

NO	QUESTIONS AND FILTERS	CODING CATEGORIES	S KI P
5.1	এই কমিউনিটিতে ৬ বৎসর বয়সের নীচে শিশুদের অসুস্থ হওয়ার প্রধান ৩ টি স্বাস্থ্য সমস্যা কি কি ? What are the three principal health problems affecting children under six years of age in this community?	(a) _____ (b) _____ (c) _____	
5.2	এই কমিউনিটিতে প্রাপ্ত বয়স্ক পুরুষদের অসুস্থ হওয়ার প্রধান ২ টি স্বাস্থ্য সমস্যা কি কি ? What are the two principal health problems affecting adult men in this community?	(a) _____ (b) _____	
5.3	এই কমিউনিটিতে প্রাপ্ত বয়স্ক মহিলাদের অসুস্থ হওয়ার প্রধান ২ টি স্বাস্থ্য সমস্যা কি কি ? What are the two principal health problems affecting adult women in this community?	(a) _____ (b) _____	
5.4	এই কমিউনিটিতে মায়েদের অসুস্থ হওয়ার প্রধান ২ টি স্বাস্থ্য সমস্যা কি কি ? What are the two principal health problems affecting maternal health in this community?	(a) _____ (b) _____	

5.5	এই কমিউনিটিতে শিশুদের অসুস্থ হওয়ার প্রধান ২ টি স্বাস্থ্য সমস্যা কি কি ? What are the two principal health problems affecting child health in this community?	(a) _____ (b) _____			
5.6	এই এলাকাতো কোন স্বাস্থ্য ক্লিনিক বা হাসপাতাল আছে কী ? Does this community have a health clinic or hospital?	হ্যাঁ 1 Yes না 2 No	5.8		
5.7	সবচেয়ে কাছের স্বাস্থ্য ক্লিনিক বা হাসপাতাল এলাকা থেকে কত দূরে ? How far is the nearest public health clinic or hospital?	দূরত্ব (হেটে যেতে কত মিনিট লাগে) Distance (in walking minutes) _____			
5.8	স্বাস্থ্য ক্লিনিক বা হাসপাতালে কি সবসময় আছে/নাই ? Does the health clinic or hospital regularly have sufficient:		পর্যাপ্ত (Sufficient)	অপর্যাপ্ত (Insufficient)	নাই (none)
			1	2	3

		a. জরুরী ঔষধ Basic medicines			
		b. যন্ত্রপাতি Equipment/instruments	1	2	3
		c. রোগীর শয্যা Patient beds	1	2	3
		d. অ্যাম্বুলেন্স Ambulances	1	2	3
		e. চিকিৎসক Physicians	1	2	3
		f. নাস Nurses	1	2	3
		g. অন্যান্য কর্মী (উল্লেখ করুন) Other health staff			
5.9	এই কমিউনিটিতে কি কোন পরিবার পরিকল্পনা প্রোগ্রাম আছে ? Does this community have a family planning program?	হ্যাঁ 1 Yes না 2 No			→ Sec tion- 6
5.10	কে এই প্রোগ্রাম বাস্তবায়ন করে ? Who offers the program?	সরকার 1 Government এনজিও..... 2 NGO বেসরকারী..... 3 Private facility			

		অন্যান্য(উল্লেখ করুন) 4 (Other (specify))	
5.11	এই এলাকার লোকজন তাদের চিকিৎসার জন্য কি কোন ব্যক্তি বা প্রতিষ্ঠানের কাছে লোন করে ? Do the people of this community receive loans or credits from individuals or institutions for health expenditure?	হ্যাঁ 1 Yes না 2 No	
5.12	এই এলাকার লোকজন তাদের চিকিৎসার জন্য কি অন্য অঞ্চলের ব্যক্তি বা প্রতিষ্ঠানের কাছে লোন করে ? Do the people of this community receive loans or credits from individuals or institutions for health expenditure from outside this region?	হ্যাঁ 1 Yes না 2 No	

6. পরিবেশগত বিষয় (ENVIRONMENTAL ISSUES)

NO	QUESTIONS AND FILTERS	CODING CATEGORIES		SKIP
6.1	এই কউনিটিতে কি আছে ? Does this community have:	হ্যাঁ (Yes)	না(No)	
	a. আবর্জনা ফেলার জায়গা যেইটা নদী এবং কুয়াকে দূষিত করে (Garbage dumping that contaminates rivers or wells)	1	2	
	b. আবর্জনা ফেলার জায়গা যেটা সাগর কে দূষিত করে (Garbage dumping that contaminates the ocean)	1	2	

	c. অব্যবহৃত জিনিস পএ ফেলার জায়গা (Junk yards or scrap heaps)	1	2	
	d. বদ্ধ জলাশয় / পানি বদ্ধতা(Standing water or stagnant pools)	1	2	
	e. কসাইখানার ময়লা ফেলার পাবলিক পে-স (Slaughterhouses that dump waste in public places)	1	2	
	f.বর্জ্য তেলের মাধ্যমে (Mechanics who dump waste oil in soil or water)	1	2	
	g. দূষিত কারখানা (Polluting industries)	1	2	
	h. বন পরিষ্কার করা বা পোড়ানো (Clear-cutting or forest burns)	1	2	
	i. খনন (Mining)	1	2	
	j. অন্যান্য (উলে- খ্য কর্শন)(Other (specify)	1	2	
6.2	সামগ্রিক ভাবে এই এলাকার পরিবেশগত অবস্থা কেমন ? How is the overall	খুব ভাল..... 1 Very good		

	environment in this area?	ভাল 2 Good মোটামুটি 3 Average খারাপ..... 4 Poor খারাপ..... 5 Very poor	
6.3	গত তিন বছরে এই কমিউনিটির পরিবেশগত অবস্থা কেমন হয়েছে ? What changes have been happened in this community in terms of environment?	উন্নতকরেছে 1 Improved খারাপ হয়েছে 2 Worsened একই রকম আছে..... 3 Remained the same	
6.4	মূলত: কি কি পদক্ষেপ নেয়া যেতে পারে (২টা গুরুত্বপূর্ণ বিষয়) ? What are the two main actions that could be taken to improve the environmental conditions in this community?	(a) _____ (b) _____	

7.কৃষি (শুধু গ্রামীণ এলাকার) AGRICULTURE (only in rural areas)

NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
7.1	এই এলাকার কোন প্রধান ৩টি কৃষিকাজ এবং গবাদিপশু পালনের জন্য পদক্ষেপউদ্যোগ ? What are the three principal agricultural or livestock activities undertaken in this community?	a) _____ (b) _____ (c) _____	

7.2	এই এলাকার লোকজন সাধারণত তাদের উৎপাদিত পণ্য এবং গবাদি পশু কোথায় বিক্রি করে ? (গুরুত্ব অনুযায়ী প্রধান ৩ টি কোড করুন) Where do the inhabitants of this community generally sell their livestock and produce? (List up to three venues by order of importance.)	<table border="1"> <thead> <tr> <th>1</th><th>2</th><th>3</th></tr> </thead> <tbody> <tr> <td></td><td></td><td></td></tr> </tbody> </table>	1	2	3				
1	2	3							
	এলাকার মার্কেট(Community market) আশে পাশের বাজারে(Market in neighboring areas) স্থানীয় মধ্যসত্ত্বভোগী/দালাল/স্থানীয় ব্যপারী(Domestic iddlemen) রপ্তানি কারক(Exporters) সরকারী প্রতিষ্ঠান(Public institutions) সমবায়(Cooperatives) স্থানীয় দোকান(Local stores and shops) শুধুমাত্র নিজদের জন্য বাইরে বিক্রি জন্য নয়(Only self-consumption/no outside sales)	 1 2 3 4 5 6 7 8							
	অন্যান্য (উল্লেখ করুন) Other (specify)		→ 7.4						
7.3	এলাকার লোকজন তাদের পণ্য পেতে এবং লাভ করতে কি ধরনের সমস্যার মোকাবেলা করতে হয়?(২ টি গুরুত্বপূর্ণ সমস্যা লিখুন) What are the two most important problems facing members of this community for getting their products to the market and earning a profit?	a) _____ (b) _____							
7.4	এই কৃষি শ্রমিক/উৎপাদক কোন ধরনের প্রযুক্তিগত সাহায্য পায় কী ? Do the agricultural	হ্যাঁ 1 Yes							

	workers/producers in this community receive technical assistance?	না 2 No	→ 7.6			
7.5	প্রযুক্তিগত প্রধান সহায়তাকারীর কে? (যাচাইকরণ:সরকারী/বেসরকারী) Who is the main provider of this technical assistance?(Probe whether the institution is public or private.)					
7.6	এই এলাকার কি কোন প্রকারের কৃষি সমবায় আছে ? Does this community have any type of agricultural cooperative?	হ্যাঁ 1 Yes না 2 No	→ 7.9			
7.7	এই এলাকার কোন প্রতিষ্ঠান বা ব্যক্তি(হয় এই এলাকার অথবা কাছাকাছি)কী কৃষি উৎপাদনের জন্য লোন ঋণ দেয় ? Does this community have any institution or person (either in the community or nearby) that provides credit and loans to agricultural producers?	হ্যাঁ 1 Yes না 2 No				
7.8	এই এলাকার কৃষি উৎপাদনের জন্য লোন বা ঋণ দেয় এরকম তিনটি প্রধান ব্যক্তি বা প্রতিষ্ঠানের নাম উল্লেখ করুন ? What are the three main persons or institutions that provide credit or loans to agricultural producers in this community?	A B C <table border="1"> <tr> <td></td> <td></td> <td></td> </tr> </table>				
	সরকারী ব্যাংক(National banks)	 1				
	কৃষি /উন্নয়নব্যাংক(Agricultural/development banks)	 2				
	বেসরকারী ব্যাংক(Private banks)	 3				
	কৃষি ঋণ ইউনিয়ন/সমবায়(Agricultural credit unions or cooperatives)	 4				
	ব্যক্তি(Private individuals)	 5				

	রপ্তানি কারক(Export businesses) 6 প্যাকিং ব্যবসায়ী(Packing businesses) 7 উৎপাদক সমিতি(Producer associations) 8 গুদাম কারক/মধ্যসত্ত্বভোগী(Warehouses or middlemen) 9 অন্যান্য (উল্লেখ করুন) Other (specify) 10		
7.9	এই এলাকার কৃষি উৎপাদকরা অন্য এলাকার ব্যক্তি বা প্রতিষ্ঠান থেকে লোন বা ঋণ নেয় কী ? Do the agricultural producers of this community receive loans or credits from individuals or institutions in other cities or regions?	হ্যাঁ 1 Yes না 2 No	
7.10	এই এলাকার উৎপাদকদের কত শতাংশ উৎপাদক তাদের কাজের জন্য লোন বা ঋণ নেয়? What percentage of the agricultural producers in this community use loans or credits to support their activities?	.....	
7.11	ঋণ নেয়ার জন্য উৎপাদক শ্রেণীর প্রধান ২টি সমস্যা কী ? What are the two principal problems facing the agricultural producers of this community in terms of receiving loans and credits?	a) _____ (b) _____	
7.12	গত ৩ বছরের ফসলের/উৎপাদনের অবস্থা কেমন ? What was the condition of crop production here, in last three years?	উন্নতকরেছে 1 Improved খারাপ হয়েছে 2 Worsened একই রকম আছে..... 3 Remained the same	

7.13	গত ৩ বছরের এই এলাকার কৃষি/পশু পন্য বিক্রের অবস্থা কেমন ? What was the condition of selling crops/ animals here, in last three years?	উন্নতকরেছে 1 Improved খারাপ হয়েছে 2 Worsened একই রকম আছে..... 3 Remained the same	

8.এলাকার সহায়তা (COMMUNITY SUPPORT)

	QUESTIONS AND FILTERS	CODING CATEGORIES		SKIP
8.1	এই এলাকাতে সংস্থাগুলোর অস্তিত্ব আছে ?	হ্যাঁ (Yes)	না (No)	
	এলাকার উন্নয়ন কমিটি(Community development committee)	1	2	
	সমবায়(মৎস,কৃষি,হস্ত শিল্প) Cooperative (fishing, agriculture, crafts)	1	2	
	পিতা /মাতা-শিক্ষক সমিতি Parent-teacher association	1	2	
	স্বাস্থ্য কমিটি Health committee	1	2	
	যুব গ্রুপ Youth group	1	2	
	খেলা দল Sports group	1	2	
	সাংস্কৃতিক গোষ্ঠী Cultural group	1	2	
	নাগরিক গোষ্ঠী Civic group	1	2	
	অন্যান্য(উল্লেখ করুন) Other	1	2	

(specify)							
8.2	এই এলাকা ভিত্তিক সংস্থাগুলোকে কোন ব্যক্তি বা প্রতিষ্ঠান সমূহ সাহায্য বা সমর্থন করে থাকে ? Which persons or organizations help or support these community based organizations?		হ্যাঁ (Yes)		না (No)		না (No)
	(ক)স্থানীয় সরকার Local government		1		2		2
	(খ)জাতীয় সরকার National government		1		2		2
	(গ)রাজনীতিবিদ Politicians		1		2		2
	(ঘ)ধর্মীয় প্রতিষ্ঠান Religious organizations		1		2		2
	(উ)স্কুল/শিক্ষক School/teachers		1		2		2
	(উ)এনজিও Nongovernmental organizations		1		2		2
	(চ)ব্যবসায়ী গ্রুপা Business group		1		2		2
	(ছ)সার্ভিস ক্লাব Service club		1		2		2
	জ)গন্যমান্য নাগরিক Prosperous citizens		1		2		2
	(ঝ)এলাকার সকল লোক The community as a whole		1		2		
8.3	এই এলাকার লোকজন মিটিং এবং সমাবেশের জন্য ব্যবহার করে ? What buildings do people in this community regularly use for meetings and gatherings?		হ্যাঁ (Yes)		না (No)		

	(ক) কমিউনিটি সেন্টার Community center		1		2		
	(খ) নিজস্ব বাড়ি Personal homes		1		2		
	(গ) রাজনৈতিক নেতাদের বাড়ি Homes of political leaders		1		2		
	(ঘ) স্থানীয় নেতার বাড়ি Homes of other local leaders		1		2		
	(উ) গীর্জা/ধর্মীয় ভবন Churches or religious buildings		1		2		
	(উ) স্বাস্থ্য কেন্দ্র /স্কুল Health center/school		1		2		
	(চ) সরকারী ভবন Government buildings		1		2		
	(ছ) ব্যবসা/বাণিজ্যিক ভবন Business/commercial buildings		1		2		
	(জ) অন্যান্য(উল্লেখ করুন) Other (specify)		1		2		
8.4	এলাকার সমস্যা সমাধানে কারা বেশী অংশ গ্রহণ করে ? Which members of the community participate most in solving the issues facing the community? ক) লিঙ্গ দ্বারা (By gender)	পুরুষ(Men)..... 1 মহিলা (Women)..... 2 উভয়ই সমান(Men and women equally)..... 3					

		কেউ না(Neither participate)..... 4	
	খ)বয়স দ্বারা By age	যুবক ও কিশোর (Youth and adolescents)..... 1 প্রাপ্ত বয়স্ক(Adults)..... 2 বয়স্ক ব্যক্তি(Older persons)..... 3 যুবক,প্রাপ্ত বয়স্ক ও বয়স্ক ব্যক্তি (Youth, adults, and elders equally)..... 4 কেউ না(None participate)..... 5	
	গ)কর্মসংস্থানের দ্বারা By employment status	শ্রমিকরা (Workers)..... 1 বেকার অথবা শ্রমিক-না(Unemployed or non-workers)..... 2 না উভয়ই(Workers and non-workers Equally)..... 3 কেউ না (Neither participate)..... 4	
8.5	গত ৩ বছরে এলাকাবাসী তাদের প্রয়োজন বা সমস্যা মোকাবেলায় একত্রিত হয়েছে কী ? In the last three years, has the community organized to address a need or problem?	হ্যাঁ 1 Yes না 2 No	→ 8.8

8.6	কি বিষয়গুলো এই সময়ে কমিউনিটি সংগঠিত করেছিলো ? Around what issue(s) did the community organize?	a) _____ (b) _____				
8.7	উদ্যোগ কি সফল হয়েছিল ? Was/were the initiative(s) successful?		হ্যাঁ (Yes)	না (No)	বর্তমান	
	(ক) উদ্যোগ #১	1	2	3		
	(খ) উদ্যোগ #২	1	2	3		
8.8	এমন কোন ২ টা সমস্যা বা চাহিদা যা আপনারা ,একাকাবাসী সমাধান করতে চান ? What are the two main problems or needs that community members feel must be addressed or solved?	(a) _____ (b) _____				
8.9	এই কমিউনিটির নির্দিষ্ট কোন সহায়তা মূলুক কোন প্রোগ্রাম আছে কি ? Are there any specific assistance programs to this community?	হ্যাঁ 1 Yes না 2 No				→ 8.11
8.10	কোন ২টা প্রোগ্রাম এবং প্রতিষ্ঠান এলাকাবাস কে সহায়তা করে ? What are the two main programs and the institutions that support them?	ক).প্রোগ্রাম/প্রতিষ্ঠান Program..... খ)প্রোগ্রাম/প্রতিষ্ঠান. Program.....				

8.11	এই কমিউনিটিতে কোন ধরনের সমস্যা আছে? যদি হ্যাঁ হয়, কারা বেশী ক্ষতিগ্রস্ত বা ঝুঁকিপূর্ণ দল(বয়স দ্বারা, লিঙ্গ দ্বারা, কাস্ট দ্বারা, ক্ষুদ্র গ্রুপ দ্বারা, অন্যান্য)				
	Do any of the following problems exist in this community? If yes, who is the most affected or at-risk group (by age, gender, caste, ethnic group, etc.)?		হ্যাঁ (Yes)	না (No)	বেশী ক্ষতিগ্রস্ত দল
	(ক) চুরি Burglaries		1	2	.....
	(খ) ডাকাতি. Robberies		1	2	.....
	(গ) আঘাত. Assaults		1	2	.....
	(ঘ) গ্যাং Gangs		1	2	.....
	(চ) হিংসা বিরোধ Vandalism		1	2	.....
	(ছ) এলকোহলের অপব্যবহার Alcohol abuse		1	2	.....
	(জ) ড্রাগের অপব্যবহার Substance (drug) abuse		1	2	.....
	(ঝ) অল্প বয়সে গর্ভবতী হওয়া Teen pregnancy		1	2	.....
	(ঞ) মাতৃ মৃত্যু Maternal Death		1	2	.....
	(ট) শিশু মৃত্যু Child Death		1	2	.....
	(ঠ) নবজাতকের মৃত্যু Neonatal Death		1	2	.....
	(ড) ঘন ঘন স্বাস্থ্য সমস্যা		1	2	.....
	(ঢ) পারিবারিক সহিংসতা		1	2	.....

Improving maternal, newborn, and child health through building public-private partnerships (SUSOMA)

Baseline Survey for Social Capital Measurement 2012

Guideline for community profile and asset mapping (social mapping)

**World Renew
icddr,b
IMCI section of DGHS
USAID**

খানার প্রশ্নপত্র (Household Questionnaire)

শুরুর সময় (start time)

ঘন্টা

মিনিট

শেষ হবার সময় (end time)

ঘন্টা

মিনিট

১. নির্ধারিত খানা সনাক্তকরণ (identification of household)

১.১. জেলা (district)

১.২. সাব-জেলা/উপজেলা (sub-district/ Unazila)

১.৩. ইউনিয়ন: (Union)

১.৪. শহর/গ্রাম (city/ village)

১.৫. ওয়ার্ড (Ward)

১.৬. পাড়া/মহল্লা (nara/ moholla)

১.৭. রাস্তা (road)

১.৮. খানা নাম্বার (Household number)

১.৯. অন্যান্য বিস্তারিত (Others)

২.০. এলাকার ধরন (type of the area)

শহর (Urban)

গ্রাম(আদিবাসী নয়) (village/ not indigenous)

আদিবাসী (indigenous)

প্রত্যন্ত অঞ্চল (remote)

সাক্ষাৎগ্রহনকারীর নাম (Interviewer)

সপারভাইজার নাম (Supervisor)

1.1 Community profile and asset mapping (Social Mapping)

কমিউনিটির লোকজন তাদের কমিউনিটিতে বিদ্যমান গ্রাম/বসতি/উৎপাদন কার্যাবলী/সম্পদ ও সেবাসমূহ সম্পর্কে বলবে এবং কাগজে মার্কার কিংবা মাটিতে কাঠি/ধারালো কিছু দিয়ে তা এঁকে দেখাবে।

(The community people will talk about their existing area of the village, community, productive activities, resources and facilities and will draw them in the paper with marker or in the earth with stick or something sharp.)

ক. এই এলাকা টি কতটুকু পর্যন্ত বিস্তৃত?

(a. Can you tell us about the boundary of this area?)

আনুমানিক জনসংখ্যা কত?

(What is the population number?)

অভিবাসন হয় কি? কারা বেশী করে?

(Have there been any cases of migration? Within which category?)

কতদিন আগে থেকে এই এলাকাটির / লোকালয়ের শুরু হয়েছে?

(How many years has this community established?)

এর জনসংখ্যা কি কমেছে/ বেড়েছে?

(Has the population been increased or decreased after that?)

খ. কোথায় কোথায় আছে... .. ?

(Where is/ are....?)

১. স্কুল(প্রাইমারী/মাধ্যমিক/কলেজ/ইউনিভার্সিটি/অন্যান্য শিক্ষা প্রতিষ্ঠান)

(1. schools- primary, secondary, college, university/ others)

২. স্বাস্থ্যসেবাসমূহ (প্রাতিষ্ঠানিক/ অপ্রাতিষ্ঠানিক)

(2. Health services- formal/ informal)

৩. পানি (খাল/নদী/পুকুর)

(3. Water – canal/ river/ ponds)

○ ব্যবহারের এবং খাবার পানির উৎস

(Sources for everyday usages and edible water)

০ মাছ চাষ

(fish farming)

০ অন্যান্য

(others)

৪.আবর্জনা ফেলার জায়গা

(4. waste and garbage disposal sites)

৫.বিদ্যুৎ (তার/খুঁটি)

(5. Electricity- cables/ poles)

৬.সরকারি টেলিফোন

(6. Public Telephone service)

৭.প্রধান সড়কসমূহ

(7. Main roads)

৮.যানবাহন (প্রধানত কি ধরনের যানবাহন ব্যবহার করা হয়)

(8. Transports- types of transports usually used)

৯.বিক্রয়কেন্দ্র/হাট-বাজার/বানিজ্যিক স্থাপনাসমূহ (মিল-কলকারখানা আছে কিনা)

(9. Sales centre/ haat/ bazar/ commercial points or trade centres- presence of industries)

১০.ধর্মীয় গুরুত্বপূর্ণ স্থানসমূহ (মসজিদ/মন্দির /গির্জা/মাজার/ অন্যান্য)

(10. Places of worship/ importance- mosque, temple, church, mazar and others)

১১.সাংস্কৃতিক এবং বিনোদনের স্থানসমূহ (মেলা/যাত্রা/নাটক)

(11. Cultural and recreational areas- Mela/ Jatra/ drama)

১২.অনিরাপদ বা কম নিরাপদ স্থানসমূহ (বিপদজনক জায়গা)

(12. Less secured and insecured areas- places with dangers)

১৩.সেচ ব্যবস্থাসমূহ

(Irrigation systems)

১.২সমষ্টিগত কাজ ও সামাজিক বন্ধন (Collective Action & Solidarity)

ক. গ্রাম/পাড়ার সমস্যা সমাধান ও জীবনমানের উন্নয়ন হয়েছে -এমন কোনো ঘটনা সম্পর্কে বলুন।(গত তিন বছরের)

(শিক্ষা,স্বাস্থ্য,সরকারি সেবাসমূহ,যাতায়াত,রাস্তা,ঋণ,বিনোদন ও সাংস্কৃতিক উপাদানসমূহ,নিরাপত্তা,শিশুর যত্ন,সেচ,বাজার,ব্যবসায়,কৃষি সেবা) - (সকল শ্রেণীর জন্য)।

(In the last three years, has there been any evidence of improvement or solution to any problem taken place in this area? Probe: – education, health, public services, communication, roads, loan, recreation and cultural elements, security, child care, irrigation, market, business, and agriculture- discuss on all these issues for all classes of people.)

খ. শিক্ষা,স্বাস্থ্য,সরকারি সেবাসমূহ,যাতায়াত, রাস্তা,ঋণ,বিনোদন ও সাংস্কৃতিক উপাদানসমূহ,নিরাপত্তা,শিশুর যত্ন,সেচ,বাজার,ব্যবসায়,কৃষি সেবাসমূহে তাদের সুযোগ-সুবিধা। (যাচাই করুন: সকল শ্রেণীর জন্য)।

(Education, health, public services, communication, roads, loan, recreation and cultural elements, security, child care, irrigation, market, business, and agriculture- discuss access to all these for all classes of people.)

গ. কমিউনিটির লোকজন/স্থানীয় সরকার/অন্যান্য সংগঠনসমূহ গ্রাম/পাড়ার সমস্যা সমাধান ও জীবনমানের উন্নয়নে কোনো ভূমিকা পালন করে কিনা?

(Does the community people/ local government/ other organizations play any role for the community development/ creating any solution?)

কি কি সাড়া আসে?

(What kind of responses are there?)

কি কি বাধা আসে?

(What kind of resistances are there?)

(যাচাই করুন: নেতৃত্ব, প্রতিরোধের উৎসসমূহ,ফলাফল হতে কে উপকৃত হয়েছে বা কে ক্ষতিগ্রস্ত হয়েছে, ফলো-আপের ধরণ যা উদ্যোগের দরুন সংঘটিত হয়েছে, প্রচেষ্টাকে টিকিয়ে রাখার কৌশল)

(Probe: leadership, sources of resistance, who benefitted or suffered, follow-up based of efforts, mechanisms to carry on the actions)

ঘ. উন্নয়নের ক্ষেত্রে কোনো ব্যর্থতার ঘটনা আছে কি? কারনসমূহ কি কি? এই ব্যর্থতা কোন উপায়ে সফল করতে পারে?

(যাচাই করুন: সমষ্টিগত কাজে বাধা, স্থানীয় সরকারের ভূমিকা অনুসন্ধান, এলাকার সংগঠনগুলো, প্রভাবশালী প্রতিষ্ঠানসমূহ, এবং কমিউনিটির মধ্যকার সম্পর্ক আলোচনা,প্রতিনিধিত্বকারী সংগঠন,স্থানীয় সরকার,অন্যান্য সুশীল সমাজের মানুষ)

(Is there any evidences of failure while acting for development? What are the reasons? What can be done to make this a success? Probe- resistance in collective activities, explore role of local government, discussion on relationship among organizations in the community, influential organizations, community; representative organizations, local government and civil society.)

১.৩ এলাকার পরিচালনা এবং সিদ্ধান্ত গ্রহণ (Community governance and Decision-making)

- ক. এই এলাকার মূল নেতা কারা? (প্রাতিষ্ঠানিক/ অপ্রাতিষ্ঠানিক উভয়ই) কিভাবে তারা নেতা হলেন? কিভাবে তারা নির্বাচিত হন? নেতারা কিভাবে সিদ্ধান্ত নেবেন?

(Who are the main leaders? – probe- formal and informal) How do they become leaders? How were they selected? How do they take decisions?)

১.৪ এলাকার প্রতিষ্ঠানসমূহের তালিকা

- ক. এই গ্রাম/পাড়ায় কর্মরত দল, সংগঠন অথবা সংস্থার তালিকা করুন

(Make a list of the active groups, organizations or institutions)

(গুরুত্ব অনুযায়ী দলগুলোর তালিকা- প্রাতিষ্ঠানিক/ অপ্রাতিষ্ঠানিক/ কৃষিভিত্তিক/ ঋণভিত্তিক/ ধর্মভিত্তিক/ বিনোদনভিত্তিক/ স্বাস্থ্যভিত্তিক / শিক্ষাভিত্তিক/ পদমর্যাদা)

(Create this list on the basis of importance- formal/ informal/agricultural/ micro-credit/ religious/ recreational/ health/education/ status)

- খ. কোন দলগুলো কমিউনিটি সদস্যদের মঙ্গলের জন্য সবচেয়ে বেশী কাজ করে করে?

(Which groups play most active roles for the wellbeing of the members of the community?)

- গ. এই দল বা সংগঠন কিভাবে শুরু হয়েছিল(সরকারি উদ্যোগ, সরকারি অর্থায়ন, এনজিও অর্থায়ন, সাধারণ জনগনের উদ্যোগ)?

(How did these groups or organizations get initiated? Effort from the government, financial help from the government or NGO, effort from the general people)

- ঘ. তারা কিভাবে নেতাদের বাছাই করে (নির্বাচন, নিয়োগ, উত্তরাধিকার সূত্রে)? এই নেতৃত্বের স্থায়ীত্ব কেমন (বারবার বা হঠাৎ পরিবর্তিত, স্বাভাবিক নিয়মে পরিবর্তিত)?

(How do they select leaders- election, recruitment or inheritance? How stable is this leadership- (frequent changes/ normal changes)?)

- ঙ. এই দল বা সংগঠনগুলোতে কিভাবে সিদ্ধান্ত নেয়া হয়?

(How are decisions made within these groups or organizations?)

১.৫ সংগঠনগুলো এবং এলাকার মধ্যে সম্পর্ক (Relationships between the organizations/ institutions and the community)

ভেনচিত্র: সংগঠনের গুরুত্ব সম্পর্কে তাদের ধারণা দেখার জন্য তিনটি ভিন্ন আকারের গোল কাগজ ব্যবহার করুন ।

(Ven Diagram: Please, use three paper circles to understand community people's perception regarding institute.)

ক. গুরুত্ব অনুযায়ী সংগঠনগুলোর তালিকা করুন ।

(Create a list of the institutions according to their importance.)

খ. লোকজন কোন সংগঠনগুলোতে বেশী যায়?

(Which institutions are used most/ most accesible by the community people?)

গ. কোন সংগঠনগুলো একত্রে কাজ করে? তারা কিভাবে একত্রে কাজ করে?

(Which institutes are working together? How do they do so?)

ঘ. এমন কোনো সংগঠন আছে কি যেগুলো একটি আরেকটির বিপরীতে কাজ করে (প্রতিযোগিতা অথবা কোনো ধরনের দ্বন্দ্ব)? কোনটি এবং কেন?

(Are there institutions who are rival to one another? (completing with each other or have any kind of conflict of interest?) Which are those and why do they do so?)

ঙ. এমন কোন সংগঠন আছে যারা একই রকম সম্পদ ভোগ করে?

(Are there any institutions which have same type of resources?)

**Improving maternal, newborn, and child health
through building public-private partnerships
(SUSOMA)**

**Baseline Survey for Social Capital Measurement
2012**

Organizational Profile Scoresheet

World Renew

icddr,b

IMCI section of DGHS

USAID

খানার প্রশ্নপত্র (Household Questionnaire)

সাক্ষাৎকার শুরু করার সময় (start time of interview)

ঘন্টা

মিনিট

সাক্ষাৎকার শেষ হবার সময় (end time of interview)

ঘন্টা

মিনিট

১. নির্ধারিত খানা সনাক্তকরণ (identification of household)

১.১. জেলা (district)

.....

১.২. সাব-জেলা/উপজেলা (sub-district/ Unazila)

.....

১.৩. ইউনিয়ন: (Union)

.....

১.৪. শহর/গ্রাম (city/ village)

.....

১.৫. ওয়ার্ড (Ward)

.....

১.৬. পাড়া/মহল্লা (nara/ moholla)

.....

১.৭. রাস্তা (road)

.....

১.৮. খানা নাম্বার (Household number)

.....

১.৯. অন্যান্য বিস্তারিত (Others)

.....

২.০. এলাকার ধরন (type of the area)

শহর (Urban)

গ্রাম(আদিবাসী নয়) (village/ not indigenous)

আদিবাসী (indigenous)

প্রত্যন্ত অঞ্চল (remote)

সাক্ষাৎগ্রহণকারীর নাম (Interviewer)

.....

সপারভাইজার নাম (Supervisor)

.....

1 নেতৃত্ব(LEADERSHIP)

1A. Rotation

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1A.1	সংগঠনটির নেতৃত্ব কি নিয়মিত পরিবর্তন হয়? Does the organization's leadership change regularly?	হ্যাঁ 1 (Yes) না 2 (No)	
1A.2	নেতারা যতটুকু সময় তাদের পদে থাকেন তা কি অভিজ্ঞতা অর্জন ও নেতৃত্বের কার্যাবলী শেখার জন্য যথেষ্ট? Is the amount of time the leaders remain in their position sufficient for acquiring experience and learning leadership functions?	হ্যাঁ 1 (Yes) না 2 (No)	
1A.3	সফল নেতাকে পুনরায় নির্বাচন করার কোন সম্ভাবনা আছে কি? Is there the possibility of reelecting successful leaders?	হ্যাঁ 1 (Yes) না 2 (No)	

B. Density/Availability

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1B.1	সংগঠনটির মধ্যে কতজন মানুষ যোগ্য নেতা হওয়ার মত দক্ষতা এবং গুণাগুণ অর্জন করেছে? How many people within the organization have acquired the capability and qualities to be effective leaders?	কেউ না.....1 (No one possesses these qualities) অল্প সংখ্যক(১-৩ জনের মধ্যে) 2 Few (1 to3) কিছু সংখ্যক(৪-৬জনের মধ্যে).....3	

		Some (4 to6) অনেকে (৬জনের বেশি) 4 Many (more than 6)	
1B.2	কতজন নেতৃত্বের পদের জন্য আগ্রহী ? How many are put forward for leadership tasks?	শুধুমাত্র কিছু সংখ্যক.....1 Only a few দলের মধ্যে প্রার্থী সীমিত কিন্তু পর্যাপ্ত ..2 Candidates is limited but adequate কখনই প্রার্থীর অভাব হয় না 3 Never lack of candidates	
1B.3	এই সংগঠনের প্রাক্তন নেতার অংশগ্রহণ কি রকম ? How amenable are former leaders to continued participation in the organization?	সংগঠনটি নতুন; প্রাক্তন নেতা নেই ...1 There are no previous leaders; the organization is new কোন অংশগ্রহণই ছিলনা 2 Almost no participation by former leaders কিছুটা অংশগ্রহণ ছিল.....3 Some participation by former leaders সক্রিয় অংশগ্রহণ ছিল.....4 Active participation by former leaders	

C.বৈচিত্র্যতা/বিভিন্নতা (Diversity/Heterogeneity)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1C.1	নেতারা কি অল্প কিছু দল বা পরিবার থেকে আসে অথবা এলাকার ১টা বৃহত্তর দল থেকে আসে? নেতা কি কমিউনিটির মধ্যে একটি বৃহৎ দলকে তুলে ধরতে পারে ? Do the leaders tend to come from a few groups or families that are always the same, or do the leaders represent a wider circle among the community?	অল্প সংখক দল থেকে আসে 1 From few groups বিভিন্ন দল থেকে আসে 2 From various groups within the community প্রায় সব দল থেকে আসে 3	

		From almost all the groups within the community	
1C.2	বর্তমানে আপনাদের দায়িত্ব-কর্তব্য পালন করতে পারে এমন কতজন নেতা আছেন ? How many leaders do you have now for carrying out responsibilities?	-----	
1C.3	এই সংগঠনের কত শতাংশ মহিলা নেতৃত্বের দায়িত্বে আছে? What percentage of those that occupy leadership positions within the organization are women?	----- (সংখ্যা এবং %)	

1D. নেতৃত্বের গুণাগুণ এবং দক্ষতা সমূহ (Leadership Quality and Skills)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES					SKIP
1D1	আপনি এই সংগঠনের নেতৃত্বের মানকে কিভাবে মূল্যায়ন করবেন যেমন- In general, how would you characterize the quality of leadership in this organization in terms of...		খুব ভালো Excellent	ভালো Good	পর্যাপ্ত Adequate	পর্যাপ্ত নয় Deficient	
		শিক্ষা/প্রশিক্ষণ Education/training	১	2	3	4	
		সক্রিয়তা/লক্ষ্য Dynamism/vision	১	2	3	4	
		পেশাদারী/দক্ষতা Professionalism/skills	১	2	3	4	
		সততা/স্বচ্ছতা Honesty/ transparency	১	2	3	4	

2. PARTICIPATION

2A.Frequency of Meetings

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
2A.1	সংগঠনটির সদস্যদের সাক্ষাৎ এর সংখ্যা Uhe frequency with which the organization meets... ..	বেড়েছে(Greater).....1 কমেগেছে(Less).....2 একই রকম আছে(The same).....3	

2B. (Participation in Decision making)

2B.1	গত বছর সবচেয়ে গুরুত্বপূর্ণ কোন দুটি সিদ্ধান্ত নেয়া হয়েছিল ? What have been the two most important decisions made in the past year?	সিদ্ধান্ত #১. (Decision # 1)..... সিদ্ধান্ত #২(Decision # 2).....	
2B.2	এই সিদ্ধান্ত গুলো সম্পর্কে ভেবে বলুন ,নিচের কোন বিষয়ে সিদ্ধান্ত নেয়া হয়েছে ? (সিদ্ধান্তকে কোড করুন # ১ প্রথম ,তারপর সিদ্ধান্ত # ২ এভাবে চালিয়ে যান) Thinking about these decisions, did any of the following take place? (Code decision # 1 first, then continue with decision # 2.)		হ্যাঁ(Yes) না(No)

	সিদ্ধান্ত #১ (Decision # 1)	ক.পূর্ব হতে তথ্য প্রচার a. Prior dissemination of information	১	২	
		খ.খোলামেলা আলোচনার সুবিধা b. opportunity for informal discussion	১	২	
		গ.সর্বসাধারণের সাথে পরামর্শ c. Consultation with grassroots	১	২	
		ঘ.বৃহৎ পরিসরে বিতর্ক,বিপক্ষীয় মতামত এবং মুক্ত আলোচনা d. widespread debate, opposing opinions and frank discussion	১	২	
		ঙ.ফলাফল প্রকাশ e. dissemination of results	১	২	
	সিদ্ধান্ত #২ (Decision # 2)	ক. পূর্ব হতে তথ্য প্রচার a. Prior dissemination of information	১	২	
		খ.খোলামেলা আলোচনার সুবিধা b. opportunity for informal discussion	১	২	
		গ.সর্বসাধারণের সাথে পরামর্শ c. Consultation with grassroots	১	২	
		ঘ.বৃহৎ পরিসরে বিতর্ক,বিপক্ষীয় মতামত এবং মুক্ত আলোচনা d. widespread debate, opposing opinions and frank discussion	১	২	
		ঙ.ফলাফল প্রকাশ e. dissemination of results	১	২	

2C.অন্তর্ভুক্তি করন (Inclusiveness)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP

2C.1	গত ৩টি মিটিংয়ে মহিলা, যুবক এবং গরীবদের অংশ গ্রহণ কেমন ছিল? In the last three meetings, what has been the level of participation of women, of youth, and of the poorest groups?	সক্রিয় (Active) মোটাছুটি (Moderate) কেউনা (Little/None) a.মহিলা (Women) 1 2 3 b.যুবক (Youth) 1 2 3 c.দরিদ্র (Poor) 1 2 3	
2C.2	বিগত মিটিংগুলোর সাথে তুলনা করলে এই অংশ গ্রহণের পরিমাণ বেড়েছে / কমেছে নাকি একই আছে? In comparison with earlier meetings, was this level of participation more, less, or the same?	বেড়েছে (More) কমেছে (Less) একই রকম (Same) a.মহিলা (Women) 1 2 3 b.যুবক (Youth) 1 2 3 c.দরিদ্র (Poor) 1 2 3	
2C.3	প্রকৃত পক্ষে সংগঠনটি সদস্যদের কে কতটুকু তুলে ধরতে পারে? To what degree does the organization truly represent its members?	খুব ভালভাবে (Highly representative).....1 মোটাছুটি (Somewhat representative).....2 কিছুটা (Slightly representative).....3 একেবারেই না (Not representative at all).....4	
2C.4	এই কমিউনিটির কত শতাংশ মানুষ মনে করে যে তারা সংগঠনটির মাধ্যমে উপকৃত হচ্ছে বা তাদের চাহিদা তুলে ধরা হচ্ছে ? What percentage of the population in this community feels included as beneficiaries of the organization or feels its interests are represented by the organization?	২৫% এর কম(Less than 25%).....1 ২৫% থেকে ৫০% মধ্যে(Between 25 % and 50%).....2 ৫১% থেকে ৭৫% মধ্যে (Between 51% and 75%).....3 ৭৫% এর বেশী (More than 75%).....4	

3. ORGANIZATIONAL CULTURE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
3.1	সংগঠনটির কতজন সদস্য সংগঠনটির নিয়মাবলী, মূল্যবোধ এবং কাজ সম্পর্কে জানে? How many members know the procedures, norms, and tasks of the organization?	বেশিরভাগ সদস্য.....1 The majority of members	

		কিছু সংখ্যক সদস্য.....2 Some members অল্প সংখ্যক সদস্য 3 Few members	
3.2	সংগঠনটি সদস্যদের মধ্যে যে সমস্যা হয় তা মোকাবেলা করতে কি ইচ্ছুক? How willing is the organization to confront problems with its members?	খুবই ইচ্ছুক 1 Very willing কখনও কখনও ইচ্ছুক.....2 Sometimes willing ক্ষমতা নেই.....3 Little capacity	
3.3	জব্বুরী ক্ষেত্রে জরিমানা এবং বহিষ্কার করা যায় , এরকম কোন নির্দেশিকা এবং নিয়মাবলী আছে কি? For serious cases, do guidelines or rules exist to sanction, fine, or expel the transgressor?	হ্যাঁ 1 Yes না 2 No	

4. Organizational Capacity & Sustainability

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES					SKIP
4A.	বিশেষ দক্ষতা সমূহ----- কেমন ? (Specific Capacities)						
4A.1	এই সংগঠনের সামর্থ্য.....(What is the organization's capacity to...)	খুব ভালো Excellent	ভালো Good	পর্যাপ্ত Adequate	পর্যাপ্ত নয় Deficient	প্রযোজ্য নয় not applicable	
	ক. বিশেষায়িত কাজ (যেমন- ঋণ, প্রশিক্ষণ, বানিজ্যিকরণ) a. Carry out its specialized tasks (e.g., credit, training, and commercialization)?	১	২	৩	৪	৯৯	
	খ. তত্ত্বাবধায়ন বা বিশেষায়িত পরামর্শদাতা এবং কর্মীর সাথে যোগাযোগ b. Supervise and contract specialized consultants or staff?	১	২	৩	৪	৯৯	
	গ. ব্যাংক, দাতা সংস্থা এবং সরকারের জন্য আর্থিক প্রতিবেদন প্রস্তুত করা c. Prepare financial reports for banks, donors, or government?	১	২	৩	৪	৯৯	
	ঘ. সংগঠনকে প্রভাবিত করবে এমন বিষয়ে সময়মত পরিবর্তন করা (দ্রব্যমূল্য বৃদ্ধি, সরকার পরিবর্তন) d. Respond in a timely fashion to changes that affect the organization (e.g., price fluctuations, change of government)?	১	২	৩	৪	৯৯	
	ঙ. ভবিষ্যতের বিশেষ পরিকল্পনা গ্রহণ করা e. Develop specific plans for the future	১	২	৩	৪	৯৯	
	চ. দৃষ্টি আরোপ করা এবং অভিজ্ঞতা থেকে জ্ঞান লাভ করা(প্রাতিষ্ঠানিক ধারণা তৈরী করা) f. Reflect upon and learn from experience (build an institutional memory)?	১	২	৩	৪	৯৯	

ছ. অন্যান্য সংগঠন এবং সামাজিক ব্যক্তিদের সাথে সমস্যা এবং দন্দ সমাধান g. Resolve problems or conflicts with other organizations or social actors?	১	২	৩	৪	৯৯	
জ.সংগঠনের অভ্যন্তরীণ দন্দ ও সমস্যাকে সমাধান করা। h. Resolve problems or conflicts within the organization?	১	২	৩	৪	৯৯	

4B. Collective Action and Formulation of Demands

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKI P
4B.1	এই সংগঠনটির কি এমন কোন নির্দিষ্ট প্রক্রিয়া আছে যার মাধ্যমে সদস্যদের চাহিদাকে ভালভাবে সনাক্ত করতে পারে ? Does the organization have clearly defined processes for identifying the common needs and priorities of its members?	হ্যাঁ 1 (Yes) না 2 (No)	
4B.2	গত তিন বছরে সদস্যরা তাদের চাহিদা পূরণের জন্য কোন আনুষ্ঠানিক আবেদন করেছেন কি ? In the last three years, have there been petitions or other formal expressions of demand by the membership?	হ্যাঁ 1 (Yes) না 2 (No)	
4B.3	সদস্যদের জন্য কি অনানুষ্ঠানিক কোন উপায় আছে যেখানে তারা নিজেদের দাবী প্রকাশ করতে পারবে? Have there been informal ways for members to express their demands?	হ্যাঁ 1 (Yes) না 2	

		(No)	
4B.4	কিভাবে সংগঠনটির তাদের দাবী সমূহকে তুলে ধরে? In what way has the organization addressed these demands?	সর্ব সম্মতিতে দাবী উঠে আসে.....1 Promotes demands of common interest সাধারণ বিষয় চিহ্নিত করার চেষ্টা করা হয় 2 Tries to identify common elements একটার পর একটা দাবীকে ক্রমানুসারে সাজানো হয় ...3 Tries to process them one by one কোন দাবী নাই 4 There were no demands	

**Improving maternal, newborn, and child health
through building public-private partnerships
(SUSOMA)**

**Baseline Survey for Social Capital Measurement
2012**

In-depth Interview and Focus Group Discussion

**World Renew
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১.১ সংগঠনের নাম (Organization's Name) _____

১.২ সংগঠনের ধরন (Organization's Type) _____

১.৩ সদস্যপদ (Membership) _____

১.৪ অবস্থান (Location) _____

১.৫ নেতাদের নাম (Name of leaders) _____

২. নেতৃত্ব বিষয়ক সাক্ষাৎকার গাইড (Leadership Interview guide)

২.ক. উৎপত্তি এবং উন্নয়ন (Origin and development)

২.ক.১ আপনার সংগঠন কিভাবে তৈরী হয়েছিল সে সম্পর্কে আমাদের একটু বলুন ? তৈরীর জন্য সর্বাধিক দায়িত্বে কে ছিলেন ?

(উদাহরন সরকারের নির্দেশ, এলাকার সিদ্ধান্ত, বাইরের এনজিও-ও পরামর্শ)

(Please, tell us about how your organization was created? Who was the most responsible person for this? Example- by the permission of government and the area or with advice from external NGO.)

২.ক.২ এই সংগঠনের কার্যক্রম কি আছে?

(Are there any activities of this organization? What are they?)

২.ক.৩ কি উপায়ে সংগঠনের কাঠামো এবং উদ্দেশ্যের পরিবর্তন হয়েছে ? আপনার সংগঠনের আজকের প্রধান উদ্দেশ্য কি ?

(How does organization's structure and purpose get changed? What are the main purposes of your organizations currently/)

২.ক.৪ এই সংগঠনের উন্নয়নের জন্য বাইরে থেকে ধরনের সাহায্য পেয়েছেন ?

(Have you got any external help for development purpose of the organization?)

২.খ . সদস্যপদ (Membership)

২.খ.১ আপনার সংগঠনের সাথে জড়িত ব্যক্তিদের সম্পর্কে কি আমাদের বলতে পারেন ? তারা কিভাবে জড়িত হয়েছে ?এলাকার সব লোক কি জড়িত ?যদি না হয়,কেন এলাকার কিছু সদস্য জড়িত হয় নাই ?

(Can you tell about the people involved with your organization? How did they get involved? Are all the people in this area involved with this? If no, why are some members not involved?)

২.খ.২ কেন মানুষ যোগ দিয়ে সংগঠন এ কাজ করতে ইচ্ছুক?(কর্মকর্তা/নেতা/বোর্ডের সদস্য) মানুষকে

সম্ভবতঃ সংগঠনের কাজ চালু রাখা কি কঠিন? তাদের কি ধরনের অনুরোধ/দাবী নেতৃত্ব এবং সংগঠনের জন্য ?

(Why do some people join or are willing to join this organization as members, leaders or board members? How hard it is to make people satisfied and work side by side? What kind of request/demand do they have for leadership and institution?)

২.খ.৩ এই সংগঠনের সক্রিয় সদস্যরা কি এলাকার অন্য সংগঠনের সদস্য ? কেন আপনি বলতে পারেন ?

(Are active members of these institution also members of other organization in this community? Do you know why?)

২গ. প্রাতিষ্ঠানিক দক্ষতা (Institutional Capacity)

২ গ.১ আপনি কিভাবে এই প্রতিষ্ঠানের নেতৃত্বের মানকে চিহ্নিত করবেন ?

(যাচাই করুন: স্থায়িত্ব, নেতাদের সংখ্যা/প্রাপ্যতা, বৈচিত্র্যতা/নেতাদের বিভিন্নতা, নেতাদের মান ও দক্ষতা, নেতা ও কর্মী এবং এলাকাবাসীর সংগে সম্পর্ক?)

(How would you characterize the quality of leadership of this organization, probe: stability, number of leaders/availability, diversity/heterogeneity of leadership, quality and skills of leaders, relationship of leaders to staff and to the community)

২গ.২ আপনি এই প্রতিষ্ঠানের অংশগ্রহনকারীর মানকে কিভাবে চিহ্নিত করবেন ?

(যাচাই করুন: মিটিং এ উপস্থিতি - সংগঠনে / অন্যান্য সংগঠনে, সংগঠনের সিদ্ধান্ত গ্রহণে অংশগ্রহণ, বা মূল সংগঠনের সাথে পরামর্শ প্রক্রিয়া, বিতর্ক, সততা, সিদ্ধান্ত গ্রহণ প্রক্রিয়ার ফলাফল প্রচার, এই সংগঠনে কাজ করে এবং দায়িত্বপদে আসীন এমন মহিলা, যুবক, দরিদ্র লোকের সংখ্যা, এই এলাকার কোন দল কি এই সংগঠন থেকে নিজেদের বিচ্ছিন্ন মনে করে, সংগঠনে কি এরাই অংশগ্রহণ করে যারা একটু গন্যমান্য পরিবারের, এই গন্যমান্যরা কি দয়ালু, সহায়তাকারী, এবং হস্তক্ষেপকারী বা ক্ষতিকারক)

(How would you characterize the quality of participation in this organization? Probe: attendance at meetings- internally and externally to the organization, participation in decision making within the organization, debate, honesty, dissemination of the results of the decision making process, the number of women, young people, poor people who work in the organization and who occupy positions of responsibility in the organization, whether any groups within the community feel excluded from the organization? What groups are they? the level of participation of more prosperous families (elites) in the organization, whether elites are sympathetic, supportive, interfering, adversarial, or negative influences.)

২গ.৩ আপনি এই প্রতিষ্ঠানের সাংগঠনিক সংস্কৃতিকে কিভাবে চিহ্নিত করবেন ?

((প্রোব : পদ্ধতি ও নীতি, পদ্ধতির কার্যকারিতা এবং নীতি জ্ঞান এবং সম্প্রদায়ের মধ্যে দ্বন্দ্ব, এবং দ্বন্দ্বের ধরণ)

(How would you characterize the organizational culture of this organization? Probe: procedures and policies, effectiveness of these procedures, ethics, conflict within community and type of conflict.)

২গ.৪ আপনি এই প্রতিষ্ঠানের সাংগঠনিক সক্ষমতা কে কিভাবে চিহ্নিত করবেন ?

(প্রাব : বিশেষ কার্যক্রম (যেমন: ঋণ ,বানিজ্যিক করন) কার্যদর্শী এবং পরামর্শদাতা চুক্তিবদ্ধ করা , ব্যাংক, দাতা এবং সরকারের আর্থিক প্রতিবেদন প্রস্তুতি, পরিবর্তনের পরিস্থিতিতে প্রতিক্রিয়া (যেমন :দাম ওঠানামা , সরকার পরিবর্তন)

(How would you characterize the organizational capacity of this organization? Probe: specialized activities- credit, commercialization; supervising and consultants, crating financial statements for bank, donor and government, response to changing circumstances- price fluctuation, change in government)

২.ঘ. প্রাতিষ্ঠানিক সংযোগ (*Institutional Linkages*)

২ ঘ.১ আপনি কিভাবে অন্য এলাকার সংগঠনের সংগে আপনার সংগঠনের সম্পর্ক চিহ্নিত করবেন ? আপনি কখন তাদের সংগে সহযোগীতা/সংযোগ স্থাপনের প্রয়োজন মনে করবেন ?

(What kind of relationship do you have with other organizations in your community? When do you feel the need to establish collaboration with them?)

২ ঘ.২ আপনার কি বাইরের গ্রাম/পাড়ার সংগঠনের সংগে সংযোগ আছে ?কোনটির সংগে ? সংযোগের প্রকৃতি কি ?

(Do you have links with organizations external to this community? Which one? What kind of link do you have?)

২ ঘ.৩ আপনি কি অন্য কোন সংগঠনের 'প্রোগ্রাম' এবং 'কার্যক্রম' সম্পর্কে যথেষ্ট অবহিত মনে করেন ? আপনার তথ্যের সূত্র কি?

(Do you feel that you are well aware of 'programmes' of other organizations? From where did you get information?)

২ ঘ.৪ আপনি অন্য সংগঠনের সংগে কাজ করতে করতে একটি পারস্পরিক লাভজনক লক্ষ্যে পৌঁছানোর চেষ্টা করেছেন ?(জিজ্ঞাসা করুন ,কোন কার্যক্রমের জন্য) এটা কি এই গ্রাম/পাড়ার সংগঠনের মধ্যে সাধারণ কৌশল ? কেন অথবা কেন নয়?

(Have you tried to get mutual benefit while working with other organization? For which activity? Is that generally present as a common strategy in this community? Why? Why not?)

২ ঘ.৫ সরকারের সংগে আপনার সম্পর্ক বর্ণনা করুন ? সরকারের সহায়তা পেতে আপনি চেষ্টা করেছিলেন ? আপনার অভিজ্ঞতা কি ছিল ?আপনি কি খুঁজে পেয়েছেন ,সরকারের কোন স্কেলে অধিকাংশ সহযোগী (স্থানীয়, জেলা, জাতীয়) ?আপনার সংগঠনে সরকার বিশেষ অনুরোধ করেছেন ?

(What is your relationship with government? Have you tried to get help from the government? What was your experience? Have you explored in which level does government help most? – local, district, national? Has the government made particular requests of your organization?)

২ ঘ.৬ সরকারের কোন প্রোগ্রামের সাথে আপনার সংগঠনের সংযোগ আছে ? সরকারের কোন প্রোগ্রামের সাথে আপনার সংগঠনের সাথে জড়িত?

(Is your organization linked to any government program? Which government program(s) is your organization involved with?)

২ ঘ.৭ আপনি মনে করেন সরকারের প্রোগ্রাম /কার্যক্রম যথেষ্ট ? আপনার তথ্যের সূত্র কি?

(Do you think that government's activities are enough? What is the reference of your information?)

২ ঘ.৮ আপনি কি সরকারকে ইনপুট দিতে চেষ্টা করেছেন ? পরিস্থিতিটা কি ছিল ? ফলাফল কি হয়েছে ?

(Have tried to provide input to government? What was the situation? Result?)

২ ঘ.৯ সরকারের বিভিন্ন উন্নয়ন পরিকল্পনা গ্রন্থন প্রক্রিয়ার কোন অংশে আপনি আপনার সংগঠনকে আমন্ত্রণ জানানো হয়েছে ?

(Have you ever been asked to join any government programme to create development plan?)

২ ঘ.১০ সাধারণত: আপনি কিভাবে জেলা পর্যায়ে সরকারের সিদ্ধান্তকে আপনার সংগঠনের প্রকৃত প্রভাব মূল্যায়ন করবেন ?

(In general, how do you assess your organization's actual influence on government decision making at the district level?)

৩. সদস্যদের ইন্টারভিউ গাইড (Members Interview Guide)

৩ এ. সংগঠনের ইতিহাস এবং কাঠামো (Organizational History and Structure)

৩.এ.১. এই দল কিভাবে শুরু হয়েছিল ?

(Tell us, how did this groups start?)

৩.এ.২ কারা দলের নেতা হয়েছে ? এখন দলের নেতা কে ? কিভাবে এবং কেন নির্ধারিত সময়ে নেতৃত্ব পরিবর্তিত

হয়েছিল ? নেতৃত্বের গুনাবলী কি কি ?

(Who have been the leaders? Who is the leader now? How and why there were changes in leadership overtime? What qualities a leader must have?)

৩.এ.৩ কেন আপনি এই দলের সদস্য হওয়ার সিদ্ধান্ত নিয়েছিলেন ? এই দলের সদস্য হয়ে আপনি কি ধরনের সুবিধা পেয়েছেন ?

(What does make you the leader of this group? What facilities did you receive?)

৩.এ৪ কিভাবে এই দলের নেতা নির্বাচিত হয় ? কিভাবে সিদ্ধান্ত নেয়া হয়? আপনার মতে , এই সংগঠন আপনার মতামতকে বিভিন্ন জায়গায় এবং সরকারের কাছে কতটুকু তুলে ধরতে পারে ?

(How are the leaders get selected? How the decision is taken? Do you think, this group can represent your concerns to the external world and the government?)

৩.এ.৫ কিছু মানুষ কেন এই দলের সদস্য নয় ?

(Why some people have not been the members of this group?)

৩.এ.৬ আপনি কি মনে করেন এই দল (গ্রুপ) সরকারী/ বেসরকারী প্রতিষ্ঠানের পরিবর্তে পুরোপুরি বা আংশিকভাবে কাজ করার জন্যে যথেষ্ট ?

(DO you think that, this organization can complement or replace the government offices / private partially?)

৩এ.৭ দলকে আরো বেশি কার্যকর করার জন্য আপনারা কি করবেন ?

(What would you do to make this organization more effective?)

৩বি. প্রতিষ্ঠানিক দক্ষতা (Institutional Capacity)

৩বি.১ আপনি কিভাবে এই প্রতিষ্ঠানের নেতৃত্বের মানকে চিহ্নিত করবেন ?

(যাচাই করুন: স্থায়িত্ব ,নেতাদের সংখ্যা /প্রাপ্যতা ,বৈচিত্র্যতা/নেতাদের বিভিন্নতা, নেতাদের মান ও দক্ষতা , নেতা ও কর্মী এবং এলাকাবাসীর সংগে সম্পর্ক?)

(How would you characterize the quality of leadership of this organization, probe: stability, number of leaders/availability, diversity/heterogeneity of leadership, quality and skills of leaders, relationship of leaders to staff and to the community)

৩বি.২ আপনি এই প্রতিষ্ঠানের অংশগ্রহনকারীর মানকে কিভাবে চিহ্নিত করবেন ?

(যাচাই করুন: মিটিং এ উপস্থিতি - সংগঠনে / অন্যান্য সংগঠনে , সংগঠনের সিদ্ধান্ত গ্রহণে অংশগ্রহণ , বা মূল সংগঠনের সাথে পরামর্শ প্রক্রিয়া , বিতর্ক , সততা, সিদ্ধান্ত গ্রহণ প্রক্রিয়ার ফলাফল প্রচার , এই সংগঠনে কাজ করে এবং দায়িত্বপদে আসীন এমন মহিলা ,যুবক ,দরিদ্র লোকের সংখ্যা, এই এলাকার কোন দল কি এই সংগঠন থেকে নিজেদের বিচ্ছিন্ন মনে করে , সংগঠনে কি এরাই অংশগ্রহণ করে যারা একটু গন্যমান্য পরিবারের, এই গন্যমান্যরা কি দয়ালু , সহায়তাকারী, এবং হস্তক্ষেপকারী বা ক্ষতিকারক)

(How would you characterize the quality of participation in this organization? Probe: attendance at meetings- internally and externally to the organization, participation in decision making within the organization, debate, honesty, dissemination of the results of the decision making process, the number of women, young people, poor people who work in the organization and who occupy positions of responsibility in the organization, whether any groups within the community feel excluded from the organization? What groups are they? the level of participation of more prosperous families (elites) in the organization, whether elites are sympathetic, supportive, interfering, adversarial, or negative influences.)

৩বি.৩ আপনি এই প্রতিষ্ঠানের সাংগঠনিক সংস্কৃতিকে কিভাবে চিহ্নিত করবেন ?

((প্রোব : পদ্ধতি ও নীতি, পদ্ধতির কার্যকারিতা এবং নীতি জ্ঞান এবং সম্প্রদায়ের মধ্যে দ্বন্দ্ব, এবং দ্বন্দ্বের ধরণ)

(How would you characterize the organizational culture of this organization? Probe: procedures and policies, effectiveness of these procedures, ethics, conflict within community and type of conflict.)

৩বি.৪ আপনি এই প্রতিষ্ঠানের সাংগঠনিক সক্ষমতা কে কিভাবে চিহ্নিত করবেন ?

(প্রোব : বিশেষ কার্যক্রম (যেমন: স্থান , বানিজ্যিক করন) কার্যদর্শী এবং পরামর্শদাতা চুক্তিবদ্ধ করা , ব্যাংক, দাতা এবং সরকারের আর্থিক প্রতিবেদন প্রস্তুতি, পরিবর্তনের পরিস্থিতিতে প্রতিক্রিয়া (যেমন : দাম ওঠানামা , সরকার পরিবর্তন)

(How would you characterize the organizational capacity of this organization? Probe: specialized activities- credit, commercialization; supervising and consultants, crating financial statements for bank, donor and government, response to changing circumstances- price fluctuation, change in government)

৪. ইন্টারভিউ গাইড: সদস্য নয় (Nonmembers Interview Guide)

৪এ গ্রুপ #১: সদস্য নয় কিন্তু সদস্য হতে চায় (Group #1: Nonmembers who want to be members)

৪.এ.১ আপনি কি মনে করেন, যারা দলের সদস্য নয় তারা এই সংগঠন থেকে উপকৃত হয় ?

(Do you think that those who are non-members get benefitted from these groups?)

৪.এ.২ কেন কিছু মানুষ এই দলের সদস্য নয় ? আপনি কেন সদস্য নন ?

(Why are some people not members of this organization? Why are you not a member?)

৪.এ.৩ আপনার মতে , এই সংগঠন এলাকার অন্যান্য সংগঠনের সাথে কতটা ভারসাম্য রক্ষা বা প্রতিযোগিতা করতে করে ?

(How far do you think this organization complements or competes with other community organizations?)

৪.এ.৪ সরকারের সাথে দলের সম্পর্কের বিষয়টাকে আপনি কিভাবে দেখেন ?(উদাহরন সরূপ এই সম্পর্ক রক্ষার ক্ষেত্রে আত্মীয়তার সম্পর্ক অথবা দলগত সংযোগ কি কোনো ভূমিকা পালন করে)

(What is your view about how the organization deals with government? (For example, does kinship or party affiliation play a role in determining the relationship?)

৪.এ.৫ গ্রামে/ পাড়ায় কাজ করে এমন অন্যান্য সংগঠনের সাথে এই সংগঠনের সম্পর্কের বিষয়টাকে আপনি কিভাবে দেখেন ?

(What is your view about how the organization deals with other organizations that work in the village/neighborhood?)

৪বি গ্রুপ #২: সদস্য নয় কিন্তু সদস্য হতে চায় না

৪. বি.১ আপনি কি মনে করেন, যারা দলের সদস্য নয় তারা এই সংগঠন থেকে উপকৃত হয় ?

(Do you think that those who are non-members get benefitted from these groups?)

৪. বি.২ কেন কিছু মানুষ এই দলের সদস্য নয় ? আপনি কেন সদস্য নন ?

(Why are some people not members of this organization? Why are you not a member?)

৪. বি.৩ আপনার মতে , এই সংগঠন এলাকার অন্যান্য সংগঠনের সাথে কতটা ভারসাম্য রক্ষা বা প্রতিযোগীতা করতে করে ?

(How far do you think this organization complements or competes with other community organizations?)

৪. বি.৪ সরকারের সাথে দলের সম্পর্কের বিষয়টাকে আপনি কিভাবে দেখেন ?(উদাহরন সরূপ এই সম্পর্ক রক্ষার ক্ষেত্রে আত্মীয়তার সম্পর্ক অথবা দলগত সংযোগ কি কোনো ভূমিকা পালন করে)

(What is your view about how the organization deals with government? (For example, does kinship or party affiliation play a role in determining the relationship?)

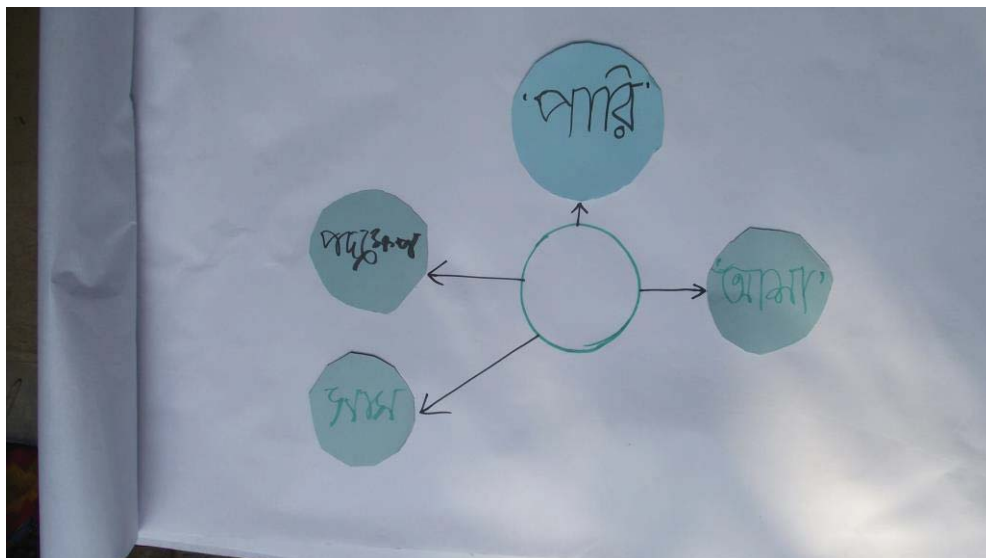
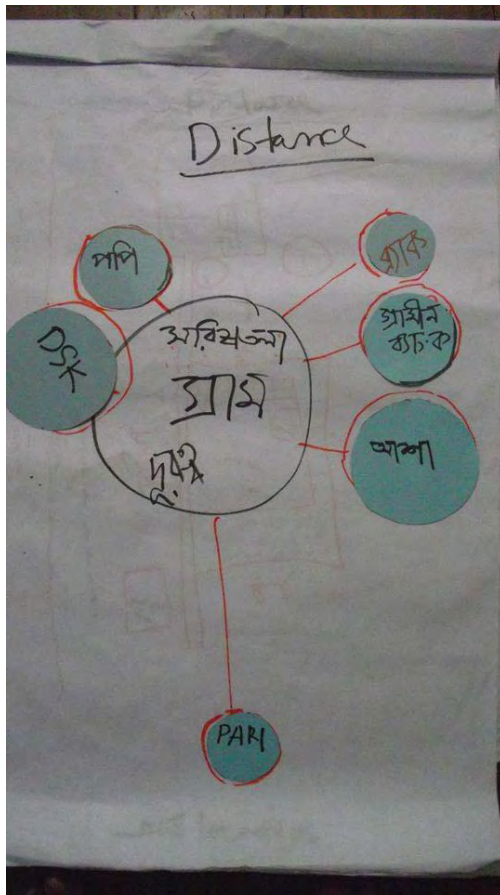
৪. বি.৫ গ্রামে/ পাড়ায় কাজ করে এমন অন্যান্য সংগঠনের সাথে এই সংগঠনের সম্পর্কের বিষয়টাকে আপনি কিভাবে দেখেন ?

(What is your view about how the organization deals with other organizations that work in the village/neighborhood?)

1.6 PROCESS OF CONDUCTING SOCIAL MAPPING



1.7 PROCESS OF CONDUCTING VENN DIAGRAM



Rapid Health Facility Assessment (R-HFA)

for core Maternal, Neonatal, and Child Health (MNCH) services at the primary level

Survey Forms

December 12, 2007



BRIEF INSTRUCTIONS FOR USE OF THE RAPID HEALTH FACILITY ASSESSMENT (R-HFA)

What is the Rapid Health Facility Assessment (R-HFA)?

This is a rapid assessment tool, designed specifically to aid managers assess the quality of and access to child health services at the "primary level," namely, the first level facilities. The core questions collect information on 12 key indicators of quality and access. There are also 7 optional indicators that can be collected with supplemental questions that are indicated by being highlighted in a yellow background. If these optional indicators are not desired, please delete the highlighted questions. On the other hand, if in-depth information is desired about a subject like vaccinations or growth monitoring, then project managers may want to add additional questions to supplement the information obtained in this R-HFA.

What is the R-HFA based on?

The R-HFA methodology is based, to a great extent, on the *BASICS Integrated Health Facility Assessment* (IHFA). The IHFA was developed in the late 1990s and is available online:

<http://www.basics.org/publications/pubs/hfa/>

The indicators in the R-HFA have been formulated to conform to recent work by the International Health Facility Assessment Assessment Network (IHFAN), hosted by WHO and which includes many technical agencies. An important contribution of IHFAN was to standardize health facility indicators. About half the R-HFA indicators come from an evolving standard survey drafted by the IHFAN for agencies doing national level health facility surveys.

The IHFAN indicators were supplemented with indicators adapted from the Service Provision Assessment (SPA) tool of the DHS. The SPA is described on the MEASURE / Evaluation web site:

<http://www.cpc.unc.edu/measure/publications/html/ms-02-09-tool06.html>

Some indicators and elements of the methodology also come from the IMCI-based Health Facilities Survey (HFS) tool of the World Health Organization. It is quite similar to the BASICS Integrated Health Facility Assessment tool. The WHO tool and manual is available at WHO's website:

<http://www.who.int/child-adolescent-health/publications/IMCI/HFS.htm>

The source of each of the questions for the R-HFA is indicated in the right margin of each of the tools (this is placed outside the print range so as not to clutter the forms).

How should one sample the Health Facilities to be assessed with the R-HFA?

Which facilities should be assessed?

Managers will need to make a decision about whether to include private for-profit, faith-based and/or NGO facilities among the facilities assessed. The general advice on whether or not to include a facility is to think about whether a facility is programmatically important. One should ask oneself if the program will be working directly with or trying to influence the practices in a particular facility. If so, then assessing it is probably a good idea, and it ought to be included in the sampling frame or census.

Sampling First Level Health Facilities

This instrument is designed to give usable data at a district level where typically one finds 15-30 health facilities at the primary level. These are facilities that do not receive referrals. In cases where there is a small number of facilities and due to the rapid nature of the survey, it can be applied without sampling facilities but rather as a census. However, in most circumstances you can reduce the amount of work that needs to be carried out by sampling facilities.

We recommend that you use a quality assurance approach to determine the sample size. Lot Quality Assurance Sampling (LQAS) has been used to carry out Health Facility Assessments with good results. It is a rapid and accurate method to judge whether a predetermined performance standard has been reached. There are several steps to use LQAS. The **first step** is to establish the performance standard. For this example, we assume that at least 80% of health facilities in a district must be of adequate quality or function well for a given performance indicator. If more than 20% are dysfunctional, then you assume there is a chronic problem in the district and that the problem must be corrected throughout the district. If fewer than 20% of health facilities are judged to be problematic then you can assume that problems in the indicator can be corrected through recurrent supervision and that they are not a priority.

The **second step** is to determine the sample size. Typical LQAS district level samples use a simple random sample of 19 Health Facilities. This sample size is determined using binomial probabilities. It is better than 90% specific in identifying Health Facilities that function up to the performance standard and better than 90% sensitive for districts in which 50% or less are of adequate quality. Additional information about LQAS and training materials can be found in Valadez, J.J., B. Weiss, C. Leburg and R. Davis (2002), *Assessing Community Health Programs: A Trainer's Guide*, London: Teaching Aids At Low Costs (TALC).

A more rapid approach than using binomial probabilities is to use the hypergeometric – which in large populations will result in sample sizes similar to those calculated with binomials. However, in small universes of health facilities (say, less than 100), it is well worth the effort to use this calculation. There are a number of software available to carry out the calculation, such as:

<http://henrylu.net/firms.com/hyper1/Ap1let.html>

As an example, let us assume that a district has 30 Health Facilities; assuming the performance standards presented in **step one**, a sample of 13 health facilities would be required -- six fewer than using binomials.

The **third step** is to choose a statistically determined decision rule to test the hypothesis that at least 80% of the health facilities in the district are of adequate quality. Using the above software, the resulting decision rule is that no more than 4 health facilities in the sample of 13 can exhibit a problem vis a vis a particular indicator for a district to pass the 80% standard. Hence, once the fifth health facility fails then the district is judged to be below the standard. With $n=13$ and $DR=4$, this design is 96% specific for districts with 80% of health facilities performing adequately. It is 93% sensitive for districts in which 50% of the health facilities fail.

Health Facility Assessment: Directions for Users

Different sample sizes will result in universes of different sizes. For example, a district with 20 Health facilities will require a sample of 10 and use a decision rule of 3.

Using a census instead of a sample

Since districts tend to have small universes of, say, $N=30$, one could carry out a census of all relevant facilities in the program area. These can all be assessed intensively in a three week period at baseline and again at the end of an intervention, or every 3-5 years. It does require considerably more work and expense, but it is feasible.

Alternate sampling procedures

In addition to LQAS approaches, one may also want to stratify by health facility type when possible. That is, if there are several large hospital outpatient departments and many smaller health facilities, it may be desirable to use a stratification scheme that ensures that at least some of the hospital OPDs are included in the sample. This will give a more valid picture of primary care service provision in the area than if the hospital OPDs were not to be included in the analysis. For a fuller explanation of a stratification scheme by type, see the the BASICS IHFA tool.

http://www.basics.org/publications/pubs/hfa/hfa_chap4.htm#5

This sampling procedure is also explained in more detail in Chapter 2 of the WHO HFS manual:

<http://www.who.int/child-adolescent-health/publications/IMCI/HFS.htm>

Using a “Rolling Census” for Monitoring and Supervision

This assessment tool was designed to be rapid enough that it can even be included in normal supervision used to monitor progress on an ongoing basis. During ongoing program implementation, a subset of the indicators can be used to track key performance benchmarks. Indicators #4 through #9 (inclusive) are the most useful and feasible for monitoring. They can be tracked annually by doing a “rolling census.” For example, if there are 24 facilities in a district, then two facilities per month could be assessed during routine supervisory visits, and over the course of the year, all 24 would be assessed at least once. The data aggregated over that year from this “rolling census” of all primary level facilities in the district could then be analyzed as if they had been collected at the same time and the indicators would be “the score for the district primary health facilities within the last year.”

Managers could also carry out “rolling sampling”. The principle is the same as for a “rolling census” except that fewer health facilities need to be measured. Should an LQAS sample of 13 be needed, then one randomly selected health facility would need to be visited each month in the year. As soon as the fifth problematic health facility is detected (assuming an 80% performance standard), the sampling could stop and the district-wide problem ameliorated. Similarly, as soon as the ninth successful health facility is detected the sampling could also stop since the district automatically passes.

Sampling for Clinical Cases Observed and Exit Interviews Conducted in First Level Health Facilities

This set of observations should be made with the most experienced clinician in treatment of sick children. While there are different sampling schemes for obtaining random samples of cases to observe in each clinic, for the purposes of this rapid assessment, we recommend observing **six consecutive cases** that fit the criteria (child 1-59 months whose reason for visit is any or all of the following: **fever, diarrhea, cough with rapid/difficult breathing**).

We are assuming that the sequencing of the patients that come to a clinician is not biased and can be treated as a simple random sample. The manager should ensure that we have no reason to suspect that the clinic is biasing the presentation of the patients by allowing the wealthiest or most politically powerful to be seen first. Also, we would not want to observe only the sickest patients or only those who live closest to the health facility because of the way the sample was chosen.

In this simple random sample of cases we are looking to see if treatment of 5 of the 6 observed cases adhere to the norms. If so, then the HF is given a passing score for this indicator. The indicators that depend on observation of cases are #10 (assessment) and #11 (treatment). The caretakers interviewed should be those whose children’s care was observed. The exit interview collects the data needed for the calculation of indicator #12 (counseling).

Health Facility Assessment: Directions for Users

This sampling design also uses LQAS principles. The 6:1 design (a sample of 6 and 1 failure permitted) is 97% specific for identifying clinicians providing appropriate services 95% of the time. In this design we assume that clinicians should have a conservative performance standard; at least 95% of the time, they must provide adequate care to patients. The benefit of using a design with such a high level of specificity is that one can be quite certain that all or almost all of the health facilities identified as problematic do have performance problems. Very few (only 3%) of those who have reached the standard of care are incorrectly classified as having below standard performance.

Explanation of the instruments in the R-HFA

The short instruments of the R-HFA are included as worksheets in this Excel file, each with its own tab. The following conventions are used in these instruments:

-- Questions that the interviewer asks to a respondent are in regular type like this.

-- INSTRUCTIONS TO THE INTERVIEWER ARE IN CAPITALS LIKE THIS.

-- Questions for optional indicators are in yellow background like this. If these indicators are not desired, these questions can be deleted with no change in numbering or flow resulting.

DHO-PLANNING. This form is used for planning the survey and calculating the "Geographic Access" indicator.

This form is applied initially in the planning stage for the R-HFA. Project staff approach the District Health Officer (DHO). This assists in improving partnership. There are three tables to fill out:

- a. line listing of all eligible facilities that could be assessed
- b. line listing of all community health workers that could be assessed (if your assessment will include community workers)
- c. line listing of all communities in the project area, with a notation on whether they have year-round access to services. There are detailed instructions on how to determine "year-round access" in the instruction manual.

There are five (5) instruments in the R-HFA. These are called "modules:"

MODULE 1. Observation of Clinical Care for 6 consecutive sick children.

The health worker with the most experience seeing children who is present and available is observed providing treatment. This is a brief checklist to assure that assessment, treatment, and health worker communication follow a standard protocol. It may need to be modified to the fit context.

MODULE 2. Exit Interview for Caretakers of the same six consecutive sick children

There are questions to determine if the caretaker understands the treatment given. There are optional questions on satisfaction with care.

MODULE 3. Health Facility Checklist

The facility supervisor (in small facilities, this will be the same health worker as is observed) can accompany the interviewer to walk around the facility and observe the infrastructure, equipment, supplies, and drugs available on the day of the assessment. The health worker can clarify any questions that arise.

Health Facility Assessment: Directions for Users

MODULE 4. Health Worker Interview & Record Review

The health worker with the most experience seeing children who is present and available is interviewed. Some of the answers are verified by review of records.

MODULE 5. Community Health Worker Form (WHERE APPLICABLE)

In health systems that employ CHWs a sample of them can be assessed. This form has simplified elements of the HW Interview & Record Review as well as the HF Checklist. It can be used to calculate the half of the indicators that are relevant to CHWs (#5,6,7,8,9,11).

How is the R-HFA implemented?

One facility can be assessed by a team of two people (if not assessing CHWs) or three people (if assessing CHWs) in one morning. One person observes clinicians providing care to patients while the other interviewer carries out the Exit Interviews. Once this is finished, one can carry out the interview while the other examines the supplies, drugs and information system. However, if the facility is large then a third person could examine the supplies, drugs and information system while the other two interviewers are carrying out the interviews. In cases where CHWs are assessed, the third interviewer should specialize in locating and assessing them.

The team can then move in the afternoon to the next facility to be assessed, so that the work can start first thing the next morning. In this way, one team can assess 5-6 facilities in a week. In an urban environment where travel times are not as long between facilities, it may even be possible to assess two facilities in a single day. This is likely to be unusual in most circumstances. If it is planned to assess two facilities in a day, then the team should verify that there are sufficient patients seen in a typical afternoon session at the second health facility that six sick child cases can be observed.

The total number of assessors depends on the sampling approach or census selected. If 13 facilities will be assessed, then only 2 teams of two or three assessors each (4 to 6 total assessors) will be needed to assess the entire district. In this case, a single trainer can feasibly train all assessors in one district. Regardless of the choice of sampling strategy, the number of assessors will be a manageable number for two trainers to handle in an intensive three or four day training. Ideally, the interviewers/observers should be experienced health workers, preferably from the Ministry of Health. If they cannot all be HW, then one member of each team should be so (and should be the supervisor of the team).

Data entry should occur in the evenings on the days of data collection. The data cleaning and preliminary analysis should be done within a few days of completion of the survey. The Excel data entry and analysis program (in the zip package on the CSTS web site) facilitate very rapid analysis. If each supervisor transcribes his/her own data for 4-6 facilities into the Excel sheets, then the HFA team leader can simply cut and paste all data into the same sheet and the tables and indicators are automatically calculated. Data can be validated by visually inspecting 20% of it for accuracy. If done this way, the team will have a clean and initially analyzed data set only 1-2 days after finishing data collection. That means that the entire process of implementation of this R-HFA (i.e., training, data collection, and initial analysis) should take about two to three weeks, with data ready at that point for feedback and planning purposes at the district level.

Country adaptation of the R-HFA

When adapting these generic R-HFA forms for application in a specific country context, there should be a national level consultation with knowledgeable counterparts to introduce them to the forms. During this consultation, several adaptations need to occur. In particular the following needs to happen:

1. Determine in what Districts **malaria is holoendemic**. In these Districts, Intermittent Presumptive Treatment (IPT) will be the norm for all pregnant women. In Districts where IPT is not the norm, then the IPT component of Indicators 5c (Essential Drugs) and 11c (Treatment for ANC) should be eliminated
2. The **country norm for first line drugs** for malaria, pneumonia, dysentery and neonatal sepsis need to be specified and put into the following questions:
 - 106A First line antimalarial
 - 106B First line oral antibiotic for pneumonia
 - 106D First line oral antibiotic for dysentery
 - 313NEO First line antibiotic for neonatal sepsis
 - 314.02 First line oral antibiotic for pneumonia
 - 314.03 First line oral antibiotic for dysentery
 - 314.04 First line antimalarial
 - 314.08 First line antibiotic for newborn sepsis
 - 314.09 First line antibiotic for newborn eye infections
 - 411.A2 First line antimalarial
 - 411.B2 First line oral antibiotic for pneumonia
3. Determine the benchmarks that will be used for a “passing score” for a HF for the following indicators:
 2. % clinical staff present (in other places, this has been 100%)
 3. Infrastructure (There are 7 items. Many first level facilities will not have all these, like emergency transport)
 4. Supplies (The default is all. This is 5 for the child)
 5. Drugs (the default is all. This is 5 for the child)
 10. Assessment tasks performed by HW (the default is all 4 tasks)

DHO INTERVIEW (listing of HF, CHWs, and communities)

Estimated crude
birth rate in project
area (per 1,000
population)

You can use this link to US Census
Bureau site to get national figure for
crude birth rate at the national level:

<http://www.census.gov/ipc/www/idb/summaries.html>

A. LIST OF FIRST LEVEL HEALTH FACILITIES

CODE	Picked for sample?	Name of health facility	Type of facility	1 = Hospital
			OPD 3 = Health Post Office	2 = Health Center 4 = Private
1				
2				
3				
4				
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B. LIST OF AUTHORIZED CHWs

CODE	Picked for sample?	Name of authorized CHW
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CODE	Picked for sample ?	Name of authorized CHW
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DHO INTERVIEW (listing of HF, CHWs, and communities)

Population of communities with access	0
Total population	0

C. LIST OF COMMUNITIES

CODE	Name of community	Name of nearest facility	Name of nearest authorized CHW	Population of community WITH access	Population of community WITHOUT access
1					
2					
3					
4					
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[illegible]

[illegible]

[illegible]

DHO MODULE QUESTIONNAIRE (Questions to be addressed to the District Health Officer or other knowledgeable respondent at District Health Office)

#	QUESTIONS	CIRCLE ONE BEST ANSWER				ADDITIONAL COMMENTS
Structure & Administration of DHMT						
a	Does a District Health Management Team (or an equivalent structure) exist?	YES	NO			
b	Does the DHMT have authority to make decisions on health plans?	YES	NO			
c	Personnel postings?	YES	NO			
d	What level of authority does the District have to use its budget to pay staff?	FULL AUTHORITY	SOME AUTHORITY	NO AUTHORITY		
e	What level of authority for the purchase of drugs?	FULL AUTHORITY	SOME AUTHORITY	NO AUTHORITY		
f	What level authority to purchase other supplies (e.g., linen, stationery, cleaning materials)?	FULL AUTHORITY	SOME AUTHORITY	NO AUTHORITY		
g	What level of authority for spending on the repair of equipment?	FULL AUTHORITY	SOME AUTHORITY	NO AUTHORITY		
h	What level of authority to spend on the Maintenance of buildings?	FULL AUTHORITY	SOME AUTHORITY	NO AUTHORITY		
i	And what level of authority to spend on the maintenance of vehicles?	FULL AUTHORITY	SOME AUTHORITY	NO AUTHORITY		
j	Does the DHMT have guidelines for its functioning?	YES	NO			
k	Do DHMT members have job descriptions?	ALL HAVE	SOME HAVE	NONE		
l	How many meetings has the DHMT had in the last 12 months?	YES, 4 or more	YES, 2 or 3	YES, one	NONE	
m	Is there a written record of the last DHMT meeting? If so, can I see the record?	YES, interviewer saw	YES, but did not see		NO	
Planning						
a	Is there a District Health Plan that covers the current date?	YES	NO			
b	Write in the dates covered by the District Health Plan	<u>Dates of plan:</u>				
c	Who was involved in development of the District Health Plan? (CIRCLE ALL THAT APPLY)	National MOH	District MOH	Technical Agencies	Local NGOs	Others (please specify):
d	What fraction of facilities in the District have health plans?	ALL	MORE THAN HALF	LESS THAN HALF	NONE	
e	Is the plan being implemented?	YES	NO			
f	Is implementation of the plan on target (i.e., up-to date)?	YES, COMPLETELY	YES, PARTIALLY		NO	
g	If not, why not?	<u>Answer:</u>				
h	Does the District Health Plan include a plan for monitoring and evaluation of its implementation?	YES	NO			
i	If yes, who is responsible?	National MOH	District MOH	Other (please specify):		
Resources						
a	How does the DHMT communicate with most health centers in the District?	TELEPHONE/RADIO IN FACILITY	TELEPHONE/RADIO NEAR FACILITY	MESSENGER	MAIL	
b	How does the DHMT communicate with most health posts in the District?	TELEPHONE/RADIO IN FACILITY	TELEPHONE/RADIO NEAR FACILITY	MESSENGER	MAIL	
c	How many functioning vehicles are there for use per District supervisor?	AT LEAST 1 PER SUPERVISOR	LESS THAN 1 PER SUPERVISOR		NONE	
d	Is there fuel today for the vehicles used for supervision?	YES for all	YES for some		NO, no fuel in any vehicle	
e	Does the District have a vehicle maintenance plan with budget?	YES, WITH ADEQUATE BUDGET	YES, BUT INADEQUATE BUDGET	YES, BUT NO BUDGET	NO PLAN	
f	Does the District have a standard list of equipment that all primary level health facilities should have?	YES	NO			
g	Does the District have an inventory of equipment in health facilities?	YES	NO			
h	If yes, when was this last updated?	WITHIN LAST 12 MO			MORE THAN 12 MONTHS AGO	
i	Does District use a written system for control of stock of medications in health facilities?	YES	NO			
j	If yes, ask to see the ledger book	OBSERVED			NOT OBSERVED	
k	If observed, check date of last entry	WITHIN LAST 3 MONTHS			MORE THAN 3 MO. AGO	

#	QUESTION	CIRCLE BEST ANSWER (Read answers to respondent)						
		MIN. No attainment 0 points	1. informal activity only 10 points	2. start of formal activity 30 points	3. some/fair progress 50 points	4. good progress 70 points	5. excellent progress 90 points	MAX. complete attainment 100 points
Budget Management								
a	Does DHMT keep accounts of money that can be presented on demand?	No accounts are kept	No records of money are kept.	Records kept of money received and spent but it is difficult to know how much money is held at any one time as there is no systematic process for keeping records up to date	Records kept of money received and spent. There is a systematic process for keeping records up to date but it is not always followed	Accounts are kept up-to-date and balances and statements are prepared at the end of the year, but there are inaccuracies or there is incomplete recordkeeping.	Accounts are always kept up-to-date and balances and statements are prepared at the end of the year	Balances and statements are prepared quarterly. At the end of the year, they are presented to external stakeholders for approval
b	Does DHMT have a bank account to hold its funds?	DHMT has no bank account. It manages its funds in cash	Someone's personal account is used for any funds	A bank account is registered in DHMT's name but only one person's signature required	A bank account is registered in the DHMT's name which requires dual or specific authorized check signatories. No other financial safeguards are in place.	A manual or computerized record of all payments (cashbook) is kept and compared with all bank statements. This record is not well kept and/or not up to date.	A manual or computerized record of all payments (cashbook) is kept and compared with all bank statements. This record is probably accurate but has not been audited within the last two years.	A manual or computerized record of all payments (cashbook) is kept and compared with all bank statements. This record has been confirmed as complete and accurate by an audit within the last two years.
c	Does DHMT maintain supporting receipts and invoices for every expenditure?	Receipts and invoices are only asked for when planning money to justify expenses	There is no requirement for keeping receipts or invoices.	Receipts and invoices are needed to justify expenses sometimes but rarely kept on file	Receipts and invoices are needed to justify any use of money and these are kept on file and are reviewed by anyone	Receipts and invoices are needed to justify any use of money and these are kept on file and are reviewed about half the time.	Receipts and invoices are needed to justify any use of money and these are kept on file and usually (but not always) reviewed	All receipts/invoices and other supporting documents are filed for three years and are regularly reviewed by an authorized person
d	Does DHMT prepare, monitor, and review the budget?	Budgets are prepared for every proposal but are not used for anything else	Budgets are not prepared, except possibly as required by a donor.	Budgets are prepared to decide how much to spend on all project and organizational costs, to ensure that there is enough money for all future plans	Budgets are presented annually for approval to a representative group of members	Every six months budgets are compared to money already spent and planned cash flow, to make sure there will be enough cash to keep the organization running.	Quarterly budgets are compared to money already spent and planned cash flow, to make sure there will be enough cash to keep the organization running.	Every month budgets are compared to money already spent and planned cash flow, to make sure there will be enough cash to keep the organization running.
Coordination								
a	Does DHMT have relations with NGOs implementing health activities in the District?	The MOH works in isolation. There is no knowledge of the strategies or work of other organizations, like NGOs	There is knowledge of other organizations' work and informal internal discussions, mainly when planning projects and with an eye not to duplicate services.	There is knowledge of other organizations' work and efforts not to duplicate programming. Additionally, there have been discussions at least once in the last two years with another organization about collaboration of some kind	There is sometimes consultation with the management of other organizations in area, especially in the planning stages. There may sometimes be joint activities.	When planning projects there is sometimes internal discussion as well as consultation with others to ensure no duplication and there has been at least one instance in last two years of joint activities with another organization.	When planning projects there is always internal discussion as well as consultation with others to ensure no duplication and activities are often done jointly with other organizations.	Have effective partnerships working together, sharing resources or referring clients to other NGO, private, or community organizations
b	What is the extent and nature of the DHMT's relations with central Ministry of Health?	DHMT has no meetings or relations with government agencies, in particular the Ministry of Health.	DHMT has some knowledge of relevant government health policies and plans. Members sometimes informally discuss these matters and how the District should work within these parameters.	DHMT has knowledge of relevant government health policies and plans. Members discuss these matters and how they should work within these parameters. Once in the last two years someone has met with the central MOH to discuss plans and/or policies.	A Member of the DHMT has met at least once in the last two years with national MOH authorities	Representative(s) of DHMT meet but not regularly with national MOH	DHMT has regular meetings with central MOH authorities and knowledge of their plans/policies.	DHMT has regular (at least twice a year) meetings with central MOH authorities. Have detailed knowledge of their plans and policies. Have done joint planning and/or evidence-based advocacy with them at least once in last two years.
c	Does DHMT have relations with technical agencies (e.g., UN agencies, large NGOs, local universities, others that offer technical assistance) and knows where it can get technical assistance when needed?	DHMT has no contacts or knowledge of the activities or competencies of technical agencies in the country.	At least one representative of DHMT has some knowledge about technical competencies of some agencies, but they are not sure who they would contact if help was needed in a technical area like doing a baseline survey.	Organization has contact, but not on a regular basis, with technical agencies. Has some knowledge of where to find assistance on technical topics in which it needs help, but either depends on an outside donor to make the contact or has experienced problems getting the required assistance more often than not.	DHMT has contacts at technical agencies and technical staff attend events at least several times a year either for information exchange or training. Managers also are aware of the technical agencies. But there is either usually dependence on an outside donor for contact or there have been problems in acquiring needed quality assistance on their own.	DHMT has contacts at technical agencies and technical staff attend events at least several times a year either for information exchange or training. Managers also are aware of the technical agencies. DHMT shares responsibility for getting assistance with outside donors.	DHMT usually knows where it can turn to for outside assistance but no ongoing formal relationship with outside technical agencies (like a local university or a UN agency)	DHMT has ongoing relationship or partnership with at least one technical agency, preferably local (e.g., national university) for needed technical assistance. For any type of technical assistance (e.g., baseline study, research analysis, or training for specialized areas), DHMT members know specific organizations and individuals they can consult.

HF FACE SHEET - RAPID HEALTH FACILITY ASSESSMENT

Write a circle around the correct option response or fill in the information requested.

QUESTIONNAIRE IDENTIFICATION NUMBER (For Office Use Only)

001	Province / District Name			
002	Facility Name			
003	Facility Code			
004	Date of assessment (dd / mm / yyyy)			
005	Facility Type Hospital Affiliated Health Center / Outpatient Department Health Center..... Health Post / Dispensary Office (private doctor, walk-in surgery)	1		
		2		
		3		
		4		
006	Managing Authority Government / Public..... Private Non-profit (NGO, faith-based, mission, community) Private For-profit.....	1		
		2		
		3		
007 (optional)	Facility GPS Geographic Coordinates Latitude..... Longitude	Lat:		
		Long:		
008	Assessment Result Code Completed all forms Partially completed forms..... No respondent available / facility closed..... Refused.....	1		
		2		
		3		
		4		
009	Supervisor Check (circle <i>all</i> appropriate codes) Clinical observation form complete (6 sick children)..... Exit interview of caretakers of sick children complete (6 caretakers)..... Health facility checklist complete..... Health worker interview & record review complete..... Community Health Worker form(s) complete	A		
		B		
		C		
		D		
		E	N/A	

Comments from Supervisor (Note anything unusual about data collection or interesting qualitative findings:)

INFORMED CONSENT - RAPID HEALTH FACILITY AS

Facility Code: _____

Hello. My name is _____. We are here on behalf of the Ministry of Health to explain the survey.

You / Your facility was selected to participate in this study. We will be asking patient names from the registers will be reviewed, recorded, or shared. The for planning service improvement or further studies of health services. The your name nor the name of this health facility will be provided, and any representative facility cannot be identified. Your name and all information that you give me

You may refuse to answer any question or choose to stop the interview at any time. Do you wish to proceed? **YES NO**

FOR HW ONLY: *We are asking for your help to ensure that the information appropriate person to provide the information, we would appreciate your input.*

Name of interviewer: _____
Name of interviewee: _____
Title of interviewee (HW, Exiting Patient, etc): _____
Date: _____

Name of interviewer: _____
Title of interviewee (HW, Exiting Patient, etc): _____
Title of interviewee: _____
Date: _____

Name of interviewer: _____
Name of interviewee: _____
Title of interviewee (HW, Exiting Patient, etc): _____
Date: _____

Name of interviewer: _____
Name of interviewee: _____
Title of interviewee (HW, Exiting Patient, etc): _____
Date: _____

ASSESSMENT (one form for each data collector in each facility)

Interviewer Code:

Health (MOH) to assist the government to know more about its health services. I would

ask you questions about various health services and will ask to see patient registers. No
The information may be used by the MOH and organizations supporting health services
The data collected may also be provided to researchers for analyses; however, neither
The reports that use this facility's data will only present information in aggregate so that the
The data will be kept strictly confidential.

any time. Do you have any questions about the survey? Do I have your agreement to

*The information we collect is accurate. If there are questions for which someone else is the most
person producing us to that person.*

Name of interviewer: _____
Name of interviewee: _____
Title of interviewee (HW, Exiting Patient, etc): _____
Date: _____

Name of interviewer: _____
Title of interviewee (HW, Exiting Patient, etc): _____
Title of interviewee: _____
Date: _____

Name of interviewer: _____
Name of interviewee: _____
Title of interviewee (HW, Exiting Patient, etc): _____
Date: _____

Name of interviewer: _____
Name of interviewee: _____
Title of interviewee (HW, Exiting Patient, etc): _____
Date: _____

MODULE 1: CLINICAL OBSERVATION OF SIX CONSECUTIVE SICK CHILDREN

Facility Code:

Interviewer Code:

READ CONSENT FORM TO HEALTH WORKER. READ CONSENT FROM TO THE CHOSEN CARETAKERS BEFORE THEY ENTER THE CONSULTATION ROOM.

OBSERVE SIX CONSECUTIVE ELIGIBLE CLINICAL CASES. ELIGIBLE CASES ARE THOSE THAT ARE SICK CHILDREN, 1-59 MONTHS OF AGE.

THEY SHOULD BE SEEN FOR ANY ONE (OR A COMBINATION) OF THE THREE FOLLOWING REASONS:

MALARIA OR FEVER, ARI OR RAPID OR DIFFICULT BREATHING, DIARRHEA.

THERE IS A SEPARATE COLUMN FOR EACH OF THE FIVE CASES OBSERVED. FOR EACH QUESTION, CIRCLE YES, NO, OR NOT APPLICABLE.

NO.	QUESTIONS	CODING CLASSIFICATION														
		CASE 1			CASE 2			CASE 3			CASE 4			CASE 5		
100	RECORD THE EXACT TIME THAT THE CARETAKER ENTERS THE EXAMINATION ROOM	TIME:			TIME:			TIME:			TIME:			TIME:		
100A	WHAT TYPE OF HEALTH WORKER EXAMINED THE CHILD?	Doctor	Nurse	Other	Doctor	Nurse	Other	Doctor	Nurse	Other	Doctor	Nurse	Other	Doctor	Nurse	Other
101	AGE OF CHILD (IN COMPLETED MONTHS - 1 TO 59)															
102	REASON FOR VISIT (CIRCLE ALL THAT APPLY) (SHOULD ONLY BE FOR CASES WITH FEVER/MALARIA, COUGH/RAPID OR DIFFICULT BREATHING, AND/OR DIARRHEA)	cough / breathing problem	fever / malaria	diarrhea	cough / breathing problem	fever / malaria	diarrhea	cough / breathing problem	fever / malaria	diarrhea	cough / breathing problem	fever / malaria	diarrhea	cough / breathing problem	fever / malaria	diarrhea
103	DOES THE HEALTH WORKER. A. ASK ABOUT THE ABILITY TO FEED OR BREASTFEED?	Y	N		Y	N		Y	N		Y	N		Y	N	
	B. ASK WHETHER THE CHILD VOMITS EVERYTHING?	Y	N		Y	N		Y	N		Y	N		Y	N	
	C. ASK ABOUT THE PRESENCE OF CONVULSIONS?	Y	N		Y	N		Y	N		Y	N		Y	N	
104	DOES THE HEALTH WORKER A. CHECK NUTRITIONAL STATUS ON CHILD HEALTH CARD?	Y	N		Y	N		Y	N		Y	N		Y	N	
	B. CHECK VACCINATIONS ON CHILD HEALTH CARD? porikkha	Y	N		Y	N		Y	N		Y	N		Y	N	
105	DOES THE HEALTH WORKER CLASSIFY THE CHILD AS HAVING A. FEVER OR MALARIA?	Y	N		Y	N		Y	N		Y	N		Y	N	
	B. PNEUMONIA OR FAST / DIFFICULT BREATHING?	Y	N		Y	N		Y	N		Y	N		Y	N	
	C. DIARRHEA WITHOUT BLOOD?	Y	N		Y	N		Y	N		Y	N		Y	N	
	D. DIARRHEA WITH BLOOD?	Y	N		Y	N		Y	N		Y	N		Y	N	

106	DOES THE HEALTH WORKER PRESCRIBE A. FIRST LINE ANTIMALARIAL?	Y	N	NA	Y	N	NA	Y	N	NA	Y	N	NA	Y	N	NA
	B. FIRST LINE ANTIBIOTIC FOR PNEUMONIA?	Y	N	NA	Y	N	NA	Y	N	NA	Y	N	NA	Y	N	NA
	C. ORS (or IV fluids - <i>only</i> in case of severe dehydration)?	Y	N	NA	Y	N	NA	Y	N	NA	Y	N	NA	Y	N	NA
	D. FIRST LINE ANTIBIOTIC FOR DIARRHEA WITH BLOOD?	Y	N	NA	Y	N	NA	Y	N	NA	Y	N	NA	Y	N	NA
	E. OTHER ANTIBIOTIC?	Y	N	NA	Y	N	NA	Y	N	NA	Y	N	NA	Y	N	NA
107	DOES HEALTH WORKER EXPLAIN TO CARETAKER HOW TO GIVE A. FIRST LINE ANTIMALARIAL?	Y	N	NA	Y	N	NA	Y	N	NA	Y	N	NA	Y	N	NA
	B. FIRST LINE ANTIBIOTIC FOR PNEUMONIA?	Y	N	NA	Y	N	NA	Y	N	NA	Y	N	NA	Y	N	NA
	C. ORS (or IV fluids - <i>only</i> in case of severe dehydration)?	Y	N	NA	Y	N	NA	Y	N	NA	Y	N	NA	Y	N	NA
	D. FIRST LINE ANTIBIOTIC FOR DIARRHEA WITH BLOOD?	Y	N	NA	Y	N	NA	Y	N	NA	Y	N	NA	Y	N	NA
	E. OTHER ANTIBIOTIC?	Y	N	NA	Y	N	NA	Y	N	NA	Y	N	NA	Y	N	NA
	SPECIFY:															
108	RECORD THE EXACT TIME THAT THE CONSULTATION ENDS	TIME:			TIME:			TIME:			TIME:			TIME:		

Supervisor Recode for Indicator #11 (HW performance - treatment): Does classification (Q.105) match the medication prescribed (Q.106)?		CASE 1		CASE 2		CASE 3		CASE 4		CASE 5	
A. malaria or fever / first line antimalarial		Match	Not match	Match	Not match	Match	Not match	Match	Not match	Match	Not match
B. pneumonia or difficult breathing / first line antibiotic for pneumonia		Match	Not match	Match	Not match	Match	Not match	Match	Not match	Match	Not match
C. diarrhea without blood / ORS but no antibiotic		Match	Not match	Match	Not match	Match	Not match	Match	Not match	Match	Not match
D. diarrhea with blood / first line antibiotic for dysentery		Match	Not match	Match	Not match	Match	Not match	Match	Not match	Match	Not match
INDICATOR #11 (numerator = all match)		All match	Not all match	All match	Not all match	All match	Not all match	All match	Not all match	All match	Not all match

NOTE ANY QUALITATIVE OBSERVATIONS HERE:

CASE 6		
TIME:		
Doctor	Nurse	Other
cough / breathing problem	fever / malaria	diarrhea
Y	N	
Y	N	
Y	N	
Y	N	
Y	N	
Y	N	
Y	N	
Y	N	
Y	N	
Y	N	NA
Y	N	NA
Y	N	NA
Y	N	NA
Y	N	NA
Y	N	NA
Y	N	NA

Y	N	NA
Y	N	NA
Y	N	NA
TIME:		
CASE 6		
Match	Not match	
Match	Not match	
Match	Not match	
Match	Not match	
All match	Not all match	

MODULE 2: EXIT INTERVIEW (CARETAKERS OF SIX OBSERVED SICK CHILDREN)

Facility Code:

Interviewer Code:

OBTAIN INFORMED CONSENT FROM EACH CARETAKER IF THE SUPERVISOR HAS NOT ALREADY DONE SO.

		CODING CLASSIFICATION (PUT CASE CODE AT TOP OF EACH COLUMN)																								
NO.	QUESTIONS	CASE 1					CASE 2					CASE 3					CASE 4					CASE 5				
		cough / breathing problem	fever / malaria	diarrhea	Don't Know	cough / breathing problem	fever / malaria	diarrhea	Don't Know	cough / breathing problem	fever / malaria	diarrhea	Don't Know	cough / breathing problem	fever / malaria	diarrhea	Don't Know	cough / breathing problem	fever / malaria	diarrhea	Don't Know					
200	What illness(es) did the health worker tell you your child had?																									
201	Did the health worker give you or prescribe any medicines today?	YES..... 1				YES..... 1				YES..... 1				YES..... 1				YES..... 1				YES..... 1				
		NO (end interview) 2				NO (end interview) 2				NO (end interview) 2				NO (end interview) 2				NO (end interview) 2				NO (end interview) 2				
202	Can you please show me the medications or prescriptions given to you by the health worker?																									
ONLY ASK ABOUT THE MEDICATIONS FROM YOUR LIST (I.E., ORS, FIRST LINE MED FOR MALARIA, FIRST LINE MED FOR PNEUMONIA, FIRST LINE MED FOR DYSENTERY) ASK THE MOTHER TO SHOW YOU EACH MEDICINE OR PRESCRIPTION GIVEN TO HER. THEN WRITE DOWN THE NAME OF EACH MEDICINE BELOW (UNDER "MEDICINE 1," "MED. 2," AND "MEDICINE 3.") ASK HER ABOUT THE AMOUNT TO BE GIVEN EACH TIME, THE NUMBER OF TIMES A DAY TO GIVE IT, AND THE NUMBER OF DAYS IT IS TO BE GIVEN.																										
01	WRITE NAME OF MEDICATION 1	Med name:				Med name:				Med name:				Med name:				Med name:								
	a. How much will you give each time?	Amount:				Amount:				Amount:				Amount:				Amount:								
	b. How many times a day will you give it?	#times/day:				#times/day:				#times/day:				#times/day:				#times/day:								
	c. For how many days will you give it?	#days:				#days:				#days:				#days:				#days:								
02	WRITE NAME OF MEDICATION 2	Med name:				Med name:				Med name:				Med name:				Med name:								
	a. How much will you give each time?	Amount:				Amount:				Amount:				Amount:				Amount:								
	b. How many times a day will you give it?	#times/day:				#times/day:				#times/day:				#times/day:				#times/day:								
	c. For how many days will you give it?	#days:				#days:				#days:				#days:				#days:								
03	WRITE NAME OF MEDICATION 3	Med name:				Med name:				Med name:				Med name:				Med name:								
	a. How much will you give each time?	Amount:				Amount:				Amount:				Amount:				Amount:								
	b. How many times a day will you give it?	#times/day:				#times/day:				#times/day:				#times/day:				#times/day:								
	c. For how many days will you give it?	#days:				#days:				#days:				#days:				#days:								

Thank you for participating. We will use this information to help improve health services in this area.

Supervisor Recode for Indicator #12 performance - counseling (HW)		CASE 1		CASE 2		CASE 3		CASE 4		CASE 5	
Is the caretaker's description of medication dose, frequency, and duration correct (Q.202)?	MED1	Correct	Not Corr.	Correct	Not Corr.	Correct	Not Corr.	Correct	Not Corr.	Correct	Not Corr.
	MED2	Correct	Not Corr.	Correct	Not Corr.	Correct	Not Corr.	Correct	Not Corr.	Correct	Not Corr.
	MED3	Correct	Not Corr.	Correct	Not Corr.	Correct	Not Corr.	Correct	Not Corr.	Correct	Not Corr.
Indicator #12 (numerator = all correct)		All correct	Not all correct	All correct	Not all correct	All correct	Not all correct	All correct	Not all correct	All correct	Not all correct

NOTE ANY QUALITATIVE OBSERVATIONS HERE:

CASE 6

cough / breathing problem	fever / malaria	diarrhea	Don't know
YES.....			1
NO (end interview)			2

Med name:

Amount:

#times/day:

#days:

Med name:

Amount:

#times/day:

#days:

Med name:

Amount:

#times/day:

#days:

CASE 6

Correct	Not Corr.
Correct	Not Corr.
Correct	Not Corr.
All correct	Not all correct

Exit Interview

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MODULE 3: HEALTH FACILITY CHECKLIST (INFRASTRUCTURE, EQUIPMENT, SUPPLIES, DRUGS)

Facility Code:

Interviewer Code:

OBTAIN INFORMED CONSENT

NO.	QUESTIONS	CODING CLASSIFICATION
	OBSERVE TO SEE IF EACH OF THE FOLLOWING STRUCTURES EXISTS IN THE FACILITY. IF IT DOES EXIST, ASK TO BE SHOWN IT SO YOU CAN INSPECT IT	
301	Does this facility have overnight or inpatient beds?	YES 1 NO 2
302	Is there 24-hour staff coverage? IF YES, ASK TO SEE A DUTY ROSTER FOR OVERNIGHT STAFFING IF STAFF LIVE ON SITE, MARK "1."	YES, 24-HOUR DUTY ROSTER OR STAFF LIVE ONSITE 1 NO DUTY ROSTER NOR STAFF LIVE ONSITE 2
303	Does this facility have a working phone or shortwave radio that is available at all times client services are offered? COUNT AS RESPONSE "3" IF HW HAS A CELL PHONE THAT FUNCTIONS IN THE FACILITY	YES, OBSERVED ONSITE OR WITHIN 5 MINUTES WALK 1 YES, REPORTED ONSITE OR WITHIN 5 MINUTES WALK 2 PAY PHONE OR HW CELL PHONE 3 NO 4
304	Does this facility have a functional ambulance or other vehicle on site for emergency transport for clients? IF YES, ASSESS IF VEHICLE IS FUNCTIONING & THERE IS FUEL ACCEPT REPORTED RESPONSE	YES, OBSERVED FUNCTIONING AND WITH FUEL 1 YES, REPORTED FUNCTIONING AND WITH FUEL 2 VEHICLE BUT NO FUEL 3 NO VEHICLE 4
305	Does this facility have electricity functioning now? COUNT AS "YES, OBSERVED" IF ELECTRICITY IS OBVIOUSLY RUNNING OR IF YOU CAN TURN ON AN ELECTRICAL SWITCH AND GET ELECTRICITY	YES, OBSERVED 1 NO 2
306	Does this facility have a back-up or standby generator for electricity? IF YES, ASSESS IF THE GENERATOR IS FUNCTIONING AND FUEL IS AVAILABLE. ACCEPT REPORTED RESPONSE	YES OBSERVED FUNCTIONING AND WITH FUEL 1 YES OBSERVED FUNCTIONING AND BUT NO FUEL 2 YES, REPORTED FUNCTIONING AND WITH FUEL 3 YES, REPORTED FUNCTIONING BUT NO FUEL 4 NO 5
307	Is there a toilet or latrine that is available for clients' to use? THIS TOILET OR LATRINE MUST BE FOR THE USE OF CLIENTS, NOT JUST HEALTH FACILITY STAFF	YES 1 NO 2
308	ASK TO SEE THE TOILET OR LATRINE AND INDICATE THE TYPE IF THERE ARE MULTIPLE TOILET FACILITIES, CIRCLE THE RESPONSE THAT CORRESPONDS TO THE HIGHEST QUALITY TYPE. THIS IS THE TYPE WITH THE LOWEST NUMBER.	FLUSH / POUR FLUSH: 1 VENTILATED IMPROVED PIT LATRINE (VIP) 2 SIMPLE PIT LATRINE 3 COMPOSTING TOILET 4 OPEN PIT 5 BUCKET 6 HANGING TOILET / LATRINE 7 OTHER 8

309	IS THE TOILET OR LATRINE USABLE? TO BE UNUSABLE, THE LATRINE IS NOT SIMPLY DIRTY, BUT NOT IN FUNCTIONING CONDITION (THAT IS, CANNOT BE USED)		YES 1 NO 2 UNABLE TO OBSERVE 3	
310	Does the health facility have water available today?		YES 1 NO 2	
311	Could you please tell me where the health facility is getting water for hand washing today. WATER CAN BE EITHER ON SITE OR WITHIN 500m OF THE SITE IF THERE ARE MULTIPLE WATER SOURCES, PLEASE CIRCLE THE ONE RESPONSE THAT CORRESPONDS TO THE MOST COMMONLY USED WATER SOURCE.		PIPED INTO FACILITY 1 PIPED ONTO FACILITY GROUNDS 2 PUBLIC STANDPIPE 3 TUBE WELL / BOREHOLE ON GROUNDS 4 PROTECTED DUG WELL ON GROUNDS 5 BOTTLED WATER 6 RAINWATER, SURFACE WATER, OR TANKER TRUCK 7 OTHER 8	
312	Can you please show me where children are seen for treatment INSPECT FOR AUDITORY AND VISUAL PRIVACY. MARK AS "BOTH" IF THERE IS A DOOR THAT CAN CLOSE MARK AS "VISUAL" IF THERE IS A DRAPE OR CURTAIN		VISUAL AND AUDITORY PRIVACY 1 VISUAL BUT NOT AUDITORY PRIVACY 2 VISUAL NOR AUDITORY PRIVACY 3	
313	IN THE CHILD CONSULTATION AREA, CHECK WHETHER EACH OF THE ITEMS BELOW IS EITHER IN THE ROOM WHERE THE SERVICE IS GIVEN OR IN AN ADJACENT ROOM.			
	ITEMS FOR SICK CHILD CONSULTATIONS	(a) AVAILABILITY OBSERVED REPORTED, NOT SEEN NOT AVAILABLE DON'T KNOW		
01	Optional (for Infection Control): Electric autoclave or dry heat sterilizer	1 → b	2 → b	3 9
02	Refrigerator for storing vaccines	1 → b	2 → b	3 9
03	Infant scale that is accessible	1 → b	2 → b	3 9
04	Adult (standing) scale that is accessible	1 → b	2 → b	3 9
05	Timer or watch with second hand	1 → b	2 → b	3 9
06	Jar or pitcher for oral rehydration solution (ORS)	1	2	3 9
07	Cup and spoon for oral rehydration	1	2	3 9
313NEO	IN THE DELIVERY ROOM/NURSERY CONSULTATION AREA, CHECK WHETHER EACH OF THE ITEMS BELOW IS EITHER IN THE ROOM WHERE THE SERVICE IS GIVEN OR IN AN ADJACENT ROOM.			
	ITEMS FOR DELIVERY AND IMMEDIATE NEWBORN CARE	(a) AVAILABILITY OBSERVED REPORTED, NOT SEEN NOT AVAILABLE DON'T KNOW		
01	Optional (for Infection Control): Electric autoclave or dry heat sterilizer	1 → b	2 → b	3 9
02	Neonatal resuscitation device (tube & mask or bag and mask)	1 → b	2 → b	3 9
03	Infant scale that is accessible	1 → b	2 → b	3 9
04	Vacuum extractor (for deliveries)	1 → b	2 → b	3 9
05	Baby wraps (e.g. blankets)	1 → b	2 → b	3 9
06	Partograph (at least one blank one)	1 → b	2 → b	3 9

313ANC	IN THE ANC CONSULTATION AREA, CHECK WHETHER EACH OF THE ITEMS BELOW IS EITHER IN THE ROOM WHERE THE SERVICE IS GIVEN OR IN AN ADJACENT ROOM.								
	ITEMS FOR ANC CONSULTATIONS	(a) AVAILABILITY				(b) FUNCTIONING			
		OBSERVED	REPORTED, NOT SEEN	NOT AVAILABLE	DON'T KNOW	YES	NO	DON'T KNOW	
01	Optional (for Infection Control): Electric autoclave or dry heat sterilizer	1 → b	2 → b	3	9	1	2	9	
02	Refrigerator or cold box for storing tetanus toxoid vaccines	1 → b	2 → b	3	9	1	2	9	
03	Blood Pressure Machine	1 → b	2 → b	3	9	1	2	9	
04	Hemoglobin reagents	1 → b	2 → b	3	9				
05	Syphilis testing kit	1	2	3	9				
06	Malaria testing supplies	1	2	3	9				
07	Albustix for testing for protein	1	2	3	9				
ASK TO SEE THE FOLLOWING DRUGS AND SUPPLIES. IF THE ITEM IS LOCATED IN A DIFFERENT PART OF THE FACILITY, GO THERE TO OBSERVE IT. IF YOU ARE UNABLE TO SEE AN ITEM, ASK IF IT IS AVAILABLE AND THE EXPIRATION DATES HAVE NOT PASSED. FOR EACH ITEM, CIRCLE THE APPROPRIATE CODE.									
314	CHILD DRUGS AND TREATMENTS	(a) AVAILABLE TODAY						(b) (OPTIONAL) OUT OF STOCK IN LAST 6 MONTHS	
		OBSERVED AND AVAILABLE			NOT OBSERVED				
		AVAILABLE ALL VALID	AVAILABLE AT LEAST ONE VALID	AVAILABLE BUT NONE VALID	REPORTED AVAILABLE, NOT SEEN	NOT AVAIL-ABLE TODAY / DON'T KNOW	NEVER AVAIL-ABLE	YES	NO
01	ORS packets	1 → b	2 → b	3	4	5	6	1	2
02	First line oral drug for child pneumonia	1	2 → b	3	4	5	6	1	2
03	First line oral drug for child dysentery (bloody diarrhea)	1 → b	2 → b	3	4	5	6	1	2
04	First line oral antimalarial	1 → b	2 → b	3	4	5	6	1	2
05	Vitamin A	1 → b	2 → b	3	4	5	6	1	2
06	Optional: Insecticide Treated Net (ITN)	1 → b	2 → b	3	4	5	6	1	2
ASK TO SEE THE FOLLOWING DRUGS AND SUPPLIES. IF THE ITEM IS LOCATED IN A DIFFERENT PART OF THE FACILITY, GO THERE TO OBSERVE IT. IF YOU ARE UNABLE TO SEE AN ITEM, ASK IF IT IS AVAILABLE. FOR EACH ITEM, CIRCLE THE APPROPRIATE CODE.									
314NEO	NEWBORN & DELIVERY DRUGS AND TREATMENTS	(a) AVAILABLE TODAY						(b) (OPTIONAL) OUT OF STOCK IN LAST 6 MONTHS	
		OBSERVED AND AVAILABLE			NOT OBSERVED				
		AVAILABLE ALL VALID	AVAILABLE AT LEAST ONE VALID	AVAILABLE BUT NONE VALID	REPORTED AVAILABLE, NOT SEEN	NOT AVAIL-ABLE TODAY / DON'T KNOW	NEVER AVAIL-ABLE	YES	NO
01	Antibiotics for newborn infections (except eye)	1	2	3	4	5	6	1	2
02	Antibiotics for newborn eye infections	1	2	3	4	5	6	1	2
03	Oxytocin	1	2	3	4	5	6	1	2
04	Niveripin (in high HIV prevalence settings)	1	2	3	4	5	6	1	2

ASK TO SEE THE FOLLOWING DRUGS AND SUPPLIES. IF THE ITEM IS LOCATED IN A DIFFERENT PART OF THE FACILITY, GO THERE TO OBSERVE IT. IF YOU ARE UNABLE TO SEE AN ITEM, ASK IF IT IS AVAILABLE. FOR EACH ITEM, CIRCLE THE APPROPRIATE CODE.											
314ANC ANC DRUGS AND TREATMENTS		(a) AVAILABLE TODAY						(b) (OPTIONAL) OUT OF STOCK IN LAST 6 MONTHS			
		OBSERVED AND AVAILABLE			NOT OBSERVED			YES	NO	DON'T KNOW	
		AVAILABLE ALL VALID	AVAILABLE AT LEAST ONE VALID	AVAILABLE BUT NONE VALID	REPORTED AVAILABLE, NOT SEEN	NOT AVAIL- ABLE TODAY / DON'T KNOW	NEVER AVAIL- ABLE				
01	Tetanus toxoid vaccines	1 → b	2 → b	3	4	5	6	1	2	9	
02	Iron/folic acid	1 → b	2 → b	3	4	5	6	1	2	9	
03	First line oral antimalarial for IPT	1 → b	2 → b	3	4	5	6	1	2	9	
04	Insecticide Treated Net (ITN)	1 → b	2 → b	3	4	5	6	1	2	9	
Opt 314A	CHILD IMMUNIZATIONS	AVAILABLE ALL VALID	AVAILABLE AT LEAST ONE VALID	AVAILABLE BUT NONE VALID	REPORTED AVAILABLE, NOT SEEN	NOT AVAIL- ABLE TODAY / DON'T KNOW	NEVER AVAIL- ABLE	YES	NO	DON'T KNOW	
01	BCG vaccine	1 → b	2 → b	3	4	5	6	1	2	9	
02	OPV (Polio) vaccine	1 → b	2 → b	3	4	5	6	1	2	9	
03	DPT or Pentavalent vaccine	1 → b	2 → b	3	4	5	6	1	2	9	
04	Measles or MMR vaccine	1 → b	2 → b	3	4	5	6	1	2	9	
Opt 314B	ASK TO SEE THE FOLLOWING GUIDELINES	OBSERVED AND IN PATIENT AREA		REPORTED, NOT SEEN	NOT AVAILABLE		DON'T KNOW				
01	Sick child care	1		2	3		9				
02	Immunization	1		2	3		9				
03	Delivery	1		2	3		9				
04	Antenatal Care	1		2	3		9				
05	Postnatal care for new mothers	1		2	3		9				
06	Newborn Care	1		2	3		9				
07	Other: P-MTCT	1		2	3		9				
Opt 314C	ITEMS FOR INFECTION CONTROL	OBSERVED		(a) AVAILABILITY REPORTED, NOT SEEN	NOT AVAILABLE		DON'T KNOW				
01	Chlorine-based disinfectant	1		2	3		9				
02	Latex gloves (clean or sterile)	1		2	3		9				
03	Sharps container	1		2	3		9				
04	At least one 5 ml syringe in sterile packet	1		2	3		9				
05	At least one 19 or 21 gauge needle in sterile packet (may be with syringe)	1		2	3		9				
06	Hand washing soap (bar or liquid)	1		2	3		9				

Opt 314D	Now I would like to ask you a few questions about the waste disposal practices for sharp items such as needles or blades, including filled sharps containers, and for infected waste, such as bandages and intravenous tubes. Can you please tell me what is the final disposal process for filled sharps boxes and for infected waste?			INCINERATOR - HIGH TEMPERATURE (2 CHAMBER) 1 INCINERATOR - ONE CHAMBER, DRUM OR BRICK 2 BURN AND BURY 3 BURY BUT NOT BURN 4 PUT IN COVERED PIT (MAY BE LATRINE) 5 BURN (IN GROUND OR PIT), BUT NOT BURY 6 OPEN TO AIR (NO BURN OR BURY) 7 STORE AND REMOVE OFFSITE (MAY BE BURNED PRIOR) 8 NEVER HAVE ITEMS 9		
Opt 314E	ASK TO SEE THE PLACE USED TO DISPOSE OF SHARPS AND INFECTIOUS WASTE. INDICATE IF THE SITE IS PROTECTED AND IF THERE IS EXPOSED WASTE OR NOT. "PROTECTED" IS DEFINED AS: INSIDE A LOCKED FENCE OR ROOM OR A PIT OR TRASH BIN WITH A LID (E.G., COVERED PIT LATRINE) SUCH THAT UNAUTHORIZED PERSONS CANNOT EASILY GAIN ACCESS			i. SHARPS 1 ii. INF. WASTE 1 YES, PROTECTED AND WASTE IS VISIBLE 2 YES, PROTECTED AND NO WASTE VISIBLE 3 NO, NOT PROTECTED AND WASTE VISIBLE 4 NO, NOT PROTECTED AND NO WASTE VISIBLE 5		
Malaria Opt 314F	ASK TO SEE THE RECORD SYSTEM FOR ORDERING AND ACCEPTING DELIVERY OF DRUGS AND SUPPLIES. IF YOU ARE NOT ABLE TO SEE THE RECORDS THEN ASK FOR THE FOLLOWING INFORMATION. REVIEW THE FIRST LINE ANTI-MALARIAL (ACT)					
01	Review the date of the most recent order of anti-malarial / ACT and tell me the date please.	DATE IS IN LAST 3 MO. (1)	DATE IS MORE THAN 3 MO. (2)	NO DATE (3)	DATE IS IN LAST 3 MO. (4)	DATE IS MORE THAN (5)
02	Review the quantity of the most recent delivery . Is this amount the same as the quantity ordered?	DELIVERY AGREES WITH ORDER (1)	DELIVERY DOES NOT AGREE WITH ORDER (2)	QUANTITY IN ORDER MISSING (3)	DELIVERY AGREES WITH ORDER (4)	DELIVERY DOES NOT AGREE WITH ORDER (5)
03	Does the Balance as recorded in the Records Agree with the quantity in the Stores/Pharmacy (CARRY OUT A HAND COUNT IF POSSIBLE OR ASK YOUR INFORMANT TO DO SO)	YES AGREE (1)	NO DOES NOT AGREE (2)		YES AGREE (4)	NO DOES NOT AGREE (5)
04	Have any of the First Line Anti-Malarials / ACT passed their expiration date?	YES (1)	NO (2)	NO DATE VISIBLE (3)	YES (4)	NO (5)
05	Does this Health Facility have a plan to dispose of expired Drugs? IF THE RESPONSE IS YES THEN ASK What is that plan?	YES APPROPRIATE PLAN EXISTS (1)	NO APPROPRIATE PLAN DOES NOT EXIST (2)	DID NOT KNOW (3)		
06	Please show me where or how expired drugs are destroyed?	APPROPRIATE PLAN IN USE (1)	NO APPROPRIATE PLAN IN USE (2)	COULD NOT OBSERVE (3)		
314G	REVIEW ENTRIES ABOUT ITN / LLIN					
01	Review the date of the most recent order of ITN / LLIN and tell me the date please.	DATE IS IN LAST 3 MO. (1)	OBSERVED DATE IS MORE THAN 3 MO. (2)	NO DATE (3)	DATE IS IN LAST 3 MO. (4)	NOT OBSERVED DATE IS MORE THAN (5)
02	Review the quantity of the most recent delivery . Is this amount the same as the quantity ordered?	DELIVERY AGREES WITH ORDER (1)	DELIVERY DOES NOT AGREE WITH ORDER (2)	QUANTITY IN ORDER MISSING (3)	DELIVERY AGREES WITH ORDER (4)	DELIVERY DOES NOT AGREE WITH ORDER (5)
03	Does the Balance as recorded in the Records Agree with the quantity in the Stores? (CARRY OUT A HAND COUNT IF POSSIBLE OR ASK YOUR INFORMANT TO DO SO)	YES AGREE (1)	NO DOES NOT AGREE (2)		YES AGREE (4)	NO DOES NOT AGREE (5)

NOTE ANY QUALITATIVE OBSERVATIONS HERE:

GO TO
→ 310

MODULE 4: HEALTH WORKER INTERVIEW & RECORD REVIEW

Facility Code:

Interviewer Code:

SPEAK TO THE MOST EXPERIENCED HEALTH WORKER INVOLVED IN MANAGEMENT OF CURATIVE CHILD HEALTH SERVICES.
IT IS BEST TO APPLY THIS FORM AFTER PATIENT SESSIONS HAVE FINISHED.
OBTAIN INFORMED CONSENT, IF YOU HAVE NOT ALREADY DONE SO.

NO.	QUESTIONS	CODING CLASSIFICATION	GO TO
401	For each of the following services, please tell me whether the service is offered by your facility, and if so, how many days per month the service is provided either <i>at the facility</i> or <i>as outreach services</i> . FOR THE PURPOSES OF THIS QUESTION, A MONTH IS EQUIVALENT TO FOUR WORK WEEKS.		
01	Consultation or curative services for sick children IF NONE, WRITE "00" IF ALL WEEKDAYS , WRITE "20" IF ALL DAYS including weekends , WRITE "30" IF ONE TIME PER WEEK, WRITE "4"	A. # OF DAYS PER MONTH IN FACILITY B. # DAYS PER MONTH IN OUTREACH LOCATIONS	
02	Routine immunizations for children IF NONE, WRITE "00" IF ALL WEEKDAYS , WRITE "20" IF ALL DAYS including weekends , WRITE "30" IF ONE TIME PER WEEK, WRITE "4"	A. # OF DAYS PER MONTH IN FACILITY B. # DAYS PER MONTH IN OUTREACH LOCATIONS	
03	Growth monitoring & promotion - where a healthy child is routinely weighed, has weight charted on growth chart, feeding advice given IF NONE, WRITE "00" IF ALL WEEKDAYS , WRITE "20" IF ALL DAYS including weekends , WRITE "30" IF ONE TIME PER WEEK, WRITE "4"	A. # OF DAYS PER MONTH IN FACILITY B. # DAYS PER MONTH IN OUTREACH LOCATIONS	
04	Antenatal care IF NONE, WRITE "00" IF ALL WEEKDAYS , WRITE "20" IF ALL DAYS including weekends , WRITE "30" IF ONE TIME PER WEEK, WRITE "4"	A. # OF DAYS PER MONTH IN FACILITY B. # DAYS PER MONTH IN OUTREACH LOCATIONS	
05	Normal delivery services IF NONE, WRITE "00" IF ALL WEEKDAYS , WRITE "20" IF ALL DAYS including weekends , WRITE "30" IF ONE TIME PER WEEK, WRITE "4"	A. # OF DAYS PER MONTH IN FACILITY B. # DAYS PER MONTH IN OUTREACH LOCATIONS	

NO.	QUESTIONS	CODING CLASSIFICATION		GO TO
402	Now I would like to ask you about the health personnel that work in this facility. I will read the type of health worker and for each one I would like you to tell me the number sanctioned by the Ministry of Health to work in this facility and the ones who are here today.			
	JOB OF HEALTH WORKER	A. # WORKERS SANCTIONED TO WORK IN THIS FACILITY (FULL OR PART-TIME)	B. # WORKERS WHO ARE PRESENT TODAY	
01	DOCTOR			
02	REGISTERED / CERTIFIED NURSE			
03	REGISTERED / CERTIFIED MIDWIFE			
04	OTHER CLINICAL CARE STAFF (CLINICAL OFFICER, ETC.)			
05	PHARMACIST			
06	LABORATORY TECHNICIAN			
07	ALL OTHER ASSIGNED STAFF (for instance, clerical staff, cleaning staff, etc.)			
403	During the past three years have you received any pre-service or in-service training on subjects related to maternal, child, or newborn health or illness?	YES	1	→ 405
		NO	2	

NO.	QUESTIONS	CODING CLASSIFICATION			GO TO
404	Did you receive the training in any topic related to the following topics that I will read? IF YES, THEN ASK: When was your most recent training? READ THE LIST	YES, IN PAST 12 MONTHS	YES, IN PAST 2-3 YEARS	NO TRAINING WITHIN PAST 3 YEARS	
01	Immunizations	1	2	3	
02	Treatment of pneumonia or Acute Respiratory Infections	1	2	3	
03	Diarrhea treatment	1	2	3	
04	Malaria treatment for children	1	2	3	
404b	IF YES ASK: Did this training include treatment with ACTs?	YES, in last 12 months (1)	YES, in last 2-3 years (2)	NO (3)	
05	Malaria prevention / Use of ITNs	1	2	3	
06	IPT for pregnant women	1	2	3	
07	Nutrition (for instance, complementary feeding, micronutrients)	1	2	3	
08	Breastfeeding	1	2	3	
09	Integrated Management of Childhood Illness (IMCI)	1	2	3	
10	Newborn care	1	2	3	
11	Postnatal care for new mothers	1	2	3	
12	Antenatal care topics (like STI control, nutrition in pregnancy)	1	2	3	
13	Infection prevention and control	1	2	3	
14	Active management of the third stage of labor (AMTSL)	1	2	3	
15	Referral protocols for obstetric and newborn emergencies	1	2	3	
405	Now I would like to ask you some questions about specifically speaking about supervision from a supervisor outside the facility. a. Do you receive technical support or supervision in your work? b. IF YES, ASK: When was the most recent time?	YES, IN THE PAST 3 MONTHS YES, IN THE PAST 4-6 MONTHS YES, IN THE PAST 7-12 MONTHS YES, MORE THAN 12 MONTHS AGO NO SUPERVISION	..... ..... ..... ..... .....	1 2 3 4 5	 → 407 → 407 → 407
406	The last time you were personally supervised, did your supervisor do any of the following? READ THE LIST:		YES	NO	DON'T KNOW
01	Deliver supplies	DELIVERED SUPPLIES	1	2	9
02	Check your records or reports	CHECKED RECORD	1	2	9
03	Observe your work	OBSERVED	1	2	9
04	Provide any feedback (either positive or negative) on your performance	GAVE FEEDBACK	1	2	9
05	Provide any comment that you were doing your work well	GAVE PRAISE	1	2	9
06	Provide updates on administrative or technical issues related to your work	GAVE UPDATES	1	2	9
07	Discuss problems you have encountered	DISCUSSED PROBLEMS	1	2	9
08	Checked drug supply	CHECKED DRUG SUPPLY	1	2	9

NO.	QUESTIONS	CODING CLASSIFICATION	GO TO
Opt 406A	Is there a mechanism that this health facility uses to elicit community participation?	YES 1 NO 2 DON'T KNOW 9	→ 406D → 406D
Opt 406B	Please tell me how the health facility elicits community participation. CIRCLE ALL THAT APPLY	COMMUNITY REPRESENTATIVE ON MANAGEMENT COMMITTEE A MEETINGS WITH CHWs AND/OR TBAs B PATIENT SATISFACTION SURVEYS C OTHER (SPECIFY): D	
Opt 406C	Can you please tell me if the facility uses the information it has gotten from community participation?	DISCUSS AT MANAGEMENT COMMITTEE MEETINGS A HEALTH WORKER REPORTS A CHANGE IN PRACTICE B OTHER USE OF INFORMATION C NO USE OF INFORMATION REPORTED / DON'T KNOW D	
Opt 406D	When was the last time that this health facility received a referral from a CHW?	IN LAST MONTH 1 1 - 3 MONTHS AGO 2 4 - 12 MONTHS AGO 3 OVER A YEAR AGO 4 NEVER 5	

NO.	QUESTIONS	CODING CLASSIFICATION	GO TO
	ASK THE HEALTH WORKER TO IDENTIFY PATIENT CONSULTATION REGISTER FOR THE HEALTH FACILITY. DO NOT INCLUDE INPATIENT RECORDS. USE THE REGISTER TO ANSWER THE QUESTIONS BELOW.		
407	Is there a sick child consultation register? IF YES, ASK TO SEE THE REGISTER	OBSERVED REGISTER 1 REPORTED, NOT SEEN 2 NO REGISTER 3	412ANC 412ANC
408	DOES THE REGISTER CONTAIN COMPLETE INFORMATION ON AGE, DIAGNOSIS, TREATMENT FOR EVERY CASE LISTED IN LAST 3 MONTHS? CIRCLE ALL THAT APPLY. FOR INSTANCE, FOR AN AGE TO BE COUNTED AS COMPLETE EVERY PATIENT MUST HAVE THEIR AGE WRITTEN. THE SAME APPLIES FOR DIAGNOSIS AND TREATMENT.	AGE INFORMATION COMPLETE A DIAGNOSIS OR SYMPTOM INFORMATION COMPLETE B TREATMENT INFORMATION COMPLETE C NONE OF ABOVE COMPLETE D	
409	HOW RECENT IS THE DATE OF THE MOST RECENT ENTRY?	WITHIN THE PAST 7 DAYS 1 MORE THAN 7 DAYS OLD 2	
410	RECORD THE NUMBER OF SICK CHILDREN BELOW 5 YEARS OF AGE (0 - 59 months age) WHO RECEIVED CONSULTATION SERVICES DURING THE PAST THREE COMPLETE CALENDAR MONTHS	NUMBER CHILDREN (0 - 59 months old) IF NONE, THEN WRITE "00" IN THE BOX	412ANC
	REVIEW ENTRIES IN THE SICK CHILD REGISTER (ONLY THE ENTRIES FOR CHILDREN U5 IF ADULT AND U5 REGISTERS COMBINED) NOTE ALL THE CASES OF FEVER/MALARIA, PNEUMONIA/FAST OR DIFFICULT BREATHING, AND DIARRHEA OR CASES WITH A COMBINATION OF DIAGNOSES THAT INCLUDE ANY OF THESE THREE. REVIEW ALL CASES FROM THE FIRST TO THE LAST DAY OF THE LAST COMPLETED CALENDAR MONTH		
411	REVIEW OF SICK CHILD REGISTER.....		
01	MALARIA OR FEVER	A1. NO. OF MALARIA CASES IN REGISTER OF CHILDREN U5 A2 NO. MALARIA CASES TREATED WITH 1ST LINE MALARIAL	
02	PNEUMONIA / RAPID OR DIFFICULT BREATHING	B1 NO. OF PNEUMONIA CASES IN REGISTER OF CHILDREN U5 B2 NO. PNEUMONIA CASES TREATED WITH 1ST LINE PNEUMONIA MED	
03	DIARRHEA WITHOUT BLOOD	C1. NO. OF DIARRHEA CASES IN REGISTER OF CHILDREN U5 C2 NO. DIARRHEA CASES TREATED WITH ORS & NO ANTIBIOTIC	

NO.	QUESTIONS	CODING CLASSIFICATION	GO TO																																				
412ANC	Is there an ANC consultation register?	OBSERVED REGISTER 1 REPORTED, NOT SEEN 2 → 416 NO REGISTER 3 → 416																																					
413ANC	DOES THE REGISTER CONTAIN COMPLETE INFORMATION ON DATE OF DELIVERY/CONFINEMENT, TT, AND BLOOD PRESSURE FOR PREGNANT WOMEN LISTED IN THE LAST 3 MONTHS? CIRCLE ALL THAT APPLY TO BE COUNTED AS COMPLETE, THERE CAN BE NO BLANKS FOR THAT COLUMN	DATE OF DELIVERY INFORMATION COMPLETE A TT INFORMATION COMPLETE OR HAS LIFE TIME IMMUNITY B BLOOD PRESSURE INFORMATION COMPLETE C NONE OF ABOVE COMPLETE D																																					
414ANC	HOW RECENT IS THE DATE OF THE MOST RECENT ENTRY?	WITHIN THE PAST 7 DAYS 1 MORE THAN 7 DAYS OLD 2																																					
415ANC	RECORD THE NUMBER OF PREGNANT WOMEN WHO RECEIVED CONSULTATION SERVICES DURING THE PAST THREE COMPLETE CALENDAR MONTHS	NUMBER IF NONE, THEN WRITE "00" IN THE BOX																																					
415NEO	Is there a delivery register?	OBSERVED REGISTER 1 REPORTED, NOT SEEN 2 → 416 NO REGISTER 3 → 416																																					
415.1NEO	HOW RECENT IS THE DATE OF THE MOST RECENT ENTRY?	WITHIN THE PAST 30 DAYS 1 MORE THAN 30 DAYS OLD 2																																					
415.2NEO	RECORD THE NUMBER OF DELIVERIES PERFORMED DURING THE PAST THREE COMPLETE CALENDAR MONTHS	NUMBER IF NONE, THEN WRITE "00" IN THE BOX																																					
416	Can you please show me a copy of the latest monthly service report that you sent to the District Health Office? EXAMINE THE REPORT	LATEST REPORT SEEN AND LESS THAN 3 MONTHS OLD 1 LATEST REPORT SEEN AND OLDER THAN 3 MONTHS OLD 2 REPORT SAID TO BE LESS THAN 3 MONTHS, NOT OBSERVED 3 REPORT SAID TO BE MORE THAN 3 MONTHS, NOT OBSERVED 4 NO REPORT 5																																					
417	LOOK FOR EVIDENCE OF USE OF SERVICE DATA Can you tell me if you have a wall chart or graphs or have had a meeting among the health facility staff to discuss the monthly service report (MSR) data within the last 3 months? CIRCLE ALL THAT APPLY	WALL CHART SUMMARIZING MSR DATA A GRAPH SUMMARIZING MSR DATA B MEETING TO DISCUSS MSR DATA IN IN LAST 3 MO. C OTHER: SPECIFY D NONE OF THE ABOVE E																																					
417A optional	ASK TO SEE THE IMMUNIZATION REGISTER. RECORD THE NUMBER OF CHILDREN IMMUNIZED IN THE LAST THREE MONTHS IF NONE, WRITE "00"	NUMBER DON'T KNOW 999																																					
417B optional	ASK TO SEE THE GROWTH MONITORING REGISTER RECORD THE NUMBER OF CHILDREN SEEN FOR GROWTH MONITORING IN THE LAST 3 MONTHS IF NONE, WRITE "00"	NUMBER DON'T KNOW 999																																					
417C optional	For each of the following diagnostic tests, please tell me if this facility can conduct the test and has all items so it can be done today, or if the facility has a system for having the test conducted elsewhere but getting results returned for follow up by this facility. DIAGNOSTIC TEST	<table border="1"> <thead> <tr> <th></th><th>YES, CAN BE CONDUCTED ONSITE TODAY</th><th>YES, OBSERVED SYSTEM FOR TEST OUTSIDE</th><th>TEST NOT AVAIL- ABLE</th></tr> </thead> <tbody> <tr><td>01 Complete blood count</td><td>1</td><td>2</td><td>3</td></tr> <tr><td>02 Anemia (hemoglobin/hematocrit, or litmus paper)</td><td>1</td><td>2</td><td>3</td></tr> <tr><td>03 Malaria (rapid test or microscopy)</td><td>1</td><td>2</td><td>3</td></tr> <tr><td>04 Urine glucose (dipstick or benedicts test)</td><td>1</td><td>2</td><td>3</td></tr> <tr><td>05 Urine protein (dipstick or acetic acid)</td><td>1</td><td>2</td><td>3</td></tr> <tr><td>06 HIV (rapid, ELISA, or Western Blott)</td><td>1</td><td>2</td><td>3</td></tr> <tr><td>07 AFB for TB</td><td>1</td><td>2</td><td>3</td></tr> <tr><td>08 Syphilis (VDRL or RPR)</td><td>1</td><td>2</td><td>3</td></tr> </tbody> </table>		YES, CAN BE CONDUCTED ONSITE TODAY	YES, OBSERVED SYSTEM FOR TEST OUTSIDE	TEST NOT AVAIL- ABLE	01 Complete blood count	1	2	3	02 Anemia (hemoglobin/hematocrit, or litmus paper)	1	2	3	03 Malaria (rapid test or microscopy)	1	2	3	04 Urine glucose (dipstick or benedicts test)	1	2	3	05 Urine protein (dipstick or acetic acid)	1	2	3	06 HIV (rapid, ELISA, or Western Blott)	1	2	3	07 AFB for TB	1	2	3	08 Syphilis (VDRL or RPR)	1	2	3	
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NOTE ANY QUALITATIVE OBSERVATIONS HERE:

MODULE 5: COMMUNITY HEALTH WORKER FORM (INTERVIEW, RECORD REVIEW, AND CHECKLIST)

 CHW Code:

 Interviewer Code:

Start Time: _____

OBTAIN INFORMED CONSENT

NO.	QUESTIONS	CODING CLASSIFICATION			GO TO
501	What services do you provide for children? READ THE LIST CIRCLE ALL THAT APPLY	HEALTH EDUCATION	A		
		GROWTH MONITORING	B		
		VACCINATION OR MOBILIZATION FOR VACCINATION	C		
		REFERRAL OF SICK CHILDREN	D		
		TREAT DIARRHEA	E		
		TREAT PNEUMONIA	F		
		TREAT MALARIA	G		
		PROVIDE OR SELL ITNs	H		
		OTHER (SPECIFY) _____	I		
502	During the past three years have you received any pre-service or in-service training on subjects related to child health or illness?	YES	1		
		NO	2		→ 504
503	I will read a list of training topics in child health. For each topic I would like you to tell me if you have received any training in that topic. IF YES, ASK: When was the most recent training?	YES, IN PAST 1 YEAR	YES, IN PAST 2-3 YEARS	NO TRAINING WITHIN PAST 3 YEARS	
01	Immunizations	1	2	3	
02	Treatment of pneumonia or Acute Respiratory Infections	1	2	3	
03	Diarrhea treatment	1	2	3	
04	Malaria treatment	1	2	3	
04b	IF YES ASK: Did this training include treatment with ACTs?	YES, in last 12 months (1)	YES, in last 2-3 years (2)	NO (3)	
05	Malaria prevention / Use ITNs	1	2	3	
06	IPT for pregnant women	1	2	3	
07	Nutrition (for instance, complementary feeding, micronutrients)	1	2	3	
08	Breastfeeding	1	2	3	
09	Community Integrated Management of Childhood Illness (C-IMCI)	1	2	3	
10	Newborn care	1	2	3	
11	Postnatal care for the mother	1	2	3	
12	Antenatal case	1	2	3	
504	Now I would like to ask you some questions about supervision you have personally received. Have you received any technical support or supervision in your work? IF YES, ASK: When was the most recent time?	YES, IN THE PAST 3 MONTHS	1		
		YES, IN THE PAST 4-6 MONTHS	2		
		YES, IN THE PAST 7-12 MONTHS	3		→ 507
		YES, MORE THAN 12 MONTHS AGO	4		→ 507
		NO SUPERVISION	5		→ 507
505	The last time you were personally supervised, did your supervisor do any of the following?	YES	NO	DON'T KNOW	
01	Deliver supplies	DELIVERED SUPPLIES 1	2	9	
02	Check your records or reports	CHECKED RECORDS 1	2	9	
03	Observe your work	OBSERVED WORK 1	2	9	
04	Provide any feedback (either positive or negative) on your performance	FEEDBACK 1	2	9	
05	Provide any comments that you were doing your work well	GAVE PRAISE 1	2	9	
06	Provide updates on administrative or technical issues related to your work	GAVE UPDATES 1	2	9	
07	Discuss problems you have encountered	DISCUSSED PROBLEMS 1	2	9	

ASK THE CHW TO SHOW YOU THEIR PATIENT REGISTER OR BOOK. USE THE INFORMATION IN THE REGISTER OR BOOK TO ANSWER THE QUESTIONS BELOW.																																																								
506	Do you treat sick children, under 5 years old?	TREAT SICK CHILDREN 1 DO NOT TREAT SICK CHILDREN 2																																																						
507	Is there a patient register or book that has information on children under 5? IF YES, ASK TO SEE THE REGISTER.	OBSERVED REGISTER 1 YES, REPORTED, NOT SEEN 2 NO REGISTER 3																																																						
508	DOES THE REGISTER OR BOOK HAVE A PLACE TO INDICATE AGE, CLASSIFICATION, AND/OR THE TREATMENT FOR THE CHILDREN SEEN? CIRCLE ALL THAT APPLY	AGE INCLUDED A DIAGNOSIS OR CLASSIFICATION INCLUDED B TREATMENT INCLUDED C NONE OF ABOVE INCLUDED D																																																						
509	DOES THE REGISTER CONTAIN COMPLETE INFORMATION ON AGE, DIAGNOSIS, AND/OR TREATMENT? TO BE COMPLETE, THERE CANNOT BE ANY BLANKS FOR ENTRIES IN THE PAST 3 MONTHS. CIRCLE ALL THAT APPLY	AGE COMPLETE A DIAGNOSIS OR MAJOR SYMPTOM COMPLETE B TREATMENT COMPLETE C NONE OF ABOVE INCLUDED D																																																						
510	HOW RECENT IS THE DATE OF THE MOST RECENT ENTRY IN THE REGISTER?	WITHIN THE PAST 30 DAYS 1 MORE THAN 30 DAYS OLD 2																																																						
511	RECORD THE NUMBER OF SICK CHILDREN, BELOW 5 YEARS OF AGE, WHO RECEIVED CONSULTATION SERVICES DURING THE PAST 3 COMPLETE CALENDAR MONTHS	NUMBER IF NO CASES, WRITE "00" in BOX AND SKIP TO Q. 514																																																						
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513	ITEMS FOR SICK CHILD CONSULTATIONS	<table border="1"> <thead> <tr> <th rowspan="2"></th> <th rowspan="2">OBSERVED</th> <th colspan="2">(a) AVAILABILITY</th> <th rowspan="2">NOT AVAILABLE</th> <th rowspan="2">DON'T KNOW</th> <th colspan="3">(b) FUNCTIONING</th> </tr> <tr> <th>REPORTED, NOT SEEN</th> <th>NOT SEEN</th> <th>YES</th> <th>NO</th> <th>DON'T KNOW</th> </tr> </thead> <tbody> <tr> <td>01 Timer for counting breaths or CHW has watch with second hand</td> <td>1 → b</td> <td>2 → b</td> <td>3</td> <td>9</td> <td>1</td> <td>2</td> <td>9</td> </tr> <tr> <td>02 CHW Training Manual</td> <td>1</td> <td>2</td> <td>3</td> <td>9</td> <td colspan="3"></td> </tr> </tbody> </table>		OBSERVED	(a) AVAILABILITY		NOT AVAILABLE	DON'T KNOW	(b) FUNCTIONING			REPORTED, NOT SEEN	NOT SEEN	YES	NO	DON'T KNOW	01 Timer for counting breaths or CHW has watch with second hand	1 → b	2 → b	3	9	1	2	9	02 CHW Training Manual	1	2	3	9																											
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ASK TO SEE THE FOLLOWING DRUGS AND TREATMENTS. FOR EACH ITEM, CIRCLE THE APPROPRIATE CODE.																																																								
514	CHILD DRUGS AND TREATMENTS	<table border="1"> <thead> <tr> <th rowspan="3"></th> <th colspan="6">(a) AVAILABILITY OF MEDICINES</th> </tr> <tr> <th colspan="3">OBSERVED AVAILABLE</th> <th colspan="3">NOT OBSERVED</th> </tr> <tr> <th>ALL VALID</th> <th>AT LEAST ONE VALID</th> <th>AVAILABLE BUT NONE VALID</th> <th>REPORTED AVAILABLE, NOT SEEN</th> <th>NOT AVAIL-ABLE TODAY / DON'T KNOW</th> <th>NEVER AVAILABLE</th> </tr> </thead> <tbody> <tr> <td>01 ORS packets</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> </tr> <tr> <td>02 First line antibiotic for pneumonia</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> </tr> <tr> <td>03 First line anti-malarial</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> </tr> <tr> <td>04 Other medicine _____</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> </tr> <tr> <td>05 Other medicine _____</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> </tr> </tbody> </table>		(a) AVAILABILITY OF MEDICINES						OBSERVED AVAILABLE			NOT OBSERVED			ALL VALID	AT LEAST ONE VALID	AVAILABLE BUT NONE VALID	REPORTED AVAILABLE, NOT SEEN	NOT AVAIL-ABLE TODAY / DON'T KNOW	NEVER AVAILABLE	01 ORS packets	1	2	3	4	5	6	02 First line antibiotic for pneumonia	1	2	3	4	5	6	03 First line anti-malarial	1	2	3	4	5	6	04 Other medicine _____	1	2	3	4	5	6	05 Other medicine _____	1	2	3	4	5	6
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NOTE ANY QUALITATIVE OBSERVATIONS HERE:

End Time: _____

CORE INDICATOR DEFINITIONS - RAPID HEALTH FACILITY ASSESSMENT						
INDICATORS WITH AN ASTERISK (*) ARE STANDARD INTERNATIONAL HEALTH FACILITY ASSESSMENT NETWORK (IHFN) INDICATORS						
Area of Analysis	Indic. #	Domain	Indicator	Instrument	Denominator	Reference
ACCESS	OVERALL	Geographic Access to Curative Services	% population with year-round geographic access (within 5 km. or one hour) to an authorized provider of curative child health services	DHO Interview	Target population	JHU Pneumonia Care Assessment Tool (JHU tool outlines procedure for pneumonia care, but this procedure has been generalized to any curative child care)
	1 CHILD	Service Availability Child*	% HF that offer three basic child health services (growth monitoring, immunization, sick child care)	HW Interview	All HF	IHFAN Services Offered Indicator for child services only / Component of SPA Indicator 2.1
	1 ANC	Service Availability ANC*	% HF that offer four basic antenatal care services (malaria treatment (IPT), tetanus toxoid (TT), and testing for anemia and syphilis)	HW Interview	All HF	
INPUTS	2	Staffing*	% HF with all clinical staff present in surveyed HF on the day of the survey	HW Interview	All HF	IHFAN Staffing Indicator
	3	Infrastructure*	% HF with all essential infrastructure on day of the survey (power, improved water source, functional latrine for clients, communication equipment, emergency transport, overnight beds, setting allowing auditory and visual privacy)	HF Checklist	All HF	IHFAN Infrastructure Indicator
	4 CHILD	Supplies Child*	% HF with all 5 essential supplies to support child health in HF on day of the survey (accessible and working scale for child, accessible and working scale for infant, timing device for diagnosis of pneumonia, spoon/cup/jug to administer ORS, ITNs)	HF Checklist	All HF	IHFAN Supplies Indicator - only for child health supplies
	4 NEO	Supplies Newborn*	% HF All 4 essential supplies to support newborn health in HF on day of the survey (resuscitation device, weighing scale, antibiotics and baby wraps)	HF Checklist	All HF	
	4 ANC	Supplies ANC*	% HF with all 7 essential supplies to support antenatal care in HF on day of the survey (blood pressure machine, tetanus toxoid vaccine, hemoglobin reagents, syphilis testing kit, and albustix for protein)	HF Checklist	All HF	
	5 CHILD	Drugs Child*	% HF with all 5 first line medications for child health on day of the survey (ORS, oral antibiotic for pneumonia, first line oral antibiotic for dysentery, first line anti-malarial, vitamin A)	HF Checklist	All HF	IHFAN Treatments Indicator - only for treatments specific to health area
	5 NEO	Drugs Newborn*	% HF with the first line medication for newborn sepsis on day of the survey	HF Checklist	All HF	
	5 ANC	Drugs ANC*	% HF with all 3 essential ANC medications on day of survey (iron, folic acid, antimalarial for IPT)	HF Checklist	All HF	

PROCESSES	6 CHILD	Information System (Child and Newborn)*	% HF that maintain up-to-date records of sick U5 children (age, diagnosis, treatment) and have report in last 3 months and evidence of data use	HW Interview (record review)	All HF	IHFAN Health Service Statistics Indicator
	6 ANC	Information System (ANC)*	% HF that maintain up-to-date records of antenatal care (TT, iron/folate, expected date of delivery)	HW Interview (record review)	All HF	
	7 CHILD	Training in Child Health	% HF in which interviewed HW reported receiving in-service or pre-service training in maternal, child or neonatal health in last 12 months	HW interview	All HF	Component of SPA Indicator 1.4
	7 NEO	Training in Maternal Neonatal Care	% HF in which interviewed HW reported receiving in-service or pre-service training in child health in last 12 months	HW Interview	All HF	
	8	Supervision	% HF that received external supervision at least once in the last 3 months (supervision included one or more of the following: checked records or reports, observed work, provided feedback, gave praise, provided updates, discussed problems, OR checked drug supply))	HW interview	All HF	Component of SPA Indicator 1.4
PERFORMANCE	9 CHILD	Utilization of Curative Services	% HF with ≥ 1.0 sick child visits in the last 12 month per U5 children in catchment area	HW interview (record review)	Number of U5 children in HF catchment area	Based on WHO standard Utilization indicator
	9 ANC	Utilization of ANC Services	% HF with ≥ 2.0 ANC visits per estimated number of births in catchment area in last 12 months	HW Interview (record review)	Number of births in HF catchment area	
	10 CHILD	HW Performance (Assessment)	% HF in which all 5 key assessment tasks are made by HW (check presence of general danger signs, assess feeding practices, assess nutritional status, check vaccination status) (benchmark 5 of 6 clinical observations)	Clinical Observation	All HF	Several Components of SPA Indicator 2.5
	11 CHILD	HW Performance (Treatment of Sick Child)	% HF in which treatment is appropriate to diagnosis for child with malaria, pneumonia, or diarrhea (benchmark: 5 of the 6 clinical observations)	Clinical Observation	All HF	WHO HFS Core Indicator #7
	12 CHILD	HW Performance (Counseling for Sick Child)	% HF in which the caretaker whose child was prescribed an antibiotic, antimalarial, or ORS, can correctly describe how to administer all drugs (benchmark: 5 of the 6 caretakers interviewed)	Exit interview - child	All HF	WHO HFS Core Indicator #11

OPTIONAL INDICATOR DEFINITIONS - RAPID HEALTH FACILITY ASSESSMENT

Area of Analysis	Indic. #	Domain	Indicator	Instrument	Denominator	Reference
INPUTS	Opt2	Availability of Immunizations	% HF with all nationally-mandated vaccines in stock on day of survey	HF Checklist	All HF	WHO HFS / BASICS IHFA
	Opt3	Availability of Guidelines	% HF with all nationally-mandated guidelines for care of children available and accessible on day of survey	HF Checklist	All HF	IHFAN Indicator #4
	Opt4	Infection Control	% HF with all infection control supplies and equipment available on day of survey	HF checklist	All HF	IHFAN Indicator #2
PROCESSES	Opt5	HF-Community Coordination	% HF that have routine community participation in management meetings (with evidence through notes) OR have a system for eliciting client opinion and evidence that client feedback is	HW interview (record review)	All HF	Component of SPA Indicator 1.5
	Opt6	Community Referral	% HF that received at least one referral from CHW in the last month	HW interview (record review)	All HF	...
	Opt7	Malaria - ACT Logistics	% HF with adequate logistics compliance for ACTs	HF Checklist	All HF	World Bank Malaria Booster Initiative
	Opt8	Malaria - ITN/LLIN Logistics	% HF with adequate logistics compliance for ITNs/LLINs	HF Checklist	All HF	World Bank Malaria Booster Initiative
	Opt9	Laboratory Facilities	% HF with adequate laboratory facilities on site or able to send out	HW interview	All HF	IHFAN Indicator #7
PERFORMANCE	Opt10	Utilization of Child Preventive Services	# annualized encounters for children per U5 population in HF catchment area: a. for vaccination b. for growth monitoring and promotion	HW interview (record review)	All HF	...

TABULATION PLAN - CORE INDICATORS						
Area of Analysis	Indic. #	Domain	Indicator	Data Element(s) for Numerator	Data Element(s) for Denominator	Notes
ACCESS	OVERALL	Geographic Access	% population with year-round geographic access (within 5 km. or one hour) to an authorized provider of curative child health services	Sum of populations of villages/neighborhoods that have year-round access to curative child health services (DHO Form, sum of column J figures where column K = YES)	Total population in project area (DHO form - sum of all column J figures)	
	1 CHILD	Service Availability*	% HF that offer ALL three basic child health services (growth monitoring, immunization, sick child care)	# HF with 3 basic child health services (Q.401/ 01A+B ≥ 30 AND Q.401/02A+B ≥ 4 AND Q.401/03A+B ≥ 4)	# HF surveyed	
	1 ANC	Service Availability ANC*	% HF that offer ANC	# HF with ANC at least 4 days per month (Q401 04 ≥ 4)	# HF surveyed	
INPUTS	2	Staffing*	% staff in HF who provide clinical services were working (either in HF or in outreach activities) on the day of the survey	# clinical care staff present on day of survey (Q.402A, boxes 01+02+03+04)	# sanctioned staff working in HFsurveyed (Q.402B, boxes 01+02+03+04)	this is the index value form of this indicator
	3	Infrastructure*	% essential infrastructure in HF on day of the survey (power; improved water source; functional latrine for clients; communication equipment; emergency transport; overnight beds; setting allowing auditory and visual privacy)	# Overnight beds (Q.301=1 AND 302=1); Communication (Q.303=1,2,or 3); Transport (Q.304=1 or 2); Electricity (Q.305 = 1 OR Q.306 = 1 or 3); Usable latrine (Q.307 = 1 AND Q.308 = 1,2,3, or 4 AND 309 = 1); Water from improved source (Q.310 =1 AND 311 = 1,2,3,4,5, or 6); Auditory and visual privacy (Q.312 = 1)	# HF surveyed x 7 infrastructure items	this is the index value form of this indicator
	4 CHILD	Supplies*	% essential supplies to support child health in HF on day of the survey (accessible and working scale for child, accessible and working scale for infant, timing device for diagnosis of pneumonia, spoon/cup/jug to administer ORS)	# essential supplies available in surveyed HF (Items 02-07 for which Q.313a = 1 or 2); items 02 - 05 are also functioning (Q.313b = 1 for all items 02 - 05)	# HF surveyed	this is the index value form of this indicator
	4 NEO	Supplies Neonatal	% of 4 essential supplies to support newborn health in HF/CHW on day of the survey (resuscitation device, weighing scale, antibiotics and baby wraps)	# essential neonatal supplies available in surveyed HF (Items 01-04 for which Q.313NEOa = 1 or 2); items 01 - 03 are also functioning (Q.313NEOb = 1 for all items 01 - 03)	# HF surveyed x 4 essential items	this is the index value form of this indicator
	4 ANC	Supplies ANC	% of 5 essential supplies to support antenatal care in HF on day of the survey (blood pressure machine, tetanus toxoid vaccine, hemoglobin reagents, syphilis testing kit, and albastix for protein)	# essential ANC supplies in HF on day of survey (Item 01-07 for which Q.313ANCa = 1 or 2; items 1 and 2 are also functioning (Q.313ANCb = 1 for items 01 and 02)	# HF surveyed x 7 essential items	this is the index value form of this indicator
	5 CHILD	Drugs*	% of first line medications for child health in HF on day of the survey (ORS, oral antibiotic for pneumonia, first line oral antibiotic for dysentery, first line antimalarial, vitamin A)	# first line child drugs available and at least one valid (not expired)in HF on day of survey (Q.314, 01 - 05 all = 1 or 2)	# HF surveyed x 5 essential drugs	this is the index value form of this indicator
	5 NEO	Drugs Neonatal	% of first line medications in HF on day of survey (for newborn sepsis and eye infections)	# of first line medications for newborns on day of the survey (Q.314NEO 01 and 02 = 1 or 2)	# HF surveyed x 2 essential drugs	this is the index value form of this indicator
	5 ANC	Drugs ANC	% of 3 essential ANC medications in surveyed HF on day of survey (iron, folic acid, antimalarial for IPT)	# of first line ANC medications in facility of day of survey (Q.314ANC 01 - 04 = 1 or 2)	# HF surveyed x 3 essential drugs	this is the index value form of this indicator
PROCESSES	6 CHILD	Information System*	% HF that maintain up-to-date records of sick US children (age, diagnosis, treatment) and for HF: have report in last 3 months and evidence of data use	# HF in which all 3 data elements (age, diagnosis, treatment) are all complete in sick child register (Q.409 = A,B,C all circled) AND in which last entry is within last 7 days (Q.410 = 1) AND report written in last 3 months (Q.411 = 1 or 3) AND there is evidence of data use (Q.412 = A, B, or C)	# HF surveyed	
	6 ANC	Information System ANC	% HF that maintain up-to-date records of antenatal care (TT, blood pressure, expected date of delivery)	# HF in which all 3 data elements (TT status, Iron/folate, EDD) are all complete in ANC register (Q.411 = A,B,C all circled) AND in which last entry is within last 7 days (Q.410 = 1)	# HF surveyed	
	7 CHILD	Training in Child Health	% HF in which interviewed HW reported receiving in-service or pre-service training in child health in last 12 months	# HF in which interviewed HW received training in at least one child health topic in last 12 months (Q.404, 01 - 09 at least one response = 1)	# HF surveyed	SPA indicator is "at least 50% HW trained in...." but in order to make this more feasible, this instrument only asks about the interviewee.
	7 NEO	Training in Maternal-Neonatal Care	% HF in which interviewed HW reported receiving in-service or pre-service training in maternal neonatal care in last 12 months	# HF in which interviewed HW received training in at least one child health topic in last 12 months (Q.404, 10 - 12 at least one response = 1)	# HF surveyed	SPA indicator is "at least 50% HW trained in...." but in order to make this more feasible, this instrument only asks about the interviewee.
	8	Supervision	% HF that received external supervision at least once in the last 3 months (supervision included one or more of the following: checked records or reports, observed work, provided feedback, gave praise, provided updates, discussed problems))	# HF receiving supervision in last 6 months that included more than just delivering supplies (Q.406 = 1 and Q.407, 02 - 08, at least one response = 1)	# HF surveyed	

TABULATION PLAN - CORE INDICATORS (continued)						
Area of Analysis	Indic. #	Domain	Indicator	Data Element(s) for Numerator	Data Element(s) for Denominator	Notes
PERFORMANCE	9 CHILD	Utilization of Curative Services	Annualized rate of clinical encounters for sick children per U5 population	# clinical encounters with sick children under 5 in last three complete calendar months (Q.413 x 4)	# children in catchment area (Q.400B or form DHO or from Census data)	1. Can get this data from routine HIS, but this is here as a validation check. 2. "Sick children" is chosen to give comparable data across different projects and health systems; however, the project may want to collect data on utilization of other types of services as well (e.g., growth monitoring, vaccination). These are included as optional.
	9 ANC	Utilization of ANC Services	% HF with ≥ 2.0 ANC visits per estimated number of births in catchment area in last 12 months	# ANC visits in last three complete calendar months (Q.413ANC) x 4	# annual births estimated for catchment area (apply national birth rate to catchment area population (DHO Form total popn.))	
	10 CHILD	HW Performance (Assessment)	% of four key assessment tasks are made by HW (check presence of general danger signs, assess feeding practices, assess nutritional status, check vaccination status)	# key assessment tasks complete (Number of answers = "Y" for Q.103A,B,C AND Q.104A,B,C)	# sick child clinical encounters observed in all HF x 4 assessment tasks	this is the index value form of this indicator
	11 CHILD	HW Performance (Treatment)	% HF clinical encounters in which treatment is appropriate to diagnosis (for encounters in which at least one of the presenting problems was fever, breathing problem, or diarrhea) (from record review for CHW / from Clinical Obs. for HF)	# sick child clinical encounters in which treatment was correct (Supervisor recode - Indicator #11 = 1 on Clinical Obs. Form)	HF: # sick child clinical encounters observed in all HF	
	12 CHILD	HW Performance (Counseling)	% HF clinical encounters in which the caretaker whose child was prescribed an antibiotic, antimalarial, or ORS, can correctly describe how to administer all prescribed drugs	# clinical encounters in which antibiotic, antimalarial, or ORS prescribed in which caretaker correctly describes the dose, frequency and duration of medication administration for ALL prescribed medications (Supervisor Recode Indicator #12 = Y on Exit Interview Form)	# sick child clinical encounters observed in which antibiotic, antimalarial, or ORS prescribed (Q.201 = 1)	
TABULATION PLAN - OPTIONAL INDICATORS						
Area of Analysis	Indic. #	Domain	Indicator	Numerator	Denominator	Notes
INPUTS	Opt1	Availability of Immunizations	% HF with all nationally-mandated vaccines in stock on day of survey	# HF with all nationally-mandated vaccines on day of survey (Q.314A, 01 - 04 all = 1 or 2)	# HF surveyed	
	Opt2	Availability of Guidelines	% HF with all nationally-mandated guidelines for care of children available and accessible on day of survey	# HF with all nationally-mandated guidelines on day of survey (Q.314B, 01 - 05 all = 1)	# HF surveyed	
	Opt3	Infection Control	% HF with all infection control supplies and equipment on day of survey	# HF with all infection control supplies and equipment on day of survey, including all supplies available (Q.314c, all items 01 - 06 = 1 or 2) AND waste disposal for sharps and infectious waste is adequate (Q.314D-i = 1-6 AND Q.314D-ii = 1-6 AND 314E-i = 1 or 2 AND 314E-ii = 1 or 2)	# HF surveyed	
PROCESSES	Opt4	HF-Community Coordination	% HF with routine community participation in management meetings (with evidence through notes) OR have a system for eliciting client opinion, and evidence that client feedback is reviewed	# HF that have routine community participation (Q.407B = A, B, or C) AND evidence that feedback is reviewed (Q.407C = A or B)	# HF surveyed	
	Opt5	Community Referral	% HF that received at least one referral from CHW in the last month	# HF receiving at least one referral from a CHW in the last month (Q.407F = 1)	# HF surveyed	
	Opt6	ACT Logistics	% HF with adequate logistics compliance for ACTs	# HF that have ordered ACTs in last 3 months, stock card agrees with hand count of ACTs; no ACTs have passed expiry date; and have appropriate plan for ACT disposal (Q.314F 01-06 all = 1)	# HF surveyed	
	Opt7	ITN/LLIN Logistics	% HF with adequate logistics compliance for ITNs/LLINs	# HF with ITN/LLIN order in the last 3 months; delivery agrees with order; count agrees with order (Q.314G 01-03 all = 1)	# HF surveyed	
	Opt8	Laboratory	% HF with adequate basic laboratory facilities on site or ability to send out	# HF with supplies to do eight basic laboratory tests or to send out (CBC, H/H, malaria RDT, urine glucose, urine protein, HIV rapid test, AFB stain, syphilis testing) (Q.417C 01-08 all = 1 or 2)	# HF surveyed	IHFAN laboratory indicator
PERFORMANCE	Opt9	Utilization of Preventive Services	Annualized rate of encounter for children for immunization / growth monitoring per U5 population in project area	# encounters with children for immunization / growth monitoring in last 3 complete months (for immunization: Q.414A, sum answers for all HF / for growth monitoring: Q.414B, sum of answers for all HF) x 4	# U5 children in project area	

ANNEX XI. SOURCES OF INFORMATION

Documents reviewed

1. SUSOMA Detailed Implementation Plan (DIP) and annexes, including PRA
2. SUSOMA First, Second and Fourth Annual Reports including LQAS
3. SUSOMA Midterm Evaluation Report and annexes
4. SUSOMA Baseline and endline RHFA
5. SUSOMA OR study proposal, social capital measurement report, annual report updates
6. SUSOMA KPC baseline, midline, and endline reports
7. SUSOMA RHFA baseline and endline reports
8. SUSOMA index computation for CSSA dashboard # 2, 3, 5, 7
9. SUSOMA M&E cumulative, MOHFW HMIS cumulative data
10. Project Implementation Team monthly reports.
11. LAMB and Joyramkura Training Reports
12. SUSOMA MCHIP Newsletters with SUSOMA stories. Compiled by Mitra Bardhan Paul, Training Coordinator, SUSOMA
13. SUSOMA Story Directory: A collection of success stories. Written by Mitra Bardhan, Paul, Training Coordinator, SUSOMA, Edited by Sukumar Ghagra, Project Manager, SUSOMA.
14. CORE Group (2009). Community-based Integrated Management of Childhood Illness Policy Guidance.
15. WHO (2014). WHO recommendation on community mobilization through facilitated participatory learning and action cycles for maternal newborn health.
16. Story, W.T. (2014). Social capital and maternal and child health in low- and middle-income countries: Evidence from India. CORE Group Webinar, June 30, 2014.
17. USAID (2011). USAID Evaluation Policy: Evaluation-Learning from Experience.
18. Mridha, M.K., Anwar, I., & Koblinsky, M. (2009). Public-sector maternal health programmes and services in rural Bangladesh. Journal of Health and Population Nutrition, 27(2), 124-136.
19. WHO (2014). Success factors for women's and children's health: Brief update on Bangladesh multi-stakeholder review.
20. SUSOMA publications and presentations listed in Annex II.

Individual and Group Stakeholder Interviews (n=459 persons) and Sites Visited during Final Evaluation Field Visits

Stakeholder Interview Schedule for Team A (Kendua: 17 interviews, 218 persons)

Date	Site	Person/Group Interviewed	#
5 August 14	Mujafforpur (Shalpa Durga)	Doel Primary Group (Female)	21
	Muzafforpur (Amlipara) Muzafforpur CC	Samorthan Health group (Male) CC Management Committee group	17 9
	Muzafforpur Union Parisad	Md. Azizul Islam, UP Chairman	1
	Kandhiura Union Parishad	Kandhiura CCC group	36

	Shandhikona Gonda , FWC	Madhumathi Primary Group (female group formed by PI rep.) SACMO & FWV	20 2
	Kendua Upazila Health Complex	Dr, Abdul Kaddush, UH& FPO	1
	Kendua Upazila Health Complex	Mr, Abdus Salam, HI In Charge, Mr, Kamal Hossain, UFPO	2
	Social welfare Office, Kendua	Ms, Mirza Nijuara, USSO,	1
7 August 14			
	Dolpa	Influencing group (Husband and mother-in-law)	19
	Asuzia Union Parisad	17 CHVs & 15 TTBA group	32
	SATHI SUSOMA Office	CHT Staff group	23
	PI office, Kendua, PI Office, Kendua	Sukher Sandhane PI Executive Committee group, PI Health Sub-Committee group (12F/1M)	13

Schedule for Team B (Durgapur: 14 interviews, 150 persons)

Date	Site	Person/Group Interviewed	#
5 August 14	Dakhinail	Joba Primary Group (low-level)	10
	Birisiri	Shishir CCC group (16F/1M)	17
	Upazilla Health Complex	GO health worker group (HI, FWV,FPI, SACMO)	11
	Chondigorh and Durgapur	Union Parishad Chairman and member	1
	Chalk Lengura	CSBA group	4
6 August 14	Soristola, Kakorgora Union	Sharishaful Primary Group (high-level)	13
	Nogua, Kakorgora	CHCP interview, visit PI-linked Model CC	4
	Luxmipur	CHV and TTBA group	22
	Birisiri Union Parishad	HIRA Society PI meeting group	18
	PARI SUSOMA	PARI SUSOMA staff group	13
7 August 14	Madhobpur	Mukta Society PI Management Committee group	10
	Madhobpur	Influencing group (Husband, mothers, and mother In-laws)	15
	PARI SUSOMA Office	Village Doctors group	10
8 August 14	SATHI offices, Dhaka	Ms Smita Hazda Mun, LAMB Training Center, Director Ms. Sara Mallick, LAMB Training Center, Technical Support Officer	2

Stakeholder Interview Schedule for Rover Team (Netrokona, Kendua, Durgapur, Dhaka: 17 interviews, 86 persons)

Date	Site	Person/Group Interviewed	#
5 August 14	SUSOMA office, Netrokona	Breakfast, visit office	
Netrokona	Family Planning Office, Netrokona	Golam Mohammad Azam, DDFP with Dr. Bijon Kanti Sarker, DCS	2
	CS Office, Netrokona	Dr. Shahid Uddin Ahmed, CS	1
	Sadar Hospital, Netrakona	Dr. Ranjon Karmoker, Gyn. Specialist	1
Kendua	Sathi Susoma Office, Kendua	Lunch, visit office	
	Dobagati, Chirang (3 rd Ward)	CC management, elites, Parishad Chair, FWA, CHCP, CSBA, TTBA, CHV, Super CHV group	22

6 August 14 Durgapur	Birisiri GBC	Nirsjal Chisik, Medical Officer; Dr. Malory, Healthcare Board Medical Director CHT SUSOMA PARI	2 1
	UHC-Durgapur	UH&FPO--out of office due to illness, unable to interview	0
	UHC-Durgapur	Mahdi Hasan Khan, UFPO	1
	Nayapara	Model CC visit, interview with CHCP, FHA-CSBA, CC donor/management committee member, PI leader/CC management committee member	5
	PARI SUSOMA Office	Lunch, visit office	
	Chondigorh	FWC visit, interview with FWV-CSBA Male PI group member, CHVs	1 3
	Fanda	Jhinuk PI Meeting group (Hi-level)	22
7 August 14 Dhaka	ICDDR'B Office, Dhaka	Meeting with ICDDR'B Operations Research Team: Sr. Shams El Arifeen, PI	5
10 August 14	ICDDR'B Office	Dr. Altaf, Program Manager, IMCI, DGHS	1
11 August 14	USAID Mission Dhaka, Bangladesh	Dr. Umma Meena	1
12 August 14 Netrokona	Netrakona District Health Complex EPI	Dissemination meeting, observation of speeches of government officials, PI leaders, CHV, and SATHI, PARI, World Renew leaders	

Stakeholder meetings held by Dr. Grace Kreulen: 4 meetings, 1 interview-5 persons

Site	Person/Group Interviewed	#
30 July 14	Conference Call Jain Aparna & James Foreit, Evidence Project, Kristina Gryboski, USAID, Dr. Emdad, ICDDR,B, Dr. Alan Talans, World Renew--OR report discussion	4
8 August 14	SATHI offices, Dhaka PARI & SATHI management staff group	5
25 August 14	Skype call Stacy Saha, LAMB MIS & Research Director, RHFA coordinator	1
26 August 14	Conference Call Meridith Crews, USAID, Kristina Gryboski, USAID, Jennifer Luna, MCSP, Dr. Alan Talans--KPC data discussion	3

Note: Permission was obtained to use the names of individuals listed above in this report. The names of health workers, beneficiaries and SUSOMA program participants are not listed to protect their privacy.

ANNEX XII. DISCLOSURE OF ANY CONFLICTS OF INTEREST

Name	Grace J. Kreulen
Title	Independent Consultant
Organization	Story Consulting
Evaluation Position	☒ Team Leader ☐ Team Member
Evaluation Award Number (Contract or other instrument)	None
USAID Project(s) Evaluated (Include project name(s), implementer name(s) and award number(s), if applicable)	Bangladesh Child Survival Project (SUSOMA Healthy Child and Mother) Implemented by World Renew (in partnership with SATHI and PARI) Cooperative Agreement No. GHS-A-00-09-00009-00
I have real or potential conflicts of interest to disclose.	☐ Yes ☒ No
If yes answered above, I disclose the following facts: <i>Real or potential conflicts of interest may include, but are not limited to the following:</i> 1. Close family member who is an employee of the USAID operating unit managing the project(s) being evaluated or the implementing organization(s) whose project(s) are being evaluated 2. Financial interest that is direct, or is significant though indirect, in the implementing organization(s) whose projects are being evaluated or in the outcome of the evaluation 3. Current or previous direct or significant though indirect experience with the project(s) being evaluated, including involvement in the project design or previous iterations of the project	Not Applicable

4. <i>Current or previous work experience or seeking employment with the USAID operating unit managing the evaluation or the implementing organization(s) whose project(s) are being evaluated</i> 5. <i>Current or previous work experience with an organization that may be seen as an industry competitor with the implementing organization(s) whose project(s) are being evaluated</i> 6. <i>Preconceived ideas toward individuals, groups, organizations, or objectives of the particular projects and organizations being evaluated that could bias the evaluation</i>	

I certify (1) that I have completed this disclosure form fully and to the best of my ability and (2) that I will update this disclosure form promptly if relevant circumstances change. If I gain access to proprietary information of other companies, then I agree to protect their information from unauthorized use or disclosure for as long as it remains proprietary and refrain from using the information for any purpose other than that for which it was furnished.

Signature ✓	
Date ✓	January 6, 2014

ANNEX XIII. STATEMENT OF DIFFERENCES

Date: December 13, 2014 at 1:31:13 AM EST

From: Nancy Tenbroek <ntenbroek@worldrenew.net>

To: Grace Kreulen <gkreulen@gmail.com>

World Renew has reviewed the FE report written by Dr. Grace Kreulen and we have no objection to the report. The report is an accurate reflection of the Susoma project.

--

Nancy TenBroek

Development Consultant

World Renew Bangladesh

Annex XIV. Evaluation Team Members, Roles and Titles

Evaluation Team Member Name	Title	Role
1. Ms. Grace Kreulen, PhD, MSN, BSN, RN	Independent consultant	FE Team Leader Rover Team
2. Ms. Kohima Daring	Country Consultant	Team B leader
3. Ms. Nancy Ten Broek	Development Consultant	Rover Team
4. Mr. Alan Talens	Backstop, World Renew	Team B
5. Mr. Dayal Chandra Paul	Executive Director, Supoth	Team A leader
6. Mr. Gabriel Rozario	Executive Director, Pari	Team A note taker
7. Mr. Apurba Ghagra	Director, Sathi	Team B note taker
8. Ms. Catherine Guda	Assistant Director, Sathi	Team B note taker
9. Ms. Shagota Chisim	Capacity Developmt Manager, WR	Team A note taker
10. Mr. Mukarram Hussein Musa	Coordinator, Susoma Sathi	Team A
11. Mr. Prafullo Hajong	Coordinator, Susoma Pari	Team B
12. Mr. Shukumar Ghagra	Project Manager, Susoma	Rover Team
13. Mr. Mitra Bardhan Paul	SUSOMA Training Coordinator	Team A
14. Mr. David Kreulen, PhD	Visitor	Rover Team, visitor
15. Ms. Kim	Visitor	Team A, visitor



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FROM THE AMERICAN PEOPLE



Building Public-Private Partnership to improve maternal, newborn, and child health in Bangladesh

Operations Research Final Report

Center for Child and Adolescent Health (CCH), icddr,b:

DM Emdadul Hoque	Associate Scientist, Project Coordinator
Nabeel Ashraf Ali	Assistant Scientist
Fahmida Taleb	Research Investigator
Shumona Sharmin Salam	Senior Research Investigator
Shams El Arifeen	Senior Scientist and Director

World Renew

Nancy TenBroek	Asia Regional Health Advisor
Kohima Daring	Team Leader for India and Bangladesh
Stephanie Sackett	Associate Director for Grants
Alan Talens	Health Advisor
Grace J. Kreulen	Lead Program Evaluator, Consultant
William Story	Consultant

Lutheran Aid to Medicine in Bangladesh (LAMB)

Ms. Stacy Saha	RHFA Coordinator

January 2015

The SUSOMA Project in Durgapur and Kendua sub-district of Netrokona district, Bangladesh is supported by the American people through the United States Agency for International Development (USAID) through its Child Survival and Health Grants Program. The SUSOMA Project is managed by World Renew, formerly known as Christian Reformed World Relief Committee (CRWRC), in collaboration with GOB and icddr,b under Cooperative Agreement No. GHS-A-00-09-00009-00. The views expressed in this material do not necessarily reflect the views of USAID or the United States Government.

Acknowledgements

The SUSOMA Operations Research study was conceptualized by World Renew in conjunction with icddr,b and USAID. The study was conducted by DM Emdadul Hoque and his team at icddr,b. Icddr,b carried out all aspects of the study, from the concept paper to data collection and analysis to writing multiple reports, including the baseline and final KPC and Operations Research Qualitative and Social Capital Study reports. This report brings together the KPC and OR data from the icddr,b reports, the health facilities assessment conducted by Stacy Saha from the RHFA report, World Renew's Peoples' Institution model intervention strategy developed by Kohima Daring and Nancy TenBroek, William Story's expertise in social capital research, and USAID/Evidence Project guidance provided by Aparna Jain and James Foreit. As primary author, I express my appreciation to each of these whose contributions enabled the writing of this integrative Final Operations Research Report that showcases the utility of the People's Institution model intervention in promoting MNC practices and utilization among poor and marginalized women in rural Bangladesh.

Grace Kreulen

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List of Abbreviations

ANC	Antenatal Care
AMTSL	Active Management of the Third Stage
BDHS	Bangladesh Demographic and Health Survey
CBO	Community Based Organization
CC	Community Clinic (Ward level)
CCC / UC	Central Coordinating Committee / Union Committee
CAAH	Center for Child and Adolescent Health
CHT	Community Health Trainer
CHV	Community Health Volunteers
CSBA	Community Skilled Birth Attendant (health providers (FWV, FWA, HA) with SBA training)
DGHS	Directorate General of Health Services
DGFP	Directorate General of Family Planning
EHF	Emergency Health Funds
ENC	Essential Newborn Care
FWA	Family Welfare Assistant
FWC	Family Welfare Centre
FWV	Family Welfare Visitor
GOB	Government of Bangladesh
HA	Health Assistant
HIV/AIDS	Human Immunodeficiency Virus/ Acquired Immune Deficiency Syndrome
HMIS	Health Ministry Information System
Icddr,b	International Centre for Diarrhoeal Disease Research, Bangladesh
IGA	Income Generating Activities
IMCI	Integrated Management of Childhood Illness
KPC	Knowledge, Practice and Coverage survey
MA	Medical Assistant
MIS	Program Management Information System
MOHFW	Ministry of Health and Family Welfare
MOU	Memo of Understanding
MMR	Maternal Mortality Ratio
MNC/MNCH	Maternal Newborn Care/Maternal Newborn and Child Health
NGO	Non-Government Organizations
NHP	National Health Policy
NNHS	National Neonatal Health Strategy
PG	Primary group
OR	Operations Research
PI	Peoples' Institution
PNC	Post Natal Care
PPP	Public Private Partnership
PHSD	Public Health Sciences Division
RHFA	Rapid Health Facilities Assessment
SACMO	Sub-Assistant Community Medical Officer
SC	Social Capital
SES	Socio Economic Status
TTBA	Trained Traditional Birth Attendant
World Renew	The international NGO formerly known as CRWRC

Abstract

Objective. This Operations Research (OR) study examines an innovative approach to community mobilization of poor marginalized populations that seeks to engage communities in planning and action to mobilize resources for maternal newborn care (MNC). The study aims to document Peoples' Institution (PI) model group formation, examine the development of social capital in PI model group members, and determine the impact of the PI model on health outcomes.

Methods. The study used a mixed-method approach including baseline and endline qualitative process evaluation, investigation of social capital, health facilities assessment, and quantitative program evaluation with an intervention and control group. Respondents included 5,373 women of reproductive age (15-45 years old) and 30 health facilities randomly selected from Netrokona district, Bangladesh.

Results. Perspectives on PI model group formation, goals, activities, savings, training, capacity development, and involvement in promoting MNC were documented as was the development of structural and cognitive social capital by group members. Membership in a group was associated with higher levels of social capital ($p \leq 0.001$) at project year 3 and 5. There was a significantly greater percentage increase ($p \leq 0.05$) in the intervention than in the comparison group in receipt of four or more antenatal care (ANC) visits, institutional delivery, delivery by a skilled birth attendant, postnatal care (PNC), exclusive breastfeeding, care-seeking for ANC/PNC complications and pneumonia, quality ANC, active management of the third stage of labor (AMTSL), and essential newborn care.

Discussion. The study confirmed that the PI model can be effectively established in rural underserved upazilas in Bangladesh to increase the social capital of poor marginalized women and empower them to work with government officials and health providers to improve household and community MNC practices and increase utilization of quality health services in hard-to-reach families and communities. The PI model intervention strengthened public-private partnerships thereby enhancing access to resources for marginalized families. It improved the MNC practices of poor mothers and families, increased the quality of MNC health services in their communities, and established an upazila-wide enabling environment to strengthen and sustain MNC gains.

Introduction

A major barrier to reducing maternal and neonatal mortality around the world is the lack of quality accessible maternal newborn health services. This is especially true in developing countries with poor and marginalized populations where maternal newborn care (MNC) service delivery platforms are underdeveloped.

In Bangladesh the high maternal and neonatal mortality rates are decreasing, however, the neonatal mortality rate is slower in its decline (52 in 1994, 32 in 2010) than the maternal mortality rate (322 in 2001, 194 in 2010) (Streatfield, et al. 2011, BMMS, 2010). Newborn deaths now account for two-thirds of all under-five deaths (39% in 1991, 60% in 2010). Among neonates death results from serious infections (24%), birth asphyxia (21%), pneumonia (13%), and pre-term birth (11%) (BDHS 2013, NIPORT 2011). For maternal deaths, about 64% are a result of direct obstetric causes such as prolonged labor, hemorrhage, eclampsia and abortion (BMMS 2010). Disparities in death rates exist between rich and poor economic quintiles and in factors that contribute to health, such as the adequacy of antenatal care, skilled attendance at birth, and postnatal care (BDHS, 2011). Rural poor areas in Bangladesh generally experience higher rates of neonatal and maternal mortality and poorer intervention coverage (BMMS, 2010).

Within this context, World Renew implemented the SUSOMA* USAID-funded Child Survival and Health

* SUSOMA is formed from the Bangla words *Shustho Shishu o Shustho Ma*, which means 'healthy child and mother.'

Grants Program from 2009 to 2014. The project targeted 124,313 women of reproductive age (WRA) and 19,314 infants 0-11 months in the Kendua and Durgapur sub-districts of Netrokona, Bangladesh. The Netrokona district in northern Bangladesh is rural, poor, one of the 14 Government of Bangladesh (GOB) low performing districts, and a priority district of USAID (UNICEF, 2009). The goal of the project intervention was to reduce mortality and improve health status among marginalized mothers and newborns through improved household and community MNC-related behaviors and increased utilization of quality MNC services. The project specifically sought to build social capital of the poorest households and mobilize communities for MNC utilizing the PI model intervention to establish community-based organizations and public-private partnership structures for ongoing MNC gains.

The effectiveness of community-based interventions that target improving MNC in poor and disadvantaged populations has not been established. While community-based strategies to enhance MNCH have been developed and had success in achieving program objectives, the mechanisms of change are now beginning to be understood (WHO, 2014). Reducing inequalities in health outcomes requires monitoring and addressing multiple factors contributing to inequity in the specific geographical area, including economic, geographic, ethnic, and health system influences (Mulholland, et al, 2008). Over the last 18 years, World Renew has developed the innovative PI model approach to engage communities to form independent, self-sustaining community-based organizations (CBOs) that promote MNCH. The empowered CBOs have the capacity and social capital to establish linkages with public (clinics/officials) and informal (village doctors) health sectors that strengthen health services and MNCH gains. This operations research study examines mechanisms of establishing the PI model within a community and explores the relationship between the PI model intervention, the development of individual social capital, and the achievement of MNC health gains. The selection of remote upazilas (sub-districts) in Netrokona district with high levels of poverty and maternal/neonatal mortality was done in consultation with the GOB to serve as a representative area for testing the innovative PI model approach and for obtaining data for informed decision-making relative to scale-up of the PI model to other areas with similar contexts.

The project sought to reduce inequity in health outcomes by addressing multiple factors contributing to inequity in the geographical area, including economic and health system influences.

A conceptual framework serves as the basis for the PI model as a social capital enhancing intervention. Social capital is seen as a broad term including social relationships, networks, and values that facilitate collective action for mutual benefit. It includes the ability to access resources through social relationships. Two types of social capital are structural and cognitive. Structural social capital focuses on what people 'do,' their actions and behaviors such as civic participation and involvement in social networks. Cognitive social capital focuses on what people 'feel,' their attitudes and perceptions such as social trust and reciprocity (Story, 2013). The PI model intervention intentionally works to increase social capital in poor, marginalized populations by building cognitive social capital in terms of social trust, social cohesion, and collective action. It works to increase structural social capital in terms of organizational involvement in PI groups and bridging links to networks of government officials, health providers, and elites/influential individuals in the community.

Social capital is a useful concept to study in global public health because it provides a conceptual basis for assessing the impact of community-based health programs. Social capital has been linked to lower levels of mortality, better health and healthy behaviors (Story, 2014). Studying the linkage between the PI model, social capital and improved health outcomes will provide greater understanding of the mechanisms of change in populations engaged in PI model community development and action to enhance MNH.

This OR study focused on three areas, each with associated research questions:

1. PI model group formation. How do PI model primary groups (PGs) form? How do PI model approaches engage poor and marginalized women of reproductive age (WRA) and promote

MNC practices?

2. Social capital in PI model implementation. What is the degree of implementation of the PI model? What are the structural and cognitive social capital characteristics of intervention group PG members? Is membership in a PI associated with higher levels of social capital in the intervention group at endline when compared with non-member levels of social capital? Is an increase in social capital linked with improved health outcomes?
3. PI model and health outcomes. Is the PI model more capable than the status quo of 1) increasing care-seeking and utilization of MNC services, 2) increasing maternal newborn health practices 3) increasing quality and availability of MNC health services, 4) creating more equitable MNC and health outcomes, and 5) reducing and creating equity in costs?

Study Design, Methods and Intervention

Study design. The study questions were addressed using a mixed-method approach with four components:

1. Qualitative process evaluation with intervention-group only baseline and endline interviews.
2. Investigation of social capital with intervention-group only pretest-posttest measurement (Social Capital survey)
3. Quantitative program evaluation with a quasi-experimental pretest-posttest, intervention-comparison group design (KPC study).
4. Health facilities assessment with an intervention area only pretest-posttest design (RHFA).

Study duration, timeline. The total study duration was 48 months (4 years).

The qualitative process evaluation data collection occurred in three phases: a) formative visits to intervention upazilas in June, August and November 2011 at the start of intervention implementation, b) visits for baseline process evaluation interviews and focus group discussions (FDGs) in January and June 2012, 7 and 12 months after the intervention began, and c) visits for endline process evaluation interviews and FDGs in March-April and July 2014 at the end of the intervention implementation period.

The investigation of social capital baseline data collection occurred over 2-months (October to November 2012) during the second year of intervention implementation, and endline measures over 1-month (28 March to 15 April 2014) at the end of the intervention period.

For the quantitative program evaluation, the baseline KPC survey data collection took 3-months (17 February to 06 May 2010) and was followed by the implementation of the intervention that lasted 39-months (July 2011 to September 2014). The endline KPC survey data collection occurred during the end of the intervention period and took 4-months (06 March to 25 June, 2014).

For the health facilities assessment, the RHFA occurred over 1-month in November 2009 prior to the start of the intervention, and at endline in June 2014 at the end of the intervention period.

Study participants, sampling, ethics. Participants were women of reproductive age (WRA, 15-45 years old) from Netrokona district, Bangladesh. For the qualitative process evaluation, participants were 81 PI group members and non-members, community-health volunteers, and managers and coordinators from the two local implementing NGOs. Non-random purposive quota and snowball sampling was used for selecting interview participants. For the investigation of social capital, participants were 300 PI group members and non-members. Equal numbers of members and non-members were randomly selected from villages that were randomly selected from a list of villages in each of the intervention upazilas. Inclusion criteria for the qualitative process evaluation and investigation of social capital were being a married WRA and lower socioeconomic status (non-elite). For the quantitative program evaluation, the respondents in the intervention group consisted of 2,500 mothers of children 0-2 years from 494 villages in the 20 unions of the intervention upazilas (Kendua and Durgapur), and the respondents in the comparison group consisted of 2,500 mothers of children 0-2 years from the 15

unions of two nearby upazilas with usual GOB services (Kalmakanda and Barhatta). Randomized cluster sampling was used in which 40 clusters were selected (20 intervention, 20 comparison). For the health facilities assessment, data regarding MNCH services in the intervention area was obtained from health facilities and health workers using systematic random sampling. Additional information about sampling is in Annex A.

Ethical approval for this study, including the process for getting informed consent from study participants, was obtained from the Research Review Committee and Ethical Review committee of icddr,b. The exception to this was RHFA carried out by LAMB for which permission and consultation was obtained from the Civil Surgeon and Deputy Director of Family Planning in Netrokona district.

Data collection and analysis methods. Information about data collection methods and endline sample size are summarized in Table I. Additional information about these methods is in Annex A.

Table I. Summary of Data Collection Methods

Data collection method	When administered		Sampling approach Respondents	Sample size (endline)	
	Baseline	Endline		Intervention Group	Comparison Group
Qualitative Process Evaluation					
Observations	2011/12	2014	PG and CC formation, CHV training	4	--
In-Depth Interviews (IDI)	2012	2014	Purposive quota sampling (with snowball)	22	--
			PI group members, WRA, low SES	22	
			Group non-members, WRA, low SES	4	
			CHVs	8	
Focus Group Discussion (FGD)	2011	2014	PI group members	9	--
			Group non-members	8	
NGO interview	2011	2014	SATHI & PARI managers	2	--
			SATHI & PARI coordinators	6	
Qualitative Social Capital (SC) Investigation					
SC Survey -Household questionnaire	2012	2014	Random selection of 45 villages and of 2 respondents/village		--
			PG members, WRA, low SES	150	
			Group non-members, WRA, low SES	150	
Quantitative Program Evaluation					
KPC Survey	2010	2014	Randomized cluster sampling (40 clusters) Mothers of children 0-2 years of age	2500	2500
RHFA	2009	2014	Systematic random sampling of facilities	30	--

Analysis. In order to determine whether the change in each KPC survey variable over time was significantly different in the intervention area compared to the comparison area, the percentage change was calculated from baseline to endline along with the 95% confidence interval for each variable. The percentage change in the intervention area was considered significantly different from the comparison area if the confidence intervals did not overlap (Knezevic, 2008). The percentage change was calculated using the following formula:

$$P_{Change} = \left(\frac{p_2 - p_1}{p_1} \right) * 100$$

where p_1 is the proportion at baseline and p_2 is the proportion at endline. The percentage change demonstrates the difference in proportions from baseline to endline relative to the starting value at baseline. The 95% confidence interval was calculated using the following formulas:

$$95\% \text{ confidence interval} = P_{Change} \pm 1.96 * SE_{p_2 - p_1}$$

and the standard error using:

$$SE_{p_2 - p_1} = \sqrt{\left(p_1 * \frac{(1 - p_1)}{n_1 / deff} \right) + \left(p_2 * \frac{(1 - p_2)}{n_2 / deff} \right)}$$

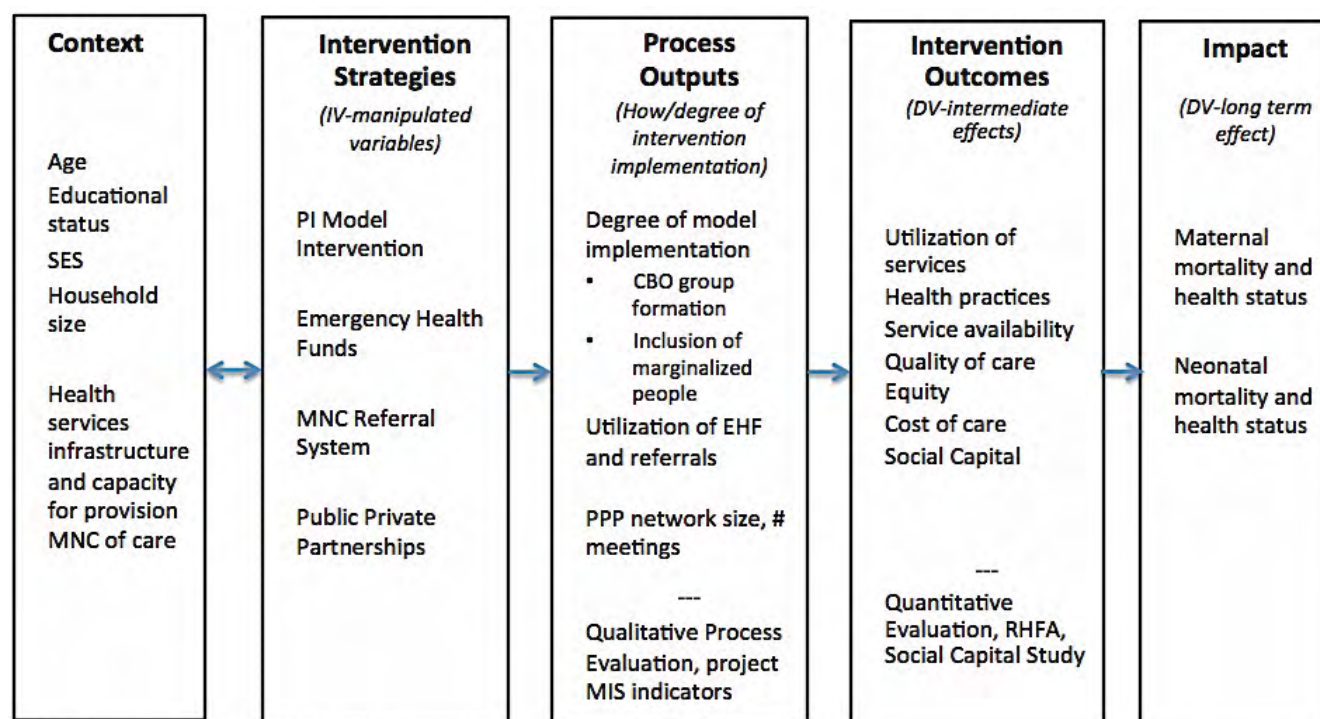
where n_1 is the baseline sample size, n_2 is the endline sample size, and $deff$ is the design effect. The design effect accounts for the bias introduced by using cluster sampling instead of simple random sampling during data collection. Although the design effect varies for different variables, a conservative estimate for cluster sampling is two (CORE Group, 2004). By adding the design effect to the equation above, the standard error is larger and the confidence interval is wider; therefore, estimates for statistical significance between intervention and comparison areas more conservative than estimates that do not include the design effect. No comparison data was collected for the Social Capital Investigation or the RHFA, so statistical assessment of change was not possible for these variables.

In order to determine whether changes in health outcomes over time were creating more equitable health outcomes, a wealth index was constructed from data collected on ownership of household durable goods, dwelling characteristics, sources of drinking water and sanitation facilities. Households were ranked according to their total 'wealth' score, and then divided into quintiles from the lowest (poorest) to the highest (richest). Health outcome data was analyzed by wealth quintile and the ratio of rich (upper quintile) to poor (lower quintile) computed for the rapid CATCH variables. To determine whether the change in the rich-to-poor ratio overtime was significantly different in the intervention area compared to the comparison area, the percentage change was calculated along with the 95% confidence intervals for each variable.

Intervention impact model. Factors considered in studying the intervention are categorized into five areas presented in the intervention impact model depicted in Figure 1. The context includes individual and community-level factors present at baseline within which the intervention was established. The quantitative program evaluation and health facilities assessment included variables that measured context. The intervention strategies comprise the independent variable, the PI model intervention, and include approaches used to affect change in MNC, such as community mobilization and training, EHF, MNC referral system, and the PPP. Process outputs are factors that indicate the degree and mechanisms of PI model implementation and include PI group formation, inclusion of marginalized people in groups, utilization of EHF and referrals, and size/functioning of the PPP network. The qualitative process evaluation and project M&E indicators inform the process outputs. Intervention outcomes are the dependent variables and include intermediate indicators of intervention effects such as utilization, practices, service availability, quality of care, equity, social capital and cost. The quantitative program evaluation, investigation of social capital, and health facilities assessment inform intervention outcomes. Impact factors are effects beyond the scope of this study that the project aims to influence in the long term, including changes in maternal and neonatal mortality and morbidity.

Intervention strategies. The SUSOMA program intervention platform being examined as the independent variable (IV) in this OR study is the People's Institution (PI) model. The PI model approach was used to mobilize marginalized populations and to train and empower them to establish independent, self-sustaining community-based organizations (PI groups) to promote maternal newborn health and social change. The PI groups supported a cadre of trained community health volunteer MNC providers, developed emergency health funds and referral mechanisms for MNC, and established public-private partnership structures for ongoing MNCH gains. The intervention group upazilas received the PI model intervention. The comparison group upazilas had usual GOB services and did not receive the intervention.

Figure 1. Intervention Impact Model

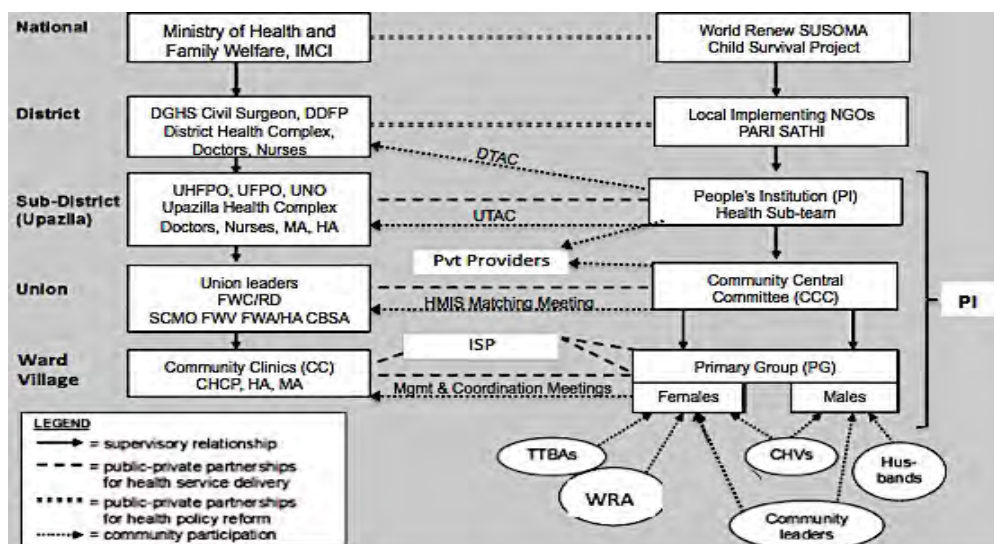


IV = independent variable, DV = dependent variable

In the first two years of the project, project staff community health trainers (CHTs) built social capital as they mobilized poor marginalized community members for maternal newborn health and established the three tiers of PI model community groups (see Figure 2). Initially, CHTs went household to household in all villages in the district to build awareness and engage pregnant women and mothers in forming groups, called Primary Groups (PGs), to address mother and newborn health concerns. PGs are PI Model groups that function at the village level. CHTs trained PG members and supported them to work together to solve problems, to claim their rights, and to track group gains in capacity. The PGs selected local volunteer providers, community health volunteers (CHVs) and trained traditional birth attendants (TTBAs) to promote maternal newborn health in their village. Beginning in 2012, men's PGs were formed to promote the involvement of husbands and males in MNC-related decision-making at family and community levels and to strengthen PI advocacy with the government. Because many of the women in the initial PGs were illiterate, they linked with elites in the higher wealth quintiles to assist them in running their organization, and eventually formed advisory groups of supportive influential persons. Once the PGs became established, the CHT helped each select two representatives to form a union-level Central Cooperative Committee (CCC). The CCC representatives received training and were supported to make and carryout plans for enhancing union-level MNCH. Each CCC then selected six representatives to join the upazilla-level PI group, which received additional training and support. Each PI (with the CCC and PGs under it) has one trained health sub-team that is responsible for overseeing local MNC health services through maintaining public-private partnership (PPP) networks.

The project established three tiers of CBOs utilizing the PI model: 541 PGs (22 male), 22 CCCs, and 4 PIs. Utilizing a training of trainers strategy, CHTs trained each of these tiers in leadership, management, record keeping, gender, local resource mobilization, monitoring and evaluation, sustainability, auditing, advocacy, networking, and capacity measurement.

Figure 2. PI community mobilization approach and links to the health system



The PGs, CCCs, and PIs were assisted to develop PPP networks by which they collaborate with the local formal, informal and private health care systems to advocate for enhanced MNC service delivery and policy change. The PIs signed MOUs with local government and private (Garo Baptist Convention (GBC), Dushtha Shasthya Kendra (DSK)) facilities in which each extends to the other support and cooperation for training, education, meetings, improving quality of services, referrals and emergency care, and maintaining maternal newborn registries. The PI's promote maternal newborn health as they link at the upazila and district levels with government officials and serve on the Upazila and District Technical Advisory Committees that meet quarterly (UTAC) and semi-annually (DTAC). They share progress, inform officials of needs, influence strategies to meet gaps, and participate in decision-making related to MNC. The CCC's link at the union level to government officials and participate in decision-making within the Family Welfare Centers (FWCs) and Rural Dispensaries (RDs). Over the course of the project they jointly developed a community maternal newborn Health Ministry Information System (HMIS) data collection form. They instituted monthly HMIS data matching meetings with the Upazila Family Planning Officer (UFPO) and Upazila Health and Family Planning Officer (UH&FPO) to sync CHV and TTBA registries with clinic staff registries and make plans to promote availability of MNC services and availability of supplies and drugs to meet local needs. The PG's promote and coordinate MNC at the village level. PG members serve and participate in decision-making at the ward level on the 60 Community Clinic (CC) Management Committees. Community-based CHVs, TTBA, and Independent Service Providers (ISPs) trained by the project meet monthly to coordinate local MNC with government health workers[†] and set goals/strategies for local action.

To provide access to emergency MNC for the poor in their community, PG groups were assisted to set up, raise funds for, and actively manage emergency health funds (EHFs) in collaboration with their union CCC. The EHF's have financial records, lending policies, and bank accounts. In addition, groups purchased or had rickshaw ambulances donated to them. An unintended but popular development in all the PGs were the health savings from which loans were taken for income generating activities (IGA) that enable parents to better feed and protect the health of their families. Group members bring 2-5 taka to

[†] Sub-assistant Community Medical Officer (SACMO), Family Welfare Visitor (FWV), Family Welfare Assistant (FWA), Health Assistant (HA), Community Skilled Birth Attendant (CSBA), Community Health Care Provider (CHCP), Medical Assistant (MA)

the weekly meetings for these funds. The health savings accounts belong to and are managed by the PGs.

To improve MNC practices the intervention established BCC-based maternal newborn counseling done by PI volunteers with all pregnant women and key stakeholders in each village. The trained CHVs and TTBAAs were responsible for promoting ANC, safe institutional/community skilled birth attendant (CSBA) delivery, essential newborn care (ENC), and PNC during household visits to pregnant and newborn mothers in their villages. They also held educational meetings with the PI groups in their community. Additionally, Theater for Development (TfD) teams were trained and integrated into the PI system to perform community dramas to raise awareness of MNC-related issues and counter the resistance to proper MNC of influencing husbands and in-laws.

To increase quality of MNC services the project intervention 1) trained community-based health providers, 2) supervised PI-linked CHVs and TTBAAs, 3) established an active referral system, and 4) facilitated PI monitoring and support of health facility (HF) utilization and care quality. A total of 1,201 community-based volunteers (537 CHVs, 541 TTBAAs) and 123 government facility-based providers received training and refresher training in ANC, safe delivery, PNC, ENC actions, and integrated management of childhood illness (IMCI). Of these, 79 CHVs were trained as regional Super CHVs to oversee and strengthen CHV performance (CRWRC, 2009). An additional 377 ISPs received training and refresher training in IMCI and referrals to reduce harmful practice. The project equipped 101 government providers (FWVs, SACMOs, MAs, CBSAs) as trainers and supported 10 local government health workers for intensive IMCI training and six for Emergency Triad Assessment and Treatment (ETAT) training in Dhaka.

Supportive supervision of community volunteers to nurture and maintain quality was built into the project with project staff initially making supervisory visits to CHVs and TTBAAs and then turning the role of overseeing CHV and TTBA care quality to MOHFW staff. Beginning in 2012, the role of Super CHV was developed to support local networks of CHVs and hold monthly meetings to facilitate ongoing learning, sharing of case studies, and best practices.

The primary activity to improve health facility utilization and quality of care was involvement of PGs in their local community clinics. Initial monitoring of clinic functioning by PGs led to the active involvement of PGs in clinic management committees. All PGs are now involved in clinic decision-making and advocacy along with the local elites. In thirty 'Model CCs' the PG opens the clinic, cleans it daily, assists and holds health workers accountable, and makes improvements in the clinic. PGs have advocated for logistical support and received delivery kits, delivery beds, weighing scales, and blood pressure cuffs. In 2012, the project assisted the PIs to work with the government on a 'Helping Workers Thrive' campaign, which has provided support and encouragement to clinic personnel.

To assess if the intervention was being implemented as planned, the OR team relied on monitoring of intervention implementation done systematically throughout the project utilizing multiple techniques established in the SUSOMA Project workplan, M&E plan, and HMIS. This includes quantitative and qualitative project data collected in the community and from field visits, data from training events and meetings, data from the MOHFW HMIS, and data from project qualitative and quantitative assessments. Following every training, follow-up and supportive supervision was provided to all participants to ensure actions taken were congruent with intervention strategies. The CHVs and TTBAAs were observed by CHTs and later by MOH workers to be sure they were following BCC counseling and referral guidelines and adjustments/retraining were done as needed. The CHTs had close relationships with the PGs, CCCs and PIs and slowly 'weaned' them from oversight as they demonstrated the ability to report monthly data and function independently. Once data was submitted to the M&E officer it was reviewed and disseminated in monthly and annual progress reports. These reports were discussed at monthly Project Implementation Team and quarterly Project Management Team meetings and adjustments were made when indicated to stay focused on project aims. The project monitored the intervention activities in the intervention area. The comparison area did not receive a project intervention and was not

monitored during the study. Although the OR team did not participate in intervention monitoring, it did train data collectors and monitor all data collection and analysis processes for both intervention and comparison groups to ensure integrity of the data.

Process output measurement. Process output indicator measures that indexed how and the degree to which the PI model intervention was implemented are presented in Table 2.

Table 2. Process output measures

Variable category	How measured	Collection method
PI model intervention implementation processes	- Demonstration of PI model group formation, CHV/TTBA trainings and roles - Group member reports about PI model PG, CCC, and PI group formation, leadership, goals and activities, EHF, CHW training and roles, linkages, capacity and involvement in MNC - Group non-member reports about purposes of PI groups, CHV roles, impact of PI model groups on their community - NGO leader reports about group formation, mobilization strategies, group functioning, leadership and linkages, involvement in MNC, barriers to MNC	Observation, IDIs, FGDs, interviews

Outcome variables and measurement. Outcome variables that indexed intermediate PI model intervention effects are presented in Table 3.

Table 3. Study outcome variables, indicators, and data collection method

Variable category	Variable name	Indicator	Collection method
Social capital	Structural social capital	• Structural social capital survey indices for decision-making, leadership, political and social networks, conflict, and access to services	SC household survey
	Cognitive social capital	• Cognitive social capital indices for solidarity, trust, cooperation, and conflict resolution	
	Level of social capital	• Social capital scale score	
Utilization of health care services	ANC	• Percentage of mothers of children age 0-11 months who had four or more antenatal visits when they were pregnant with the youngest child.	KPC
	SBA delivery	• Percentage of children age 0-11 months whose births were attended by skilled personnel	
	Institutional delivery	• Percentage of children age 0-11 months whose births took place at institution/health facility	
	PNC-newborn	• Percentage newborn of age 0-11 months who received a post-partum visit from an appropriate trained health worker within two days after birth (LB)	
	PNC-maternal	• Percentage of mother of children age 0-11 months who received a post-natal visit from an appropriate trained health worker within two days after birth	
	Care-seeking	• Percentage of children age 0-23 months with chest-related cough and fast and/ or difficult breathing in the last two weeks who were taken to an appropriate health provider • Percentage of mothers of children age 0-11 months who sought care from a medically trained provider for complications during pregnancy, delivery, and after delivery for births in the year preceding the survey	KPC
Practices	Contraceptive use	• Percentage of mothers of children age 0-23 months using modern contraception	KPC
	Exclusive breastfeeding	• Percentage of children age 0-5 months who were exclusively breast fed	
	Immediate breastfeeding	• Percentage of children age 0-23 months put to breast within 1 hour of delivery	
	No pre-lacteal feeds	• Percentage of children age 0-23 months who did not receive pre-lacteal feeds	
	Use of clean birth kits	• Percentage of women of children age 0-11 months who used a clean delivery kit during the birth of their youngest child (HOME Delivery only)	
	Thermal care newborn	• Percentage of children age 0-11 months who were dried immediately	

Variable category	Variable name	Indicator	Collection method
	Immediate wrapping	after birth (HOME Delivery only before the placenta was delivered)(LB) • Percentage of children age 0-11 months wrapped with a cloth or blanket immediately after birth before placenta delivered (HOME Delivery LB only)	
	ORT use	• Percentage of children age 0-23 months with diarrhea in the last 2-weeks who received oral rehydration solution (ORS) or recommended home fluids	
	Point-of-use water Handwashing practices	• Percentage of households of children age 0-23 months that treat water • Percentage of mothers of children age 0-23 months who live in households with soap at the place for hand washing	
Service availability	ANC services	• Percentage facilities with ANC services 4+ times/month • Annualized number ANC visits/facility/year	RHFA
	Institutional delivery	• Percentage facilities with 24/7 delivery services	
	Clinic availability	• Number of CCs, FWCs and RDs open and functional	RHFA
	Sick child care	• Percentage facilities that offer sick child care • Annualized number of sick child visits/facility/year	
	Growth monitoring Laboratory services	• Percentage facilities that offer growth monitoring • Percentage facilities with available MNC and child laboratory services	
	Supply/drug availability	• Percentage facilities with all essential child care supplies/drugs • Percentage facilities with ANC supplies and drugs • Percentage facilities with neonatal supplies and drugs	RHFA
	Guideline availability	• Percentage facilities with available care guidelines • Percentage facilities with MNC information systems	
	MNC referrals	• Number referrals made by CHVs, TTBAAs, and ISPs • Percentage facilities with community referrals	MIS RHFA
	Community health volunteer & informal health services	• Number CHV and TTBA visits • Number community presentations about MNC • Number ISPs collaborating with CHVs and HFs	MIS
Quality of health care services	Quality antenatal care	• Percentage of mothers of children aged 0-11 months who had 4+ ANC visits from medically trained providers with all necessary services (blood pressure and weight measurement, urine testing for proteinuria, blood testing) and advising about danger signs of pregnancy complications and their management	KPC
	Quality delivery care	• Percentage of mothers of children 0-11 months who received AMTSL (active management of the third stage of labor with administration of a prophylactic uterotonic, gentle cord traction, uterine massage after delivery of the placenta)	KPC
	Essential newborn care coverage	• Percentage of children age 0-11 months who received all 3 ENC elements (essential newborn care includes thermal protection immediately after birth, clean cord care, immediate/exclusive breastfeeding)	KPC
	Infection control	• Percentage of facilities with soap for handwashing • Percentage of facilities with gloves	RHRA
	Infrastructure	• Percentage of facilities with client latrine, safe water, and visual/auditory privacy	
	Facility-community collaboration	• Percentage of facilities having at least one method for community participation (facility management committees and/or engagement with CHWs/TTBAAs) and at least one way to incorporate information received (community discussions and/or changing health worker behavior)	RHRA
	IMCI-based staff training	• Percentage facilities with staff training in MNC / child health in past 12 months • Appropriate child diagnosis/treatment during illness visit	RHFA
Health Equity	Rich-to-poor ratio	• The ratio of community members surveyed in the lowest versus the highest wealth quintile for intervention outcome indicators (health equity gap indices)	KPC
Cost of care	Out-of-pocket cost	• Out-of-pocket cost incurred by mothers for transport, hotel,	KPC

Variable category	Variable name	Indicator	Collection method
	incurred in securing care	consultation, diagnostic, and drug costs in securing antenatal, delivery, and postnatal care for a pregnancy in the year preceding data collection as well as care for pregnancy complications and illnesses in their under two children	

Results

Intervention monitoring results. The SUSOMA project utilized the PI model intervention to establish the capacity of the poor and marginalized to work for improved MNH in multiple ways. They mobilized the poorest village residents and helped them to establish the PI model system across each of the 494 villages in Durgapur and Kendua upazilas, including 4 People's Institutions (PIs) with health sub-teams, 22 union-level Community Central Committees (CCC), and 541 village-level Primary Groups (PGs) that together are providing community-based management of MNC. By the end of the project, 42% of the PGs formed were high-level/independent functioning, 38% medium-level, 20% low-level/emerging, and 96% had active EHF that had been used by 2,406 women and children to access care. The project trained and supported over 40,000 community PI members in the intervention upazilas. The PI groups are registered GOB social welfare agencies and have established functional PPPs with GOB health officials and workers with MOUs and regular meetings to promote equitable, quality MNC (4,038 meetings held during the project). All PGs are involved in decision-making on their local clinic management committees and 30 clinics are PI-managed. PI groups were helped to establish a PPP-based MNC referral system in which the poor receive priority treatment (5,467 referrals made to health facilities by CHVs, TTBAAs, and ISPs). During the life of the project, facilities receiving referrals increased from 37% to 80% (RHFA). The project provided training, supportive supervision, and refresher training in ANC, safe delivery, PNC, ENC actions, and IMCI to 1,201 community-based volunteers (537 CHVs, 541 TTBAAs) and 123 government facility-based providers. An additional 377 ISPs were trained in IMCI. CHVs and health officials/workers met monthly to coordinate care and match HMIS data. The PI-based CHVs and TTBAAs visited every household in the intervention upazilas and provided counseling to over 120,000 pregnant women and 40,000 newborn mothers. The CHVs held 15,659 community MNH promotion events and 55,486 MCH teaching sessions with PG members. Three PI-based Theater for Development teams performed 113 BCC drama events to raise awareness and overcome resistance to MNC utilization. The PI groups assisted with 881 National Health/Immunization Days. During the project, the Peoples Institution Manual (Daring, 2014) was published which has standardized PI model implementation and training practices.

Demographic characteristics and equivalence of groups. Comparison of household and population data from the KPC surveys, obtained from the intervention upazilas and two comparison upazilas in Netrokona District, revealed that both groups (WRA with a child <2 years old) were similar in age, marital status, religion and ethnic status (Table 4). Fewer respondents in the intervention group did not have any formal education, however, across both groups more younger than older women had completed primary school or higher. They were equivalent in household size, access to electricity, improved drinking water, and household possessions. At baseline the intervention group had better access to improved sanitation and more owned their homestead than the comparison group, however, both groups were equivalent in sanitation and homestead ownership by endline. Fewer of the households in the intervention than the comparison group were in the poorest wealth quintile and more were in the richest quintile, although the differences were less marked in 2014.

Table 4: Respondent demographic characteristics intervention and comparison group, 2010 and 2014 (KPC Survey)

Indicators	Intervention		Comparison	
	2010	2014	2010	2014
Mean age in years (SD)	27.5 (±5.08)	27.3 (±5.07)	27.5 (±5.09)	26.7 (±5.04)
Currently married	99.4%	99.8%	99.4%	99.7%
No formal education	32.6%	24.7%	44.6%	27.5%
Islamic religion	95%	95.7%	88.4%	91.5%
Hajong, Garo or other ethnic minority	2.7%	1.1%	2.7%	0.7%
Mean size of households (SD)	5.4 (±2.05)	5.5 (±2.1)	5.6(±2.19)	5.3 (±2.0)
Percentage of HHs with electricity	20.8	43.1	20.2	43.8
Percentage of HHs with improved source of drinking water	98.5	97.8	97.2	98.6
Percentage of HHs with improved toilet facility	73.1	76.2	62.5	78.2
Land ownership status				
Homestead	77.5	89.8	73.0	90.1
Other cultivable land	47.5	45.7	37.6	50.0
Neither	18.1	7.9	23.1	8.4
Wealth status				
Lowest	16.6	19.0	23.6	20.9
Second	19.9	19.0	20.1	20.9
Middle	21.2	20.1	18.7	19.9
Fourth	20.5	21.3	19.6	18.7
Highest	21.9	20.5	18.1	19.5

Main findings. Results will be reported in three stages: First, by examining the dynamics of PI model group formation utilizing qualitative process evaluation data; second, by exploring the role of social capital in PI model implementation utilizing data from the investigation of social capital; and, third, by evaluating whether the PI model is more capable than the status quo of increasing care-seeking, utilization, MNC quality, and equity with reduced personal costs utilizing KPC survey and RHFA data. Composite results are presented for the intervention area. For the sake of clarity in understanding findings, differences between upazilas are not considered here, however, they can be found in the cited reports.

The dynamics of PI model group formation are presented by examining the research question in light of the qualitative process evaluation data from group members, non-members, and implementing NGO leaders. Information presented below is drawn from the qualitative research findings found in the 2014 icddr,b Final Operations Research Qualitative and Social Capital Study Report (SUSOMA Final Evaluation Report, Annex XIXe). Major findings of the qualitative process evaluation are summarized in Annex B.

How do PI model PGs form and how do they engage poor and marginalized WRA and promote MNC practices? Data related to PGs is presented first, followed by CCCs and PIs and then promotion of MNC.

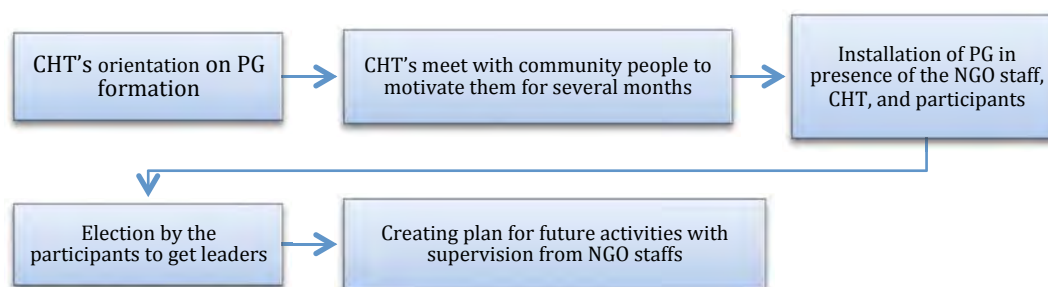
Primary Groups (PG)

PG formation. NGO staff and community health trainers (CHT) were the primary “external” element in the basic scheme of building a People’s Institution (Figure 3). The CHT spends months talking to people in the community, expressing the need and utility of forming a Primary Group (PG), explaining the vision to women and men, and mobilizing group formation, selection of leaders, and planning activities for the group. The process was arduous and required a lot of patience. The initial activity of group formation was finding the right persons who were motivated enough to deposit a nominal amount of money weekly and had a vision of doing well for themselves as well as the community. One of the CHTs in Kendua reported that she worked for three months and was able to identify 13 potential members.

NGO staff provided the organizational know-how and oriented the potential group members on the activities, goals, and objectives of forming the group.

PG membership criteria and leadership. Group members indicated that membership criteria included being a married female of reproductive age (15-49 years). Groups indicated that they decided who was poor and could join the group, income was not mentioned as a criterion. Groups were comprised primarily of uneducated poor women who could not write their names, so groups intentionally included educated 'elite' members who could read, write and calculate money deposits to serve in leadership roles. Groups stated, "she can read and write and understand all... she helps us to understand things and keeps linkage with everyone in our society." Overtime, education became a criterion for the selection of the president, cashier and secretary.

Figure 3. The process of PG formation as related by informants



PG trust and social cohesion. The development of trust and unity of vision (social cohesion) among members was reported as important for groups to function, especially related to management of EHF accounts and health savings bank accounts. Initially saving money was a technical problem, the women did not know how to do it and did not trust each other or the banks, but eventually they and their husbands developed confidence in savings and were reaping benefits. Mistrust was also initially present related to uncertainty about the NGO intent in setting up groups, lack of clarity about PG's objectives and plans, confusion about individual roles and responsibilities. Jointly working through these conflicts as they emerged helped strengthen group bonds. By endline, groups demonstrated trust and the ability to resolve problems that they arose, understood that groups function for their own benefit, and showed commitment to working together for positive community change.

PG goals and activities/EHF and savings. Primary groups stated their main task was to reduce maternal and child mortality in their area. Most of the PGs had regular weekly meetings that were facilitated by the PG leader. Initially, groups developed mechanisms for collecting regular deposits and calculating the deposited amount, and decided financial matters such as providing loans, how to collect and distribute EHF money, and where to spend money. As groups matured, they worked on creating health guidelines, flipcharts, and books that they discussed during their weekly meetings. The PGs engaged with union-level CCCs, and although all PGs were able to talk knowledgeably about the CCC, involvement with CCCs was not uniform across all groups.

Savings was the most important motivation to PG members. Each deposited BDT 2 (USD .03) per week for the EHF and BDT 5-10 (USD .03-.13) per week for the group health savings account. The poor women earned taka for these deposits by selling vegetables grown in their yard, sewing, poultry, or accumulating a handful of rice every day. They were required to deposit funds to the EHF weekly to remain in the group and were expected to deposit to the health savings account as well. Upon approval of the group, members who deposited to the saving account could take a zero to .04% loan from their PG for IGA, such as rickshaw van, shop, nursery, poultry, animals, pond or land property, to enhance the welfare of their families. Loans from the EHF were interest free and for all mothers and children from the community requiring emergency care. The cashier kept the financial records for the group. A PG member explained the mechanisms of using EHF accounts and linking with government hospitals, "Each of us

gives 2 taka which constitute 50 taka per month... we deposit this money in the emergency fund. If the pregnant mother faces any trouble, if the newborn is in bad health, we take them to the hospital with this money. We call the van or person to accompany her. We have the referral slip with us and write the name of the patient and her husband's name on it. We take that with us and show that to the doctor. Then, they find that this patient is from SUSOMA and provide emergency treatment. They help us, otherwise, they don't."

CHV/TTBA training and roles. The CHVs received training in MNC in batches of 16-22 participants from the implementing NGO staff. Attendance and compliance to this training was high. A CHV related that at her 5-day training she learned how to counsel the pregnant mother regarding diet and activity, complications and ANC, weighing and wrapping newborns, breastfeeding, handwashing, identifying danger signs, referrals, and maintaining MNC registries. CHVs also received training on PG formation. A PG related that a CHV contributed to their group coming together by telling them, *"You should form a PG and deposit 10 taka or 5 taka. This is to keep our health better. If we have money, that money will be used for the pregnant mother to take her (to the hospital)." This is the reason for our creating this group."*

TTBAs also received MNC training and maintained linkages with the health system. They visited households and delivered MNC health promotion to all the mothers in the catchment area. They encouraged 4 ANC checkups, identified danger signs of pregnant mother, sent mothers to the hospital for any danger sign, and enhanced patients' communication with the doctor. One TTBA related, *"After training now I can understand easily what is good and what will be bad for a patient, and if I see any problem I say to them, 'take her to the hospital', they listen to me."* TTBAs also identified neonatal danger signs, encouraged giving colostrum to the newborn, and assisted health personnel with MNC. TTBAs found that their lives had changed since they joined the groups in terms of knowledge, relationships with people and new linkages with elites and government officials, who respected them and met regularly with them. One of the TTBAs stated that there are changes in the society as well after commencing the PI groups, *"Mothers died, babies died previously...any woman might have 5 to 10 children... nowadays they have 2 or 3... the mother in labor died before as soon as she delivered... now you won't find any mother dying even if you search thoroughly... none of the newborns die now...very few babies are born with weight less than 3 kilo... mothers go to the hospital as they understand that delivery at hospital would ensure good health for the mother and the baby... isn't that a change that happen after they got the message?"*

ISP training and roles. The PGs and CHV/TTBAs engaged with ISPs (village doctors). Many ISPs were trained by the project; however, most in the qualitative process evaluation sample were not. One ISP had a good connection with the CHT, CHV/ TTBA, knew PG members from the same locality and was willing to help people in need. Another ISP trained by the project stated that he had referred nearly 100 patients with MNH problems to the district hospital in Netrokona. All ISPs said that the CHT visited and informed them about MNH regularly and also provided referral slips. One advised that more programs on awareness building should be initiated to get a good result on MNH and to include the religious leaders in disseminating information after Jumma (Islamic Friday prayers).

PG linkages with government. Since the beginning PGs were highly appreciated by local leaders and the support PGs received from others encouraged group members to further concentrate on their activities. The PGs met monthly with their implementing NGO and government health staff at the union level. At these meetings they shared about group activities and discussed MCH, nutrition and food practices. PG members helped the GOB by informing communities about health clinics, assisting with immunizations and hand washing programs, sharing pregnant mother and newborn HMIS lists, and providing health facility referrals and support. Government health staff invited PG leaders to join in meetings with elites where information provided by the PGs influenced decision-making and plan development of the GOB. A PG related, *"In upazila and district level we are respected, our list and our information helps the government."* PGs received donations from government officials and elites of blood pressure machines and scales for the clinics, and contributions to EHF and a clinic management fund.

PG Capacity. During the project, members developed knowledge and skills in MCH, what to do in emergencies, management and leadership of a group, financial management, record keeping, and group processes. Most members gained capacity to work independently over the years and confidence to run

the PG without NGO assistance, saying, “Yes, we are *capable*, we *can*.” As groups, they were committed to helping communities with EHF, were becoming more knowledgeable on MNC topics, were praised by family members and community people, and were satisfied with their activities saying, “*This is not mere wastage of time... we are helping the pregnant mothers and the children... this is our reason to be happy.*” They reported that collectively groups were able to have discussions and make decisions, learn and share ideas, and save and help others. They expressed wanting to share about their activities and ideas at meetings with community people, “*We need to share about our group activities with community peoples, we need to arrange a large monthly meeting...*”

PG non-member perspective. Non-members reported that, although the groups were engaged in monetary matters, they also dealt with issues of MNCH emergencies, health education, compilation of information on pregnant mothers, identification and their regular health check-ups, and other health needs. They indicated that the CHV provided regular visits to the mothers and provided booklets to the mothers so that they can take better care for their health. They stated that due to this group the general consciousness regarding maternal health had increased in their community.

Central Coordinating Committee (CCC) and Peoples’ Institution (PI)

CCC formation. Data from NGO leaders and PGs indicated that, as groups developed the CHT proposed that all PGs elect two representatives to form the union-level CCC. A meeting was held, officers elected, and BDT 10 deposited by each member. The monthly meeting observed by the qualitative research team opened with recitation from the Holy Qur’an, introductions and sign-in, calculation of money deposited, discussion of MNC health topics, and reports by the health, communication, leadership and finance sub-teams. The CHT was present to assist the president in learning their role and to help facilitate group process. Resolutions made were recorded and only passed if all members agreed. Planning for community service, such as purchase of emergency vans, began in the CCC.

PI formation and leadership. The PIs formed after the CCCs were established, when up to five representatives from each of the CCCs from all the ‘feeder’ unions came together for the election of officers. The PI, which is the top level in the PI model, worked to reduce maternal newborn deaths, monitored activities of the PGs, provided special assistance for high risk situations, and deposited BDT 10 in PI savings. The qualitative research team noted that in the PI they observed, “*none of the PI members are now poor,*” but most were illiterate and all were less than 50 years of age. Committee secretaries were elected based on their qualifications, all members participated in the meeting, and decisions were made when all members agreed. The group had a bank account and was preparing for sustainability. The four PIs active at endline had good linkages with the public health system and other local government offices. They were buying land for their offices. They reported being confident that they would be able to continue without the NGO cooperation.

Leadership development was one of the primary outcomes of the PI model. PI leadership criteria focused on being committed and having time to accomplish activities, being trustworthy and of good character. Leaders were volunteers trained to manage groups of 15-20 members, to lead discussions and solve problems. Although members of the groups were poor and illiterate, by learning to take care of group property and manage group activities they became more confident, honest, responsible and knowledgeable, and were taking over from the rich as community leaders. Motivation for the voluntary work was 3-fold: to get respect from other community members, fulfill one’s responsibility to society, and please God with their good will.

Mobilization strategies. Members from the community formed the women’s PGs and men’s PGs (which were added in year 3 of the 5-year project), the CCC was developed from the participation of two representatives from all the PGs, and representatives from CCC formed the PI. Strategies used by the implementing NGOs to mobilize PI groups included: a) helping them make a strategic plan and set targets, b) developing a list of all possible trainings, sign community people up and provide the training, c) networking with local government to learn more about the on-going activities, improve health facility access, create lists of facilities, stakeholders and local resources, and apply for registration as a GOB

social service agency. Each PI was subdivided into several committees, such as, health committee, education committee, and financial committee that focused on management of different activities, namely, how to manage health-related emergencies, educational arrangements for poor, to whom loans should be given, and how to manage financial activities. The PI coordinated capacity building efforts of the PI model groups and provided direction to the committees. A NGO manager explained that their goal with the PIs was to ensure the empowerment of women and the increase in social capital and reduction in poverty among the poor.

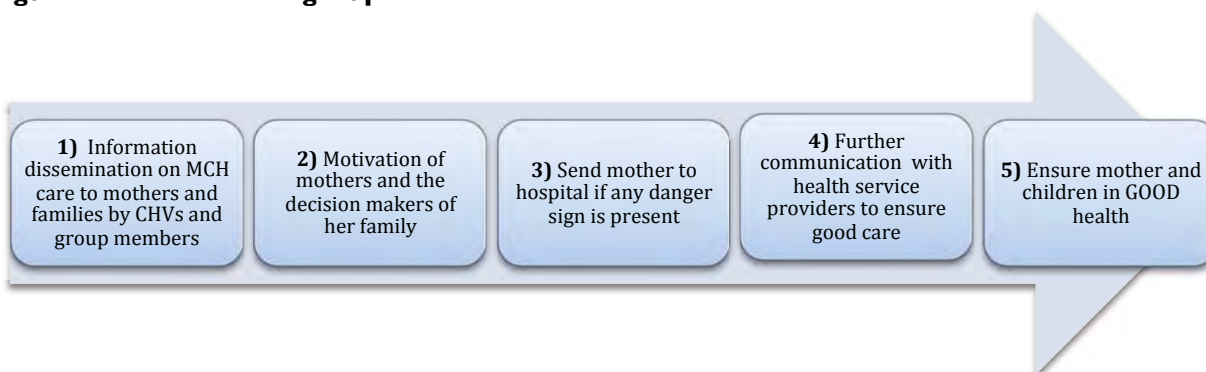
CCC/PI group functioning. The CCC and PI met monthly, each with 20 participants, 11 which were members of the steering committee. NGO participation in the groups was for financial decision-making, leadership development and measurement of capacity. The PIs were taught to measure their capacity in human resources, financial stability, leadership management, networking, legality, and gender equity with a 6-indicator PI Capacity Indicator scale (PICI). The PGs used a brief Organization Capacity Indicator tool (OCI). Collective actions of the community members were done for societal good. PI model groups worked for road and bridge construction, health emergencies, donation of warm clothes and food during winter, and worked against early marriage. An NGO staff gave an example of their initiative, stating, “suppose, one of the roads is broken... everyone was thinking that government will reconstruct the road... however, members from our CCC found that this would not be carried on... the community start collecting 2 taka from everyone to create a small bridge made of bamboo to cross this river... they dig the soil and put in the road...”

PI linkages with government. After successful formation of the PIs good relationships were established between PI groups and local GOB/NGO officials, who gave donations from them several times, including: The Ministry of Child and Women’s Affairs donated a total of BDT 900,000 (USD 11,800) to a PI from which a member can take a loan of BDT 10,000 (USD 128). The implementing NGOs donated decoration sets for event management (plates, glass, spoon, mike and so on) worth a total of BDT 412,000 (USD 5,301) that they can use for earning money.

Promotion of MNC

Involvement in MNC. NGO leaders and PI model group members indicated that the four PIs were playing important roles in improving maternal care and reducing maternal and newborn deaths by assisting in sending patients to the hospitals and helping them to get timely care through improved connections with local elites, as depicted in Figure 4. These benefits were accessible to all community members.

Figure 4. PI model group’s involvement in maternal newborn health care-seeking



The PI members reported getting directly involved in helping mothers and newborns with accessing emergency care. They gave an example of the PI president going to a home to convince the mother-in-law that bleeding in the seventh month of pregnancy was abnormal and required hospital care. The PIs directly taught families the importance of getting care when maternal and newborn danger signs were present, gave families referrals to insure they will be seen when they get to the health facility, and gave them interest free loan from the EHF to pay for the care. The loan was repaid in small installments over a long period of time. When problems arose with access, such as being denied care at the regional

hospital, the PI president called the resident medical officer who then provided care. PI members also explained that their quarterly meetings at the district level with MOHFW service providers created linkages and helped in reducing the refusal of patients. These PPP meetings were explained by NGO staff: “Two representatives from each PI join the Upazila Technical Meeting where other participants are upazila health and family planning officer (chairperson), UFPO (co-chairperson), the NGO health coordinator (secretary) and other respectable guests. Here the PI members represent their community. They also have regular meeting with the chairmen. In the district level, the PI members and the CHVs join the meeting. The public health staff didn’t give them any value before, however, it is different now. They are well respected there.”

Barriers to MNC. The challenges community and NGO informants faced in seeking health care from public health services early in the project and the status at the end of the project when the PI model groups were formed and functioning are presented in Table 5.

Table 5. Comparison of reported barriers in healthcare seeking 2011-2012 versus 2014 (Qualitative Process Evaluation)

Barrier	2011-12	2014
Knowledge health problems	Present in one, absent in other upazila.	Improved.
Inability to make care-seeking decisions	Present in almost all areas.	Present in small scale.
Health care provider behavior and availability	Not always welcoming, some did not care for patients with severe cases, absent health care providers even during duty time.	Mostly welcoming. Strong connection established between the health service providers and the PI leaderships.
Distance to care and lack of transportation	Worked as a demotivating factor and very few went to hospital.	Use emergency fund to take to the hospital whatever the distance is.
Cost of treatment (BDT 20)	People borrow (with interest) from different sources or sell properties, very few uses emergency fund.	Emergency fund used by members and non-members to get health care. Money provided as loan without interest and paid back in small installments over long period.
Communication with CC	Absent	Present.
Communication with elites	Present in upazila with early PI groups, present in small scale in other upazila.	Interpersonal and working relationships established with local elites and public health service providers.
Family member’s disapproval	Present in almost all areas.	Present in small scale.

Exploration of the degree of change in social capital in PI model implementation is presented by examining data from the investigation of social capital. Information presented below is a summary of findings from the investigation of social capital found in the 2014 icddr,b Final Operations Research Qualitative And Social Capital Study Report (SUSOMA Final Evaluation Report, Annex XIXe, pg. 57-86). Data from this intervention-group only sample provide results that inform the social capital related research questions (Table 6).

Table 6: Summary social capital investigation indicators, 2012 and 2014 (Social Capital Survey)

Social Capital Indicator	2012 n=335	2014 n=310
Degree of PI Model implementation		
Member of any group or organization	65.4%	63.9%
PI model group most important group to their household	62.5%	74.8%
Function as a leader in their group	10.5%	19.2%
Structural social capital		
Leadership/decision-making:		
-group leaders effective	96%	98.5%
-leaders make decisions with group input	12.3%	36.9%
-group members hold discussion and decide together	74.9%	59.6%

Social Capital Indicator	2012 n=335	2014 n=310
Social support/political networks:		
Who would work together to deal with a village-level problem?		
-each household individually	20.6%	88.1%
-neighbors among themselves	6.3%	9.0%
-municipal leaders	33.7%	6.5%
-entire village	29.2%	8.1%
Who would decide on a village-level development project		
-community leaders	38.5%	23.6%
-whole village	61.5%	76.5%
Collective action		
-joined with others to address a common issue	45.9%	63.6%
-success when jointly petition officials with development goals	43.2%	87.6%
-made personal contact with an influential person (advocacy)	44.2%	51%
-actively participated in an election campaign	35.5%	43.2%
Community-level conflict:		
-differences in community likely to cause trouble	13.7%	31%
-problems likely to lead to violence	30.4%	56.3%
-problems worked-out by the people themselves	32.6%	68.8%
-problems worked-out with help of neighbors	37%	62.5%
-problems worked-out with help of community leaders	76.1%	36.5%
Service access:		
-denied or limited access to health services	19.4%	45.5%
-denied or limited access to credit	17.3%	44.5%
-denied or limited access to justice/conflict resolution	26.6%	40.3%
Cognitive social capital		
Solidarity in time of personal crisis:		
-turn to family for assistance	33.8%	90.3%
-turn to neighbors for assistance	43.6%	5.5%
Trust:		
-trust each other in lending and borrowing	93.1%	95.5%
-believe interpersonal level of trust has gotten better last few years	39.7%	52.3%
-believe that most village people are basically honest & trustworthy	37%	52.3%
Conflict resolution:		
-believe their community is peaceful	89.8%	96.1%
-believe their community has less conflict than other communities	73.4%	73.2%
-believes neighbors will help resolve interpersonal disputes that occur	58.2%	59.4%
Social capital scale score (2012 and 2014 scales not comparable)		
Mean non-member social capital scale score	4.9	10.0
Mean member social capital scale score	8.22	15.35
Relationship between social capital and membership status in 2012 & 2014	p≤0.01	p≤0.01

What is the degree of implementation of the PI model? In 2014, two-thirds of household social capital questionnaire respondents indicated that they were members of a group, one-fifth considered themselves to be group leaders, and three-quarters reported that the PI model groups were the most important group for their household. Over time groups were increasingly heterogeneous in terms of religion (83.6% Muslim in 2012 vs. 70.7% in 2014), gender (93.6% vs. 90.9% female), political perspective (17.8% vs. 14.7% with same viewpoint), occupation (68.5 vs. 33.3 with same occupation), and educational level (13.2% vs. 11.1% from same level).

What are the structural social capital characteristics of intervention group PG members? PI group members overwhelmingly considered their leaders to be effective. By 2014, one-third relied on their leaders to decide issues while two-thirds related holding group discussions and deciding matters together. In terms of collective action, respondents expressed decreased reliance on municipal leaders to work out village-level problems and increasingly thought the whole village would be called to make a decision on a village-level development project. They reported greater joining together with others to address a common issue and more success when they jointly petitioned officials. In addition, respondents increasingly voted in elections (88.5% to 92.3%), made a personal contact with an influential person

(44.2% to 51%), actively participated in an election campaign (35.5% to 43.2%), talked with other people in their area (51.3% to 56.1%) and made a monetary donation (59.7% to 61.9%). They considered the spirit of participation in their village to be moderately to very high (78% in 2012, 50% in 2014).

Assessment of sources of conflict in the intervention communities reveals that throughout the intervention period 50% or more of the issues that divided villages were attributed to differences in education, wealth, landholdings, and social status. By 2014, additional differences were acknowledged that included gender (29% to 62%), age (38.2% to 63.2%), political party affiliation (68.9% to 79.4%), religious beliefs (10.8% to 58.9%) and ethnic background (8.9% to 59.4%). The differences experienced were viewed as more likely to cause trouble and lead to violence, which was increasingly worked out between themselves with the help of others. By 2014, respondents reported that individuals, households and community members more often were denied or had limited opportunity to use the following services: health services (19.4% to 45.5%), job training and employment (14.9% to 26.5%), credit (17.3% to 44.5%), agricultural extension (18.5% to 30%), and justice/conflict resolution (26.6% to 40.3%).

What are the cognitive social capital characteristics of intervention group PG members? In dealing with a crisis, such a father's sudden death, the respondents increasingly indicated villagers would turn to family for help with less importance placed over time on neighbors for assistance. The same trend was reported for getting help for an economic loss, such as a crop failure, that required financial assistance (family 33.4% to 84.9%, neighbors 33.1% to 10.7%). Over 95% of informants in 2012 and 2014 indicated that they trusted each other in lending and borrowing, and the level of trust had gotten better during this time period. A greater percentage over time agreed that most people in the village were basically honest and trustworthy. Respondents believed their communities were peaceful and had less conflict than others. When serious conflicts emerged between two people, they consistently indicated reliance on neighbors to help resolve the dispute as opposed to the persons working it out among themselves (4.9% to 7.4%).

Is membership in a PI associated with higher levels of social capital at endline when compared with non-member levels of social capital in the intervention group? Analysis of the social capital scales created from the social capital tool, which differed in 2012 and 2104, focused on the relationship between social capital and PI group membership status. There was a significant relationship ($p \leq 0.001$) between social capital and group membership status in 2012 (mean member 8.22, non-member 4.92) and also in 2014 (mean member 15.35 and non-member 9.99).

Is an increase in social capital linked with improved health outcomes? Because the social capital study utilized intervention group only data drawn from different baseline and endline population samples, there is no quantitative comparison to examine the link between increased capital and outcomes.

Exploration of whether the PI model is more capable than the status quo of increasing health outcomes and health equity is assessed through analysis of intervention and comparison group KPC survey data found in the baseline and final KPC Reports (SUSOMA Final Evaluation Report, Annex VI) with significance tests of the change between groups from 2010 to 2014. The intervention group only RHFA data from 2009 and 2014 (SUSOMA Final Evaluation Report, Annex XIXa) provides additional information regarding these variables. The research questions are answered below, with data presented in tables 7, 8, and 9. The percentage change and confidence interval data for all variables is in Annex B.

Is the PI model more capable than the status quo of increasing care-seeking and utilization of MNC services? (Table 7). Between 2010 and 2014, there was a significantly greater percentage increase ($p \leq 0.05$) in the intervention than in the comparison group in receipt of four or more ANC visits from a medically trained provider, institutional deliveries, and in deliveries assisted by CSBAs, which are primarily skilled home deliveries. By endline, institutional and CBSA-assisted skilled deliveries accounted for 41% of all deliveries in the intervention group and 30% in the comparison group. There was a significantly greater percentage increase ($p \leq 0.05$) in the intervention group than in the comparison group in the number of newborns and mothers that received post-partum care from an appropriate trained health worker

within two days after birth, in care-seeking from a qualified provider for all reported antenatal and postpartum complications, and in appropriate care-seeking for pneumonia. Care-seeking for delivery complications saw a decline in both the intervention and comparison groups.

Is the PI model more capable than the status quo of increasing MNH practices? (Table 7). Although the use of a modern contraceptive by mothers increased significantly ($p \leq 0.05$) in both groups between 2010 and 2014, there was no difference between groups in the percentage change during this period. Data regarding delivery practices indicate reported high levels of clean cord cutting ($\leq 95\%$) in both intervention and comparison areas in both 2010 and 2014. During this period, there was a significantly greater percentage increase ($p \leq 0.05$) in the intervention group in use of clean birth kits by women during home deliveries, in thermal care /immediate drying and wrapping of the newborn, and in delayed bathing.

Table 7: Percentage change in utilization, care-seeking, MNCH practices, intervention vs. comparison groups, 2010 to 2014 (KPC Survey)

Indicator value							
Indicators	Intervention			Comparison			p ≤0.05
	2010 %	2014 %	% change	2010 %	2014 %	% change	*
Antenatal care	5.3	13.6	157%	5.6	5.8	3%	*
Tetanus toxoid	86.9	80.2	-7.7%	82.3	77.8	-5.5%	
Skilled birth attendant	9.3	21.5	136%	12.9	15.6	2%	*
Institutional delivery	8.0	19.3	143%	9.9	14.8	49%	*
PNC-newborn	7.9	18.7	132%	10.7	15.0	39.2%	*
PNC-maternal	8.6	18.5	114%	11.1	15.2	36.3%	*
Contraceptive use	49.3	71.0	44%	44.3	64.1	44.6%	
Exclusive breastfeeding	47.2	52.9	12%	49.0	41.7	-14.8%	*
ORT use	73.7	85.0	15.3%	49.6	85.9	73.1%	*
Point of use (POU)	1.8	4.6	163%	5.7	9.7	71.6%	*
Hand washing practices	21.6	39.3	82.2%	31.6	15.7	-50.3%	*
Care-seeking for:							
-pneumonia	22.3	32.6	46.2%	18.5	16.8	-9.4%	*
-ANC complications	26.4	37.6	42.4%	24.4	27.4	12.3%	*
-delivery complications	43.0	40.0	-6.3	29.5	22.5	-23.7%	
-PNC complications	29.3	43.4	48.1%	30.4	23.1	-24%	*
Clean cord cutting	98.4	94.6	-3.8	95.8	96.2	4.1%	
Use of clean birth kit	4.2	32.0	663%	17.3	29	67.5%	*
Thermal care newborn	9.5	40.2	334%	21.7	36.6	68.9%	*
Delayed bathing	22.7	46.3	104%	34.6	58.8	70.1%	*
Immediate breastfeeding	52.8	77.6	46.9%	53.0	76.4	44.1%	
No pre-lacteal feeds	59.3	81.6	37.6%	56.5	79.5	40.8%	
Quality of ANC	0.4	4.9	1116%	1.5	1.0	-36.2%	*
AMTSL	0.9	3.6	300%	1.5	2.3	53.3%	*
Essential newborn care	0.9	12.7	1315%	4.8	13.6	183%	*

Data regarding breastfeeding show a significantly greater percentage increase ($p \leq 0.05$) in the intervention versus the comparison group in exclusive breastfeeding of infants 0-5 months with comparable gains across groups in immediate breast-feeding after birth and in children age 0-23 months

not receiving pre-lacteal feeds.

While ORT use for diarrhea increased significantly ($p \leq 0.05$) in both groups between 2010 and 2014 the increase in the comparison group during this period was significantly greater than that in the intervention group. In addition, there was a significantly greater percentage increase ($p \leq 0.05$) the intervention group compared with the comparison group in the number of households with children age 0-23 months that treat water effectively and in households with soap at the place for handwashing.

Is the PI model more capable than the status quo of increasing the quality and availability of MNC health services? This question is answered with data from the 2010 and 2014 KPC surveys (Table 7) and the intervention-group only 2009 and 2014 RHFA (Tables 8).

Quality of maternal newborn care (Table 8). Significantly greater percentage increases ($p \leq 0.05$) occurred in the intervention versus the comparison group in terms of quality of ANC, active management of the third stage of labor (AMTSL), and receipt of essential newborn care (ENC) during home delivery. Changes in the comparison group were significantly less for each of these indicators.

Availability of maternal neonatal and child health care in the intervention area (Table 8). From 2009 to 2014, the number of facilities in the intervention area offering greater maternal newborn and child services availability increased 28%. In 2009 there were 55 Community Clinics (CCs) at the ward level of which 48 were open but which RHFA data collectors found without staff or patients. In 2014, there were 60 CCs, all of which were open, staffed, and providing care. In addition, 27 FWC and RDs (20 at baseline) were operating at the union level.

Table 8. Percentage change in MNC and child health service and quality in health facilities, intervention area, 2009 and 2014 (RHFA)

Sevice and quality indicator	2009	2014	% change	Service and quality indicator	2009	2014	% change
Number of clinics open	68	87	28%	Community health worker referral	38%	80%	111%
ANC available 4+x per month	60%	90%	50%	Availability neonatal drugs	17%	22%	29%
Institutional delivery available daily	3%	17%	467%	Availability neonatal supplies	9%	22%	144%
Availability of sick care	60%	100%	67%	Availability ANC drugs	19%	22%	16%
Availability of growth monitoring	7%	20%	186%	Availability ANC supplies	9%	28%	211%
Appropriate child diagnosis/treatment	23%	53%	130%	Availability essential child care supplies	34%	66%	94%
Annualized number of ANC visits/facility	51	236	363%	Availability first line child health drugs	39%	63%	62%
Annualized number U5 sick child visits visits/facility	508	606	19%	MNC information system	14%	38%	171%
Staff training MNC past 12 months	3%	53%	1667%	Available MNC laboratory	15%	32%	113%
Staff training in child health past 12 months	37%	87%	135%	Available child health laboratory	7%	10%	43%
Staff supervision in past 12 months	7%	51%	629%	Infection control-gloves	30%	60%	100%
Availability care guidelines	7%	21%	200%	Infection control-soap for handwashing	57%	93%	63%
Facility-community collaboration	73%	90%	23%	Infrastructure (latrine/water/privacy)	13%	27%	108%

Between 2009 and 2014, facilities offering ANC service at least four times per month increased 50%. There was a 95% increase in the average ANC days per month per facility (10 to 19.5 days), and the annualized number of ANC visits increased 363%. In 2009, daily delivery services were only offered by an Upazila Health Complex (UHC) and this increased by 2014 to include two HWCs, one CC, and a private clinic (467% change). Facilities offering under-5 sick child care had a 67% increase, growth monitoring a 186% increase, and children receiving appropriate diagnosis/treatment a 130% increase. The annualized number of sick child visits increased 19%.

During the same period, there was an 1667% increase in the numbers of staff trained in MNC in the past 12 months, a 135% increase in staff trained in child health, a 200% gain in the availability of care guidelines in clinics, a 629% improvement in supportive supervision of health workers, and a 111% increase in facilities that received referrals from community health workers. In addition, facility-community collaboration levels saw a 23% improvement by endline, with 90% of facilities having management committee meeting discussions (70% baseline), 77% engaging with the CHW/TTBA (57% baseline), and 53% changing health worker behavior based on community feedback (60% baseline). Table 8 also depicts improvements that occurred between 2009 and 2014 in availability of neonatal, ANC, and child health drugs and supplies, MNC information systems, laboratory services, hand soap and gloves, and in the facility infrastructure.

Is the PI model more capable than the status quo of creating more equitable MNC and health outcomes? This question is addressed with a comparison of health equity between the highest and lowest wealth quintiles in the intervention versus comparison groups utilizing rich-to-poor ratio[‡] data from relevant 2010 and 2014 KPC survey rapid CATCH variables (Table 9). The wealth quintile data is in Annex B.

Table 9. Percentage change in rich-to-poor ratio for outcome indicators, intervention and comparison groups, 2010 to 2014 (KPC Survey)

Indicators	Rich to poor ratio						
	Intervention			Comparison			p ≤0.05
	2010 %	2014 %	% change	2010 %	2014 %	% change	*
Antenatal care	3.0	3.6	20%	33.7	3.7	-89%	*
Skilled birth attendant	12.9	3.4	-73.6%	7.2	2.9	148%	*
Institutional delivery	23.6	3.6	-84.7%	13.5	2.9	-78.5%	
PNC-newborn	23.8	5.1	-78.5%	9.1	2.2	-56.8%	*
PNC-maternal	24.4	3.6	-85.2%	11.2	2.8	-75%	*
Contraceptive use	1.3	1.2	-7.7%	2.0	1.2	-40%	*
Exclusive breastfeeding	0.9	1.1	22.2%	0.8	0.9	12.5%	*
ORT use	1.3	1.0	23.1%	0.8	1.2	50%	*
Point of use (POU)	1.4	1.3	-7.1%	2.2	3.4	54.5%	*
Hand washing practices	2.3	2.5	8.7%	2.7	3.9	44.4%	*
Care-seeking for pneumonia	1.7	1.9	11.8%	2.2	1.1	-50%	*

Significant ($p \leq 0.05$) variations were present in the rich-to-poor ratios between the intervention and comparison areas that illuminate changes in equity that occurred between 2010 and 2014. There was a significantly greater percentage decrease ($p \leq 0.05$) in the intervention versus the comparison group in the rich-to-poor ratio for births attended by a skilled birth attendant, newborn and maternal postpartum visits, and households that treat water effectively (POU). In addition, the equity gap for ORT use and appropriate handwashing practices increased at a slower rate in the intervention than the comparison group. The equity gap in the intervention group decreased the most for institutional delivery (-84.7% change), however, the decrease was non-significant because of substantial decreases that also occurred in the comparison group (-78.5% change).

Although the rich-to-poor ratio for current contraceptive use decreased somewhat in the intervention group, there was a significantly greater ($p \leq 0.05$) reduction in the comparison group. The rich-to-poor

[‡] A decrease in the rich-to-poor ratio indicates a decrease in disparity between the highest and lowest wealth quintiles and an increase in equity for the variable under consideration.

ratio for four or more ANC and care-seeking for pneumonia increased in the intervention group, while there was a significant reduction ($p \leq 0.05$) in the comparison group for these indicators. The rich-to-poor ratio increase for exclusive breastfeeding in the intervention group was double that in the comparison group.

In the intervention group, increases in ANC visits occurred in all age, educational, and wealth quintile categories (Final KPC Report, Annex 3). All wealth quintiles at least doubled in the number of women receiving four-or-more ANC. For institutional and CSBA-assisted deliveries, there were greater increases for women in the lower poor quintiles than those in the upper richer quintiles with the greatest gains in the intervention group. Improvements in post-partum visits were greatest in the lower as compared with the higher wealth quintiles with greater change in the intervention group. The lowest quintile in the intervention group had 5-fold and 7-fold gains against the highest quintiles for newborn and maternal post-partum visits, respectively, versus 4-fold gains in the comparison group.

Is the PI model more capable than the status quo in reducing and creating equity in MNC cost? Exploration of MNC costs and equity in health expenditures considers data from the 2010 and 2014 KPC surveys related to direct out-of-pocket (OOP) expenditures incurred by mothers in securing antenatal, delivery, and postnatal care for a pregnancy in the year preceding data collection, as well as care for pregnancy complications and illnesses in their children under the age of two. Table 10 presents the data in USD (US Dollars), Annex B presents the data in BDT (Bangladesh Taka).

Table 10: Percentage change in household out-of-pocket expenditures and rich-to-poor ratio for ANC, delivery, PNC, maternal complications and childhood illness, intervention and comparison groups, 2010 and 2014 (KPC Survey SUSOMA Final Evaluation Report, Annex VI)

Type	Average out-of-pocket expense USD (\$)							Rich to poor ratio						
	Intervention			Comparison			$p \leq 0.05$	Intervention			Comparison			$p \leq 0.05$
	2010	2014	% change	2010	2014	% change	*	2010	2014	% change	2010	2014	% change	*
Antenatal care														
	\$12	\$14.88	21.6%	\$14.30	\$14.01	-2.0%	*	6.4	4.8	-25%	7.4	2.5	-66.2%	*
Institutional delivery														
	\$114.34	\$149.13	30.4%	\$59.58	\$139.21	134%	*	3.3	1.6	-51.5%	2.7	1.8	-33.3%	
Home delivery														
	\$12.56	\$15.57	24%	\$10.28	\$12.87	25.2%		na*	1.5		1.0	2.5	150%	
Postnatal care														
	\$8.66	\$8.42	-2.8%	\$10.80	\$9.15	-15.3%	*	0.8	1.7	113%	10.6	0.7	-93.4%	*
Complications														
	\$8.08	\$4.64	-42.6%	\$22.66	\$5.54	-75.5%	*	2.1	2.4	14.3%	6.6	1.6	-75.8%	*
U2 child illness														
	\$1.51	\$1.94	28.5%	\$1.85	\$1.73	-6.5%	*	1.3	1.5	15.4%	1.4	2.0	42.9%	*

* Numbers not enough to make any comparisons

Significant ($p \leq 0.05$) variations were present between the intervention and comparison areas for OOP expenditures between 2010 and 2014. Reported OOP costs that increased significantly more in the intervention than the comparison group were for antenatal care and care for childhood illness for children under the age of two. OOP costs that had significantly less change in the intervention versus

the comparison group included expenditures for institutional delivery, postnatal care, and care for complications. In the intervention group, reported expenditures for all MNC increased slightly or stayed the same, except for care for complications that was cut in half. In the comparison group, reported expenditures for institutional delivery increased markedly while those for complications decreased markedly while the remaining costs increased slightly or stayed the same.

Significant ($p \leq 0.05$) variations were also present between the intervention and comparison areas in the rich-to-poor ratio, or equity gap, for OOP expenditures. Although the rich-to-poor ratio for ANC costs decreased in the intervention group, there were significantly greater ($p \leq 0.05$) decreases in the control group. While the rich-to-poor ratio increased for postnatal and complication care expenses in the intervention group, it decreased and had a significantly greater ($p \leq 0.05$) change in the control group. The equity gap for institutional delivery saw a greater but non-significant decrease in the intervention versus comparison group. The equity gap for care-seeking for childhood illnesses remained similar in intervention areas but increased in comparison areas.

Discussion/Recommendations

Main conclusions. The study confirmed that the PI model can be systematically and effectively established in poor rural underserved upazilas in Bangladesh to increase the social capital of poor marginalized women and empower them to work with government officials and health providers to improve household and community MNC and increase utilization of quality health services in hard-to-reach families and communities. The PI model intervention strengthened public-private partnerships thereby enhancing access to resources for marginalized households. It improved the MNC practices of poor mothers and families, increased the quality of MNCH services in their communities, and established an upazila-wide enabling environment to strengthen and sustain MNC gains.

Brief summary of evidence supporting main conclusions. PI model groups were effectively formed at the ward, union, and upazilla level by grassroots mobilization efforts of the implementing NGO who motivated the poor and marginalized women of reproductive age to form groups, establish trust, elect leaders, engage in group savings, and work together for MNCH. They trained and supported over 40,000 community members in 567 PI model groups (PGs, CCCs, PIs) to promote MNC practices in the community, and establish emergency health funds (EHFs) and health savings accounts. The groups were supported to form public-private partnerships in which PI group members worked together with government officials and local health providers to improve MNC and promote health. The groups had functioning joint referral and HMIS systems. A cadre of community health volunteers received MNC and IMCI training and promoted health knowledge and practices at household, community, and group levels in collaboration with local government health workers and ISPs/village doctors, who were also trained. In the process, the poor assumed community leadership roles alongside the rich. The PI groups assisted in sending patients to hospitals and helped them get timely care for complications via EHF loans, a referral system, and collaboration with established networks of health providers. They brought problems and needs of the people to their monthly/quarterly meetings with government health officials for mutual solution and action.

PI model groups were established in all villages in the intervention upazilas. Two-thirds of WRA in the social capital investigation sample were members of a group. Group mobilization focused on increasing the social capital in its members to facilitate group action for MNC. Reports from those engaged in PI model groups from 2012 to 2014, demonstrated enhanced structural social capital via involvement in PI model groups, group leadership, and decision-making. Their increased reliance on personal problem-solving abilities and in village-wide decision-making speaks to PI model empowerment of individual and group-level decision-making. PI group members were more likely to join together to work out problems with the help of others, such as government officials, health providers, and elites. Their increased petitioning of officials, contacting of influential persons, and participating in election campaigns speaks to the PI model emphasis on advocacy skill development. The finding that PI model group members

reported more problems accessing services generally may reflect a heightened awareness of their rights to services as well as the possibility that it may take greater than a two-year measurement window for perceptions of access to improve, despite the MNC improvements seen in the project period. Reports from PI group members also demonstrated cognitive social capital in terms of a stronger sense family solidarity in times of personal crisis, established levels of group trust in financial matters and overall, and the belief that their overall peaceful community was able to resolve interpersonal conflicts by themselves. The finding that members of PI groups had significantly ($p \leq .001$) higher levels of social capital than non-members in both 2012 and 2014 indicates that involvement in a PI group can lead to enhanced social cohesion, networking and values that facilitate collective action for community health benefits.

The PI model intervention shows promise of being more capable than existing approaches in increasing utilization of ANC, delivery, and PNC services and care-seeking for ANC/PNC complications and pneumonia. The PI model led to significantly better MNCH practices than the status quo in terms of greater levels of exclusive breastfeeding, use of clean birth kits, thermal care of the newborn, delayed bathing, safe drinking water and handwashing. Quality of MNC also had significant gains with the PI model versus the status quo in quality of ANC, delivery care (AMSTL) and essential newborn care. The finding that the intervention group had significantly greater gains than the comparison group's status quo in each of these areas points to the utility of the total package of the PI model intervention in achieving greater MNC outcomes.

The outcomes in which the intervention group had fewer or no gains than the status quo may reflect the effect of ongoing MNCH projects in the comparison upazilas, and/or a ceiling effect for these outcomes in these populations. ORT use increased statistically more in the comparison area, however, both groups were equivalent by endline. Immediate breastfeeding, no pre-lacteal feeds and contraceptive use increased equally to approximately 75% in both groups, and over 95% of all deliveries already practiced clean cord cutting at baseline. Although it is not clear why care-seeking for delivery complications declined in both groups, the intervention group decline was four times less than that in the comparison group.

Although quality of care outcome values remain low, the fact that care quality improved significantly with the PI model over the status quo between 2010 and 2014 may point toward the potential for further care improvement with ongoing PI model PPP synergies. This conclusion is supported by gains in MNC and child health service and quality that occurred in the intervention area health facilities during PI model implementation, such as more open and functioning clinics, greater use of referrals, more available MNCH services from trained supported skilled providers, greater availability of drugs/supplies/guidelines and laboratory services, and improved infection control practices and infrastructure.

The impact of the PI model intervention on OOP cost of care was variable and appears to be impacted by multiple factors. While MNC costs for most services increased in both PI model intervention and status quo groups, the finding that costs for institutional delivery, postnatal care, and care for complications had significantly less increase than the comparison group may reflect the intervention focus on preventive practices and appropriate early care-seeking for complications as well as the effect of the PI referral network and EHF's on cost efficiencies for this population. The significant increase in ANC costs associated with the PI model versus the status quo was due to the fact of a 363% increase in ANC visits/facility with many women making more ANC visits in the intervention area. Expenditures for home deliveries were markedly less than cost for institutional deliveries, and increased equally across groups indicating that home deliveries may have been more stable and manageable in terms of costs. The equity gap or ratio of costs of care for the lowest and highest wealth quintiles for ANC costs and institutional delivery decreased by a 25% and 50%, respectively, in the intervention group. However, because these decreases were not significantly greater than the status quo, the effect of the PI model on equity related to costs of care cannot be established and warrants further study. The significant increase in cost for child illness in the PI model versus the status quo may be a positive finding reflecting improved access to needed care made possible by the EHF mechanisms. Although the equity gap

increased for child illness costs, this may reflect the costs of increased care-seeking that were incurred in the poor intervention population and is significantly less than the broadening of the equity gap seen in the comparison group.

The PI model intervention showed promise of effectively narrowing the MNC equity gap. Involvement in the PI model groups and activities was associated with a significant reduction in health inequity versus the status quo. The equity gap narrowed as significantly more women in the lowest wealth quintile in the PI model area had SBA-attended births, newborn and maternal postpartum visits, and clean water than in the comparison area. The PI model area saw a lesser increase in inequities for ORT use and handwashing practices than the status quo due to PI model community-based health counseling. Despite the significant gains in four or more ANC visits associated with the PI model versus the status quo, the ANC equity gap for the PI model area did not narrow appreciably because the project engaged the whole community, both poor and wealthy elites, in intervention strategies and saw at least a doubling in ANC visits across all wealth quintiles. Similar gains were seen in care-seeking for pneumonia across wealth quintiles. The finding that the equity gap for institutional deliveries decreased substantially and equally for both the PI model and status quo does not diminish this PI model achievement, but points to possible influence of complementary district-wide initiatives promoting institutional deliveries. That the equity gap for contraceptive use and exclusive breastfeeding improved less in the PI model versus the status quo points to the need for additional efforts to promote these practices with poor and ultrapoor women in the PI model communities.

Mechanisms of the intervention that specifically contributed to the significant MNC gains associated with the PI model included: a) the established autonomously functioning 3-levels of PI groups that worked closely with government officials and health providers at ward, union, upazilla and district levels to monitor and advocate for equitable MNC for all; b) the cadre of trained community health workers (CHVs/TTBAs) delivering MNC at household and community levels and linking with trained ISPs and government/private health workers with referrals to promote ANC, safe delivery, PNC, and care for complications and childhood illnesses; and c) the availability of funds, transportation and advocacy in every village for emergency care.

Study Limitations

- A limitation of this operations research is that it used different samples for the KPC and social capital studies and did not collect comparison data for the social capital study. Also, it was not possible to determine if there was a significant improvement in social capital scale scores from baseline to endline because, although the same data collection tools were used, different scales were constructed for each time period.
- This comprehensive mixed method study investigates the effects of a complex intervention in a remote rural area of Bangladesh. It was susceptible to difficulties from the beginning and may have been under-resourced. The study's coordinator/principle investigator moved from Bangladesh to Australia during year four of the project.
- The timing of the baseline qualitative evaluation study and social capital study was delayed such that the findings were not available until year three and four of the five year program. Interpretation of findings must take this into consideration. In addition, data from the endline assessments, which all occurred at project end, were not finalized until after the program final evaluation occurred.
- OOP costs were calculated by the total amount of money spent on the service instead of the cost per service (where the number of visits were used as the denominator). In the data presented, an increase in care use results in an increase in OOP costs. It might be better to calculate OOP costs by dividing the cost of care by the number of visits for each service.

Implications and Program Recommendations

Based on these findings and conclusions, the following recommendations are made:

1. That the PI model intervention receives ongoing support by GOB and NGOs and be consider for scale-up among marginalized communities with low health outcomes in Bangladesh that have government officials interested in improving MNC health services and outcomes.
2. That the duration of PI model intervention be longer than 5-years to sustain MNC behavior change and care-seeking from the formal health care sector. Although the project was able to achieve rapid uptake of the model in 2-years and achieve independently functioning PI groups by year five, incorporation of support mechanisms for group and PPP structures beyond 5-years could increase sustainability of the model and health gains.
3. That learnings from the PI model intervention be applied to the Community Clinic Support Groups of the GOB MOHFW that are actively working in the whole country in improving child and maternal health activities.
4. That continuing research and scholarship be conducted to enhance the impact and sustainability of the PI model in various settings.
5. That the international global health community adapt relevant PI model approaches to promoting MNC in their specific contexts.

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Annex A. Methods-Sampling, Data Collection, Analysis

Qualitative Process Evaluation (Source: Final Operations Research Qualitative And Social Capital Study Report, SUSOMA Final Evaluation Report Annex XIXe)

Methods. This section of the study explored and documented the dynamics of PGs, representation of marginalized in the PGs and its activities, nature of care seeking for maternal, neonatal and childhood illness and nature of community support system through a combination of several qualitative methods, namely, in-depth interview (IDI), Focus Group Discussion (FGD) and observation of events. The study was implemented in both Durgapur and Kendua. Participatory approaches, such as, social mapping were also used for identifying local resources, disenfranchised people, health care facilities visited and preferences. All the information was collected after getting participants' informed consent.

Sample. Procedure for qualitative sampling for process evaluation followed the standard purposive approach with in-depth interviews with member of PGs (22), non-members (22), TTBA (4), CHV (8); social mapping (11); organizational proofing (8); FGD with member (9), non-member (8); observation of CHV training (4), PG (4) and CC formation (4); in-depth interviews with implementing NGO managers and coordinators (8).

Interview guidelines and tools. A set of tools was developed for extracting desired information that were pretested and used for data collection. These consisted of a guideline for social mapping (conducted in selected sites), guideline for IDI and FGD (conducted with selected individuals and in selected sites) and organization profiling (administered to key-informants).

Data Collection, Entry, and Analysis. The research team visited randomly selected intervention areas for several times during the implementation period for data collection. First level visits for formative research were made as follows: Durgapur, June 2011 and November 2011; Kendua, August 2011 and November 2011. Second level visits were held in Durgapur and Kendua, January 2012; Kendua, June 2012; and third level visits took place in Durgapur and Kendua in March-April 2014; Netrokona and Dhaka: 30th June to 3rd July 2014. All the interviews and FGDs were transcribed. All observations and social mapping were reported as soon as the team returned from field. We performed content analysis of the qualitative data with a code list prepared and agreed on by the research team.

Investigation of Social Capital (Source: Final Operations Research Qualitative And Social Capital Study Report, SUSOMA Final Evaluation Report Annex XIXe)

Methods. A social capital measurement survey was done at baseline and endline.

Sample. The sampling techniques were the same for both baseline and endline social capital measurement. Inclusion criteria for the participants are, married women of reproductive age; reproductive age set in between 15-45; non-elite (belongs to lower socio-economic strata). Sample size was 300 to 360 from two sub-districts (i.e. Kendua and Durgapur) where 75 are members and 75 are non-members from both of the areas. 40 to 45 villages were randomly selected from a complete list of villages in the sub-districts; 2 members were randomly selected from each village; randomness was decided through spinning bottles.

Survey Questionnaire. Questionnaires were primarily an adaptation of the World Bank tools which were pretested in Amalpur in April 2012 and revised based on our findings from pretesting and interviews with various managers of the NGOs related to mature PIs. The same set of questionnaires were used in both the baseline and endline survey. The survey set used in the investigation of social capital consisted of a Household questionnaire (survey) and a Community questionnaire (administered to key-informants).

Data Collection, Entry, and Analysis. The social capital surveys were carried out from October to November 2012 (baseline) and from March to April, 2014 (endline). A total of 15 data collectors were recruited and trained to collect the SC survey data from 335 households during baseline and 310 during

endline using the household questionnaire. The community questionnaire was administered by field research officers (4) to 12 community elites during baseline and eight during endline. All the information was collected following participants' informed consent. Two field supervisors, who reported to two field research officers, monitored the data collection process and quality assurance of data. The Data Management Services System (DMSS) from icddr,b safeguarded entry of the data. After all these procedures, data was analyzed using STATA.

The following steps were followed for the development of the scale:

1. Recode dichotomous variables
2. Check for successful recoding
3. Reliability analysis – 1st round
4. Interpret the first round of reliability analysis
5. Reliability analysis – 2nd round (with reduced number of variables; during the baseline, this was 17 variables, while during the endline it was 35 variables)
6. Interpret the second round of reliability analysis
7. Create social capital scale and create bar charts

At the final stage a total of 17 variables were selected to construct the baseline social capital scale, while a total of 35 variables were selected to construct the endline social capital scale. To apply the scale, we examined the association between the social capital scale score and membership status. For more detail about scale development and testing is in the Final Operations Research Qualitative And Social Capital Study Report, SUSOMA Final Evaluation Report, Annex XIXe.

KPC survey sampling and data collection methods (Primary source: Final KPC Report, SUSOMA Final Evaluation Annex VI))

Methods. A pre-post quasi-experimental study design was used for the study in order to explore the effectiveness, equity and cost-effectiveness of the intervention package. A total forty clusters were selected for the study. Twenty clusters were from the two intervention upazilas, while the other 20 clusters were selected from two nearby upazilas with usual GOB services as comparison areas.

Indicator and respondents. The key indicators measured in the baseline, midline and endline KPC survey are provided below in Table A-I. The lists of indicators were prepared on the basis of rapid CATCH indicators. The measurement of these indicators required a population of under-2 children and women who had a birth outcome in the previous one year.

Table A- I. Sample size calculation for KPC survey

Indicator	Denominator or (target)	Recall period	Proportion in the comparison /baseline	Proportion in the intervention/ endline	Sample required for specific category per union/cluster (assuming 20% refusal)	# of HHs required per union/cluster to provide the required sample
% of newborn dried & wrapped by warm cloth immediately (-0-4 min)	Ch 0-5 months	last birth	4%	20%	4	76
% of newborn boys & girls received delayed bathing by 72 hours	Ch 0-5 months	last birth	16%	25%	25	529
Exclusive breastfeeding	Ch 0-5 months	Previous day	57%	71%	18	378
% of pregnant women who received at least 4 ANC services	Mothers children age 0-11 months	last birth	5%	20%	5	48

Indicator	Denominator or (target)	Recall period	Proportion in the comparison /baseline	Proportion in the intervention/ endline	Sample required for specific category per union/cluster (assuming 20% refusal)	# of HHs required per union/cluster to provide the required sample
% of pregnant women received at least 2 doses of Tetanus Toxoid	Mothers children age 0-11 months	last birth	70%	80%	29	287
Skilled attendant at delivery?	Mothers children age 0-11 months	last birth	13%	20%	35	346
% of mothers and newborns who received postnatal care within 2 days of delivery	Mothers children age 0-11 months	last birth	15%	25%	20	203
Vitamin A supplementation	9-23m	6m	66%	85%	8	66
Measles vaccine coverage	Ch 12-23 months		50%	75%	6	57
ORS for diarrhea	Ch 0-23 mos with diarrhoea last 2 wk	2 wks	64%	85%	80 under-2 children (7 children with diarrhoea)	378
% of children 0-23 months with suspected pneumonia taken for treatment to health facility/ medically trained provider	Ch 0-23m with fast breathing last 2 wk	2 wks	25%	50%	96 under-2 children (5 child with suspected pneumonia)	454
Recommended homemade fluid for diarrhea	Ch 0-23 mos with diarrhoea last 2 wk	2 wks	12%	40%	27	126
% of <5 years old children < 2 z weight for age	Ch 0-23m		31%	25%	83	391
Current contraceptive use among mother of young children	Mothers children age 0-23 months		48%	57%	44	210
Access to Immunization service (% of children aged 12-23 months received DPT1)	Ch 12-23 months		92%	97%	38	363
Health System Performance regarding Immunization Service (% of children aged 12-23 months received DPT3)	Ch 12-23 months		80%	88%	34	318
% of HH of children Ch 0-23m that treat water effectively	Ch 0-23m		1%	3%	44	210

Sample size. Standard formulas (Betty 2003) had been used to estimate the required sample size based on the normal distribution, confidence levels of 95%, 80% power, and a design effect of 1.5 (to allow for clustering) for both baseline and endline surveys. Rapid CATCH indicators (and questionnaire) and the module on maternal and newborn care guided selection of indicators for the sample size calculation. Annex-I shows the sample requirements according to selected indicators. The largest sample size required for each cluster was 96 under-2 children for the primary indicator of care seeking for suspected pneumonia. The largest sample required for the maternal and newborn care indicators was 50 women who had a birth outcome one year preceding the survey.

Selection of village and households from upazila. The selection process consisted of two stages in both the surveys. In the first stage, 4-9 villages were selected from each cluster using Probability proportionate to sampling (PPS) to get 750-900 households (HHs). Next a census was done to map and list the HHs of the selected villages. In each selected village a sketch map was drawn indicating boundary, landmark and Bari locations. All HHs and all women who had a birth outcome (live birth or still birth) two years preceding the survey were enumerated and listed. In the second stage sampling was done according to the following steps:

Step 1: First, 125 women with pregnancy outcomes two years preceding the survey were drawn from the list randomly for collecting information on child health, morbidity, nutrition, ITN, HIV/AIDS, family planning etc. using a computer designed program. One hundred and twenty five women were selected to attain the required number (96) of under-2 children for the sample.

Step 2: Then, 60 women who had a pregnancy outcome one year preceding the survey were randomly selected from the 125 women for maternal and newborn care measurement.

Step 3: Next, 30 women were randomly selected from the 60 women selected in step 2 for maternal costing who had a birth outcome one year preceding the survey.

Finally, based on the random sampling technique, a list of HHs by village was provided to the supervisor for conducting the survey. The list contained detailed information on which module needed to be used for which selected women.

Data collection. A household survey questionnaire consisting of four modules (HH information; Maternal and newborn information; cost of maternal care; and child health, morbidity, nutrition) was used to collect the required information both at baseline and endline. The baseline tools are provided in the SUSOMA Final Evaluation Report Annex X. Trained data collectors collected the data. The baseline KPC survey was conducted in 2009. The endline survey was conducted in 2014. The respondents for the survey were women who had a birth (live/still) in the one year preceding the survey and mothers of children aged 0-2 years. A total of 4,502 households were surveyed during baseline and endline respectively.

Quality assurance. The quality of data collection was maintained by trained field supervisors through spot-checking, cross checking, consistency checking and editing. Each day, field supervisor accompanied three or four data collectors for part of their workday and observed some interviews. The field supervisor reviewed completed questionnaires. Any errors, discrepancies and other problems were discussed and resolved at the end of each day and at weekly meetings. This sometimes resulted in a re-visit to the household. Field supervisors or data collectors to check the correctness of the information collected revisited a random sample of 5% of households interviewed. Any discrepancies were resolved with the original data collectors and supervisors.

Data entry and analysis. In both baseline & endline survey, SQL server 2008 was used for data entry and the interface was designed by Visual Basic. Data was analyzed with the statistical software STATA 12. Descriptive analysis has been done to present the findings on key indicators and cost information.

In order to determine whether changes in intermediate health outcomes over time were creating more equity, a wealth index was constructed from data collected on ownership of household durable goods, dwelling characteristics, sources of drinking water and sanitation facilities. Households were ranked according to their total 'wealth' score, and then divided into quintiles from the lowest (poorest) to the highest (richest). Health outcome data was analyzed by wealth quintile and the ratio of rich (upper quintile) to poor (lower quintile) computed for the rapid CATCH variables (Annex B. Table B-2).

All costs were presented in taka (BDT) with conversion to USD in report tables (Annex B. Table B-3). Direct cost was used to reflect out of pocket expenditure for the maternal and child illness. Direct costs refer to household expenditures related to seeking treatment (medical expenses such as

physician's fee, drug cost, cost of hospital stay both for patient and accompanied person) along with non-medical expenses such as transport costs.

In order to determine whether the change in each variable, including rich-to-poor ratio data, over time was significantly different in the intervention area compared to the comparison area, the percentage change was calculated from baseline to endline along with the 95% confidence interval for each variable (Annex B. Table B-4). The percentage change in the intervention area was considered significantly different from the comparison area if the confidence intervals did not overlap (Knezevic, 2008). The percentage change was calculated using the following formula:

$$P_{Change} = \frac{p_2 - p_1}{p_1} \times 100$$

where p_1 is the proportion at baseline and p_2 is the proportion at endline. The percentage change demonstrates the difference in proportions from baseline to endline relative to the starting value at baseline. The 95% confidence interval was calculated using the following formulas:

$$95\% \text{ confidence interval} = P_{Change} \pm 1.96 * SE_{p_2 - p_1}$$

and

$$SE_{p_2 - p_1} = \sqrt{\left(p_1 * \frac{(1 - p_1)}{n_1 / deff} \right) + \left(p_2 * \frac{(1 - p_2)}{n_2 / deff} \right)}$$

where n_1 is the baseline sample size, n_2 is the endline sample size, and $deff$ is the design effect. The design effect accounts for the bias introduced by using cluster sampling instead of simple random sampling during data collection. Although the design effect varies for different variables, a conservative estimate for cluster sampling is two (CORE Group, 2004). By adding the design effect to the equation above, the standard error is larger and the confidence interval is wider. Therefore, the estimates for statistical significance between the intervention area and comparison area more conservative than estimates that do not include the design effect.

Rapid Health Facility Assessment (Source: Final RHFA Report, SUSOMA Final Evaluation Report Annex XIXa)

Methods. Baseline and endline Rapid Health Facility Assessments (RHFA) were carried out in Durgapur and Kendua Upazillas of Netrakona District in November 2009 and June 2014 by World Renew and LAMB to assess the maternal, newborn and child health services (MNCH) in the 3 levels of Health Facilities in the project area (district hospital, first level and community- based) in the areas of staffing (qualifications, training, supervision); health infrastructure (facilities, medicines, supplies); and health worker performance regarding management of childhood illnesses.

Sampling. Sampling was done to determine the health facilities to be assessed; the number of clinical cases /exit interviews to be observed and the Community Health workers to be interviewed.

Health Facilities: The sampling frame included all health facilities that provided primary care (not just referral) for childhood illnesses. Sampling was done on a sample proportionate to size basis to ensure balanced sampling from the different levels of health facility. Once the sample size was determined the sample was chosen using systematic random sampling. Information about the sample frame and sample size is in Table A-2.

Table A-2. Sampling for Health Facilities and Population estimates

Level	Type of facility included	Baseline			Endline		
		Sampling frame	Percent of total	Final Sample Size	Sampling frame	Percent of total	Final Sample Size
1	UHC OPD	2	2.7	1	2	2.3	1
2	FWC / RD	20	27.4	8	21	24.4	7
3	Community Clinic	48	65.8	20	60	69.8	21
4	Private / NGO	3	4.1	1	3	3.5	1
Total		73	100	30	86	100	30

Clinical observations/Exit Interviews: Six clinical observations/ exit interviews were targeted for each facility (30 x 6= 180 cases). The first six children who attended the clinic and presented with fever/malaria, diarrhoea (with or without blood) and/or pneumonia / difficulty breathing were chosen for observation.

Community Health Workers: A systematic random sample of 13 out of a total of 40 Community Health Workers (33%) was chosen from the sampling frame provided by the government authorities at baseline and 20 out of 60 (33%) at endline.

Data collection tools and techniques. The survey instrument was based on the Rapid Health Facility Assessment tool developed by a team at MEASURE Evaluation. The tool was designed to provide valid data on indicators of health service quality and access that would be comparable across child survival programs in different countries. Adaptation of the questionnaire was done in consultation with World Renew (CSP, Health Specialist) before the baseline survey, retaining the optional questions that were appropriate for the context. The RHFA used five modules to collect data on health service delivery access and quality through exit interview of caregivers, Health facility checklist to check availability of logistics and infrastructure, health worker (including community health worker) interview to elicit information on their training, supervision and record keeping. The data collection teams consisted of two members: one supervisor who did the clinical observation on child illness assessments and health worker interviews as well as checking all forms for completeness at the end of each day; and one field investigator who did the exit interviews with the child's care giver, the health facility check lists and community health worker interviews

Annex B. Data Tables

Table B-1. Summary of major endline findings regarding the dynamics of PI model formation (Final Operations Research Quantitative and Social Capital Study Report, October 2014).

<i>Perception, knowledge and practice regarding the PI model groups and activities</i>	
Perception of PGs	Knowledge levels regarding goals and aims of PGs differed at the beginning but at endline PGs in both intervention sub-districts were well aware of their group's activities, purposes, and vision.
Selection of PG members	Criteria to select the members of a PG, though were set by the programme, not always followed and the group members included those whom they found to serve group's purposes better [such as educated elites].
Capacity of leaders of PGs	Leadership rests on the more educated as it did in the beginning. Groups make careful decisions in their leaders. They want someone who is presentable, articulate, and able to provide the time essential to leading an organization.
Trust among PG members	Most of the PG members have learned to trust themselves or at least know how to resolve if problems related to trusting arises.
Management of groups	Group management has become more diversified over the years. Initially it was limited to saving money, while now it includes providing loans, taking on small income generating projects, and ensuring health benefits to members and non-members.
Management of financial activities	Banking was problematic in the beginning. Over the years, people have started to reap the benefits of the system and have started to have faith banks.
Engagement with CCCs	CCCs are formed out of representatives from the PGs, but not all PGs are equally aware of it. The awareness has increased over time, but still is lacking in some places.
Engagement of ISPs (village doctors)	Orientation of the village doctors seemed slow to pick up. Most of our informants at baseline were among those who didn't receive the orientation. However, we did find out many of them were oriented on SUSOMA activities and things that were expected of them.
Problems in forming PGs	Formations of groups have become stable over time and the questions and doubts about the groups have lessened.
<i>Impact of PI model on health equity</i>	
Utilization of Savings	Focus on ensuring money for the emergency funds seem to have increased over the years. People are involved in various income generating activities in order to pay their dues, which they take almost religiously.
Planning	Planning is being diversified. Every passing year people gain more confidence in their abilities and now think about innovative ways to earn and save more money for both emergency health needs and also their own sustainability.
Linkage with social elites	Support of the social elites has been noteworthy in these communities throughout the years. The elites are properly motivated in helping in people with health needs.
Engagement of NGOs	Over the years, PGs have become confident in engaging with other groups and the parent NGO, but not yet with NGOs or other organizations beyond the reach of the program.
Engagement of GOB	There has been active collaboration between the government health system and PGs – especially the TTBA's who are a part of the PGs in their respective areas. The extent of collaboration has only gotten better over time and the PGs have also received both respect and monetary assistance from the government.
TTBA's linkages	A linkage between the TTBA's and health system is encouraging. Pregnant women and mothers in need are being referred and attempts at better care is ensured.
Building capacity: CHV	Training of CHVs is crucial to their activities and also for their confidence to work in the community. This has been provided to the CHVs adequately, though frequent refreshers may be required.
Capacity building: individual	Group members are becoming confident and claim they might be able to continue without the assistance of the NGOs who helped them form the groups initially and have been guiding them ever since. They discussed increased capacity in terms of their ability to manage group finances and plan what to do in the future, as well as their increased knowledge of mother child health and what to do during times of need.
Capacity building: group	The PGs unanimously valued their capacity to help the community, especially with regard to emergency medical needs, i.e. pregnant women needing assistance during delivery. They mentioned that their capacity to share ideas during the group meetings helps the community at large and the group members in specific. While some confusion over the selection and election aspects of PI formation remains, people are more inclined toward election rather than selection, which they see as more empowering.
PI- improving SES	The PIs report making progress in terms of improving the SES of the members and diversifying the savings mechanism and income generating activities.
<i>Impact of PI groups on referral and health care-seeking</i>	

Health care seeking	Initially, the activities of the groups were limited to savings and then it expanded to certain other activities, like some income generating activities and helping group members in emergencies. People have started to know about their health related activities where even the non-group members are also becoming aware.

Table B-2. Percentage distribution by wealth quintile, intervention and comparison, 2010 and 2014 (KPC Survey)

Indicators	Time	Intervention Quintiles					Comparison Quintiles					Rich-to-poor Ratio	
		1 st	2 nd	3 rd	4 th	high	1 st	2 nd	3 rd	4 th	high	Intervention	Comparison
Antenatal Care													
	Baseline	3.3	4.9	3.3	4.7	9.7	0.6	0.8	1.4	4.9	20.6	3.0	33.7
	Endline	7.1	11.2	7.6	14.0	25.7	3.4	3.5	5.3	3.9	12.5	3.6	3.7
Tetanus Toxoid													
	Baseline	79.5	88.5	85.5	87.3	91.5	71.3	80.5	83.9	85.9	91.1	1.2	1.3
	Endline	75.0	84.0	77.1	81.1	82.9	77.7	75.7	74.2	83.1	79.	1.1	1.0
Skilled Birth Attendant													
	Baseline	1.6	4.2	6.6	10.7	21.2	4.3	5.3	11.2	14.1	30.8	12.9	7.2
	Endline	12.5	15.2	13.9	22.0	42.1	10.1	11.1	15.9	11.5	29.0	3.4	2.9
Institutional delivery													
	Baseline	0.8	3.0	4.6	10.1	19.4	1.8	3.8	7.7	12.0	24.7	23.6	13.5
	Endline	10.7	15.2	11.1	17.7	38.8	9.5	9.7	14.6	11.5	27.6	3.6	2.9
Post-Partum Visit													
Newborn	Baseline	0.8	3.7	3.4	10.3	19.8	3.1	3.9	8.6	10.9	27.9	23.8	9.1
	Endline	7.6	12.7	11.4	17.7	38.8	11.5	10.1	14.1	12.5	25.7	5.1	2.2
Maternal	Baseline	0.8	3.6	5.9	10.7	20.0	2.4	4.5	9.1	12.7	27.4	24.4	11.2
	Endline	9.8	15.2	11.1	18.3	34.9	10.1	11.1	13.9	11.5	28.3	3.6	2.8
Contraceptive Use													
	Baseline	42.9	45.5	48.4	50.9	55.4	30.2	44.5	41.6	48.4	59.5	1.3	2.0
	Endline	64.9	71.9	68.6	70.7	77.5	56.9	62.9	64.0	66.0	71.0	1.2	1.2
Exclusive breastfeeding													
	Baseline	31.4	29.5	30.4	30.1	29.6	32.3	28.5	30.9	30.4	27.1	0.9	0.8
	Endline	50.9	46.6	48.5	52.5	58.3	44.2	41.9	38.0	43.1	38.5	1.1	0.9
ORT use													
	Baseline	60.0	80.0	74.2	73.9	80.0	52.8	41.7	54.2	54.5	44.8	1.3	0.8
	Endline	84.9	79.3	85.7	90.0	87.0	77.8	90.6	90.9	77.8	91.3	1.0	1.2
Care Seeking- Pneumonia													
	Baseline	18.2	15.4	17.4	26.9	30.3	7	25.8	21.2	26.5	15.6	1.7	2.2
	Endline	21.7	47.4	30.0	25.0	41.2	12.2	16.7	14.3	25.6	13.0	1.9	1.1

Point of Use -POU													
	Baseline	1.4	1.1	2.3	1.8	2.0	3.7	5.1	5.1	6.7	8.2	1.4	2.2
	Endline	4.1	4.8	3.8	5.2	5.1	5.2	5.3	9.1	11.6	17.7	1.3	3.4
Appropriate Hand washing Practices													
	Baseline	16.3	15.9	17.7	18.7	36.9	19.5	26.6	26.5	37.2	52.1	2.3	2.7
	Endline	23.4	32.7	32.9	43.5	59.3	8.2	8.0	15.5	15.5	31.7	2.5	3.9

Table B-3. Percentage change in household out-of-pocket expenditures and rich-to-poor ratio for ANC, delivery, PNC, maternal complications and childhood illness, intervention and comparison groups (KPC 2010 and 2014)

A Type of expense	Average out-of-pocket expense BDT (t)/USD (\$)							Rich to poor ratio						
	Intervention			Comparison			P ≤0.05 *	Intervention			Comparison			P ≤0.05 *
	2010	2014	% change	2010	2014	% change		2010 %	2014 %	% change	2010 %	2014 %	% change	
Antenatal care (n)	156	240		143	208			156	240		156	240		
	t952.8 \$12.24	t1157.6 \$14.88	21.6%	t1112. \$14.30	t1090.3 \$14.01	-2.0%	*	6.4	4.8	-25%	7.4	2.5	-66.2%	*
Institution al delivery (n)	28	68		40	50			40	50		40	50		
	t8897.1 \$114.3 4	t11603. 9\$149.1 3	30.4%	t4636.3 \$59.58	t10832.4 \$139.21	134%	*	3.3	1.6	-51.5%	2.7	1.8	-33.3%	
Home delivery (n)	375	267		341	309			341	309		341	309		
	t977.1 \$12.56	t211.7 \$15.57	24%	t800.3 \$10.28	t1001.7 \$12.87	25.2%		na*	1.5		1.0	2.5	150%	
Postnatal care (n)	41	80		46	52			46	52		46	52		
	t673.7 \$8.66	t657.2 \$8.42	-2.8%	t840.0 \$10.80	t712.0 \$9.15	-15.3%	*	0.8	1.7	113%	10.6	0.7	-93.4%	*
Complic- ations (n)	68	93		80	74			80	74		80	74		
	t628.6 \$8.08	t361.1 \$4.64	-42.6%	t762.9 \$22.66	t431.1 \$5.54	-75.5%	*	2.1	2.4	14.3%	6.6	1.6	-75.8%	*
U2 child illness (n)	960	899		906	935			960	899		906	935		
	t117.7 \$1.51	t150.9 \$1.94	28.5%	t144.1 \$1.85	t134.8 \$1.73	-6.5%	*	1.3	1.5	15.4%	1.4	2.0	42.9%	*

Table B-4. Results of percentage change and confidence interval analysis (KPC Data)

Variable name	Area	Endline %	Baseline %	Endline (n)	Baseline (n)	% change	95% CI Lower	95% CI Upper
Antenatal Care (4+)	Intervention	13.63	5.31	697	753	156.58	1.5233	1.6084
	Comparison	5.79	5.63	725	728	2.86	-0.0051	0.06238
Tetanus Toxoid	Intervention	80.20	86.85	697	753	-7.66	-0.1306	-0.02259
	Comparison	77.79	82.28	725	728	-5.45	-0.1126	0.00351
Skilled Birth Attendant	Intervention	21.95	9.30	697	753	136.13	1.3089	1.41375
	Comparison	15.72	13.05	725	728	20.50	0.1540	0.25597
Institutional Delivery	Intervention	19.37	7.97	697	753	143.08	1.3811	1.48047
	Comparison	14.76	9.89	725	728	49.23	0.4446	0.53994
Post-Partum Visit Newborn	Intervention	18.54	7.97	669	740	132.47	1.2748	1.37470
	Comparison	14.89	10.69	712	711	39.28	0.3438	0.44176
Post-Partum Visit Mother	Intervention	18.51	8.63	697	753	114.41	1.0944	1.19374
	Comparison	15.17	11.13	725	728	36.36	0.3146	0.41271
Contraceptive Use	Intervention	70.96	49.28	1670	1806	43.99	0.3950	0.48474
	Comparison	64.08	44.33	1846	1771	44.58	0.4007	0.49082
Exclusive Breast-feeding	Intervention	52.86	47.21	384	502	11.97	0.0259	0.21356
	Comparison	41.72	48.99	441	494	-14.83	-0.2384	-0.05816
Infant and Young Child Feeding	Intervention	25.25	31.74	1303	1314	-20.44	-0.2532	-0.15559
	Comparison	23.95	36.59	1432	1290	-34.54	-0.3939	-0.29679
Vitamin A Supplement	Intervention	82.35	72.07	1303	1314	14.26	0.0975	0.18772
	Comparison	83.94	65.19	1432	1290	28.75	0.2420	0.33307
Immunization (Measles)	Intervention	69.78	95.07	877	893	-26.60	-0.3134	-0.21856
	Comparison	70.28	85.88	979	921	-18.17	-0.2332	-0.13026
(DTPI/Penta1)	Intervention	88.60	94.51	877	893	-6.26	-0.0991	-0.02610
	Comparison	92.85	90.55	979	921	2.54	-0.0098	0.06049
(DTP3/Penta3)	Intervention	76.28	90.82	877	893	-16.00	-0.2080	-0.11206
	Comparison	72.01	83.50	979	921	-13.75	-0.1898	-0.08528
Treatment of Fever	Intervention	0.71	0.80	1686	749	-11.15	-0.1222	-0.10084
	Comparison	0.21	0.14	1873	715	52.70	0.5221	0.53184
ORT Use	Intervention	84.96	73.68	133	114	15.31	0.0101	0.29606
	Comparison	85.92	49.63	142	135	73.11	0.5870	0.87527
Care Seeking-Pneumonia	Intervention	32.63	22.31	95	130	46.28	0.2954	0.63019
	Comparison	16.77	18.50	167	173	-9.36	-0.2081	0.02096
Point of Use (POU)	Intervention	4.63	1.76	1686	1816	162.54	1.6089	1.64201
	Comparison	9.72	5.66	1873	1784	71.64	0.6921	0.74064
Handwashing Practices	Intervention	39.32	21.59	1686	1816	82.17	0.7793	0.86420
	Comparison	15.70	31.61	1873	1784	-50.35	-0.5419	-0.46510
Child Sleeps Under ITN	Intervention	8.36	5.89	1686	1816	41.94	0.3952	0.44353
	Comparison	6.67	2.58	1873	1784	158.83	1.5692	1.60734
Underweight	Intervention	27.27	33.26	1665	1816	-18.02	-0.2232	-0.13711
	Comparison	31.42	36.03	1865	1779	-12.80	-0.1714	-0.08456
Clean Cord Cutting	Intervention	94.68	98.40	526	683	-3.78	-0.0681	-0.00762
	Comparison	96.19	95.80	604	643	0.41	-0.0267	0.03486
Thermal Care	Intervention	40.24	9.50	246	368	323.62	3.1397	3.33267
	Comparison	36.64	21.70	292	378	68.87	0.5909	0.78644
Delayed Bathing	Intervention	46.34	22.70	669	740	104.13	0.9729	1.10971

Variable name	Area	Endline %	Baseline %	Endline (n)	Baseline (n)	% change	95% CI Lower	95% CI Upper
Immediate Breast-feeding	Comparison	58.85	34.60	712	711	70.08	0.6297	0.77194
	Intervention	77.58	52.80	1686	1816	46.93	0.4263	0.51230
Knowledge Timing/Spacing of Pregnancies	Comparison	76.39	53.00	1872	1784	44.13	0.3987	0.48388
	Intervention	48.10	54.90	1686	1816	-12.38	-0.1706	-0.07708
Knowledge Risk Birth-Pregnancy Intervals<24 mo	Comparison	59.74	55.30	1873	1784	8.04	0.0351	0.12565
	Intervention	49.41	37.30	1686	1816	32.46	0.2784	0.37072
Quality Antenatal Care	Comparison	46.88	17.40	1873	1784	169.41	1.6536	1.73456
	Intervention	4.86	0.40	473	713	1115.64	11.1283	11.18463
Iron Tablets for Pregnant Women	Comparison	0.96	1.50	418	687	-36.20	-0.3805	-0.34362
	Intervention	69.15	43.70	697	753	58.25	0.5127	0.65219
Knowledge of Danger Signs During Pregnancy	Comparison	58.07	37.10	725	728	56.52	0.4942	0.63622
	Intervention	72.31	65.20	697	753	10.90	0.0418	0.17630
Knowledge of Danger Signs During Delivery	Comparison	72.41	53.70	725	728	34.85	0.2796	0.41734
	Intervention	67.43	67.20	697	753	0.35	-0.0649	0.07179
Knowledge of Post-Partum Danger Signs	Comparison	69.93	48.10	725	728	45.39	0.3841	0.52360
	Intervention	67.00	63.20	697	753	6.01	-0.0092	0.12951
Knowledge of Neonatal Danger Signs	Comparison	69.24	45.70	725	728	51.51	0.4453	0.58496
	Intervention	74.46	78.20	697	740	-4.78	-0.1100	0.01438
Clean Birth Kit	Comparison	84.83	67.40	725	711	25.86	0.1974	0.31971
	Intervention	32.04	4.20	543	683	662.96	6.5701	6.68902
Essential Newborn Care	Comparison	28.97	17.30	611	643	67.45	0.6090	0.74006
	Intervention	12.74	0.90	526	683	1315.29	13.1114	13.19446
Cord Care	Comparison	13.58	4.80	604	643	182.84	1.7832	1.87352
	Intervention	65.02	54.60	669	740	19.09	0.1189	0.26290
Feeding Colostrum	Comparison	66.57	62.30	712	711	6.86	-0.0017	0.13887
	Intervention	97.03	96.80	1686	1816	0.24	-0.0138	0.01861
Pre-Lacteal Feeds	Comparison	98.18	97.20	1872	1784	1.01	-0.0037	0.02392
	Intervention	81.61	59.30	1686	1816	37.63	0.3350	0.41757
Prophylactic Eye Care	Comparison	79.54	56.50	1872	1784	40.78	0.3662	0.44935
	Intervention	4.78	2.50	669	740	91.33	0.8854	0.94116
Birth Preparedness	Comparison	3.09	3.10	712	711	-0.33	-0.0287	0.02219
	Intervention	91.68	89.60	697	753	2.32	-0.0191	0.06553
AMTSL	Comparison	94.76	88.60	725	728	6.95	0.0296	0.10941
	Intervention	3.60	0.90	753	697	300.00	2.9787	3.02127
Careseeking for any ANC complication	Comparison	2.30	1.50	728	725	53.33	0.5135	0.55318
	Intervention	37.60	26.40	202	182	42.42	0.2934	0.55511
Careseeking any delivery complication	Comparison	27.40	24.40	190	209	12.30	0.0012	0.24471
	Intervention	40.20	42.90	112	84	-6.29	-0.2602	0.13429
Careseeking for any postpartum complication	Comparison	22.50	29.50	111	105	-23.73	-0.4025	-0.07210
	Intervention	43.40	29.30	76	75	48.12	0.2666	0.69583
Careseeking from health	Comparison	23.10	30.40	65	79	-24.01	-0.4440	-0.03623
	Intervention	5.00	2.20	202	182	127.27	1.2206	1.32483
	Comparison	3.20	1.40	190	209	128.57	1.2438	1.32767

Variable name	Area	Endline %	Baseline %	Endline (n)	Baseline (n)	% change	95% CI Lower	95% CI Upper
worker ANC period								
Average OOP expense for ANC (\$)	Intervention	1.49	1.22	240	156	21.57	0.1831	0.24832
	Comparison	1.40	1.43	208	143	-2.03	-0.0559	0.01532
Average OOP expense for institutional delivery (\$)	Intervention	14.91	11.43	68	28	30.43	0.0990	0.50951
	Comparison	13.92	5.96	50	40	133.65	1.1657	1.50733
Average OOP expense for home delivery (\$)	Intervention	1.56	1.26	267	375	23.96	0.2133	0.26602
	Comparison	1.29	1.03	309	341	25.19	0.2286	0.27529
Average OOP expense for PNC (\$)	Intervention	0.84	0.87	80	41	-2.77	-0.0768	0.02138
	Comparison	0.92	1.08	52	46	-15.28	-0.2087	-0.09689
Average OOP expense for complications (\$)	Intervention	0.46	0.81	93	68	-42.57	-0.4616	-0.38987
	Comparison	0.55	2.27	74	80	-75.55	-0.8075	-0.70356
Average OOP expense for childhood illness (\$)	Intervention	0.19	0.15	899	960	28.48	0.2794	0.29012
	Comparison	0.17	0.19	935	906	-6.49	-0.0703	-0.05940
Rich-to-poor ratio-expense for ANC	Intervention	4.80	6.40	240	156	-25.00	-0.3164	-0.18357
	Comparison	2.50	7.40	208	143	-66.22	-0.7299	-0.59447
Rich-to-poor ratio - institutional delivery expense	Intervention	1.60	3.30	68	28	-51.52	-0.6178	-0.41251
	Comparison	1.80	2.70	50	40	-33.33	-0.4214	-0.24523
Rich-to-poor ratio - home delivery expense	Intervention	1.50		267	375			
	Comparison	2.50	1.00	309	341	150.00	1.4712	1.52879
Rich-to-poor ratio-PNC expense	Intervention	1.70	0.80	80	41	112.50	1.0694	1.18061
	Comparison	0.70	10.60	52	46	-93.40	-1.0638	-0.80414
Rich-to-poor ratio - care complications expense	Intervention	2.40	2.10	93	68	14.29	0.0776	0.20811
	Comparison	1.60	6.60	74	80	-75.76	-0.8445	-0.67066
Rich-to-poor ratio - expense childhood illness	Intervention	1.50	1.30	899	960	15.38	0.1387	0.16898
	Comparison	2.00	1.40	935	906	42.86	0.4119	0.44525
Rich-to-poor ratio -Antenatal Care (4+)	Intervention	3.60	3.00	697	753	20.00	0.1739	0.22607
	Comparison	3.70	33.70	725	728	-89.02	-0.9425	-0.83790
Rich-to-poor ratio - Tetanus Toxoid	Intervention	1.10	1.20	697	753	-8.33	-0.0989	-0.06781
	Comparison	1.00	1.30	725	728	-23.08	-0.2463	-0.21527
Rich-to-poor ratio - Skilled Birth Attendant	Intervention	3.40	12.90	697	753	-73.64	-0.7753	-0.69759
	Comparison	7.20	2.90	725	728	148.28	1.4511	1.51446
Rich-to-poor ratio - Institutional Delivery	Intervention	3.60	23.60	697	753	-84.75	-0.8946	-0.80032
	Comparison	2.90	13.50	725	728	-78.52	-0.8243	-0.74606

Variable name	Area	Endline %	Baseline %	Endline (n)	Baseline (n)	% change	95% CI Lower	95% CI Upper
Rich-to-poor ratio - Post-Partum Visit (Newborn)	Intervention	5.10	23.80	669	740	-78.57	-0.8351	-0.73633
	Comparison	2.20	5.10	712	711	-56.86	-0.5961	-0.54115
Rich-to-poor ratio - Post-Partum Visit (Mother)	Intervention	3.60	24.40	697	753	-85.25	-0.9000	-0.80487
	Comparison	2.80	11.20	725	728	-75.00	-0.7866	-0.71342
Rich-to-poor ratio - Contra-ceptive Use	Intervention	1.20	1.30	1670	1806	-7.69	-0.0874	-0.06648
	Comparison	1.20	2.00	1846	1771	-40.00	-0.4116	-0.38841
Rich-to-poor ratio - Exclusive Breastfeeding	Intervention	1.10	0.90	384	502	22.22	0.2034	0.24104
	Comparison	0.90	0.80	441	494	12.50	0.1083	0.14170
Rich-to-poor ratio - ORT Use	Intervention	1.00	1.30	133	114	-23.08	-0.2687	-0.19287
	Comparison	1.20	0.80	142	135	50.00	0.4669	0.53306
Rich-to-poor ratio - Care Seeking for Pneumonia	Intervention	1.90	1.70	95	130	11.76	0.0677	0.16760
	Comparison	1.10	2.20	167	173	-50.00	-0.5382	-0.46184
Rich-to-poor ratio - Point of Use (POU)	Intervention	1.30	1.40	1686	1816	-7.14	-0.0822	-0.06062
	Comparison	3.40	2.20	1873	1784	54.55	0.5304	0.56053
Rich-to-poor ratio - Handwashing Practices	Intervention	2.50	2.30	1686	1816	8.70	0.0726	0.10131
	Comparison	3.90	2.70	1873	1784	44.44	0.4281	0.46078

OPERATIONS RESEARCH BRIEF



USAID
FROM THE AMERICAN PEOPLE



The Hira Society Peoples Institution, a community-based organization in Durgapur, Netrokona District in Bangladesh, in one of its regular meetings.

KEY FINDINGS:

1. The People Institution (PI) model can be systematically established in poor rural underserved *upazilas* (sub districts) in Bangladesh to increase the social capital of poor marginalized women and empower them to work with government officials and health providers to improve household and community maternal and newborn care and increase utilization of quality health services in hard to reach families and communities.

2. The PI model intervention strengthened public-private partnerships enhancing access to resources for marginalized households.

3. The PI model improved the maternal newborn care practices of poor mothers and families, increased the quality and availability of MNCH services in their communities, and established an *upazila*-wide enabling environment to strengthen and sustain MNC gains.

Significantly greater percentage increases ($p \leq 0.05$) in the intervention versus comparison group:

- 4+ ANC
- Institutional & SBA delivery
- PNC-newborn & maternal
- Care-seeking (complications/ARI)
- Exclusive breastfeeding
- Quality of MNC services

Building Public- Private Partnership to Improve Maternal Newborn and Child Health in Bangladesh

The high proportion of newborn and maternal mortality in Netrokona District is due to lack of accessible quality maternal newborn services and underdeveloped health care delivery platforms. The Peoples Institution (PI) model is an approach to community mobilization of poor marginalized populations that seeks to engage communities in planning and action to mobilize resources for maternal and newborn care (MNC). This Operations Research (OR) study examines the PI model as an intervention delivery platform and documents PI model strategies, outcomes and effectiveness.

This project was funded by the U.S. Agency for International Development through the Child Survival and Health Grants Program

February 2015

Background

Netrokona is a resource-poor district with marginalized populations and one of 14 lowest performing districts in Bangladesh. Disparities in death rates exist between the rich and poor in factors that contribute to health such as adequacy of antenatal care, skilled attendance at birth and post-natal care. Within this context World Renew, in partnership with local NGOs SATHI and PARI, implemented the USAID-funded child survival project (2009-2014) targeting 124,313 women of reproductive age and 19,314 infants 0-11 months in two *upazilas* (sub-districts) of Netrokona. The goal of the project was to reduce mortality and improve health status among poor mothers and newborns in vulnerable communities by building the social capital of the poorest households and mobilizing communities for maternal newborn care (MNC). World Renew utilized the PI model intervention to establish community-based organizations (CBOs) and public-private partnership (PPP) structures for ongoing MNC gains. The PI model CBOs served as grassroots governance bodies to oversee MNC promotion, direct resources to those who need them most, and promote equity. The project addressed economic and health system factors that contributed to inequality.

Icddr,b (International Center for Diarrheal Disease Control, Bangladesh) was the local partner that conducted the Operations Research study, which included the KPC study. The Health Facility Assessment was conducted by LAMB (Lutheran Aid to Medicine, Bangladesh).

Intervention Design and Implementation

The PI model intervention was used to mobilize marginalized populations in Kendua and Durgapur *upazilas* of Netrokona and train and empower them to establish independent self-sustaining PI groups (CBOs) to promote MNC. These PI groups supported a cadre of trained community health volunteers, developed emergency health funds (EHF) and MNC referral mechanism, and established public-private partnerships (PPP) with health facilities and government officials. The entry point to the PI is membership in the village-level primary group (PG) (Figure 1). With support from the project's community health trainers (CHTs), PGs worked together to solve problems, claimed their rights, and tracked group gains in their capacity building efforts. The PGs selected Community Health Volunteer (CHVs) and Traditional Birth Attendants (TTBAs) who were trained and supported to promote MNC in their villages. Once the PGs were established, each selected two representatives to form the union-level Central Cooperative Committee (CCC) to coordinate MNC-related activities of the PGs. Each CCC then selected six representatives to form the *upazila*-level PI. Each PI has a trained health sub-team that oversees *upazila*-level MNC services and maintains

PPP linkages with health officials and facilities. Using a Training of Trainers (TOT) strategy, the project CHTs trained each PI model group (PG, CCC and PIs) in the area of leadership, governance, record-keeping, gender, M&E, sustainability, advocacy, networking and capacity.

The primary activity to improve health facility utilization and quality care is the involvement of PG and PI members with their corresponding level health facility (PGs with Community Clinics, CCCs with Union Health and Family Welfare Centers/Rural Dispensaries, and PIs with the *Upazila* Health Complex) through membership on the health facility management committees and involvement in decision-making, advocacy and policy making on behalf of their communities. PI groups participate in clinic operations, assist in the daily opening and cleaning of facilities, and provide safety and logistic support to local facilities.

The intervention *upazilas* received the PI model intervention while comparison *upazilas* received usual government services.

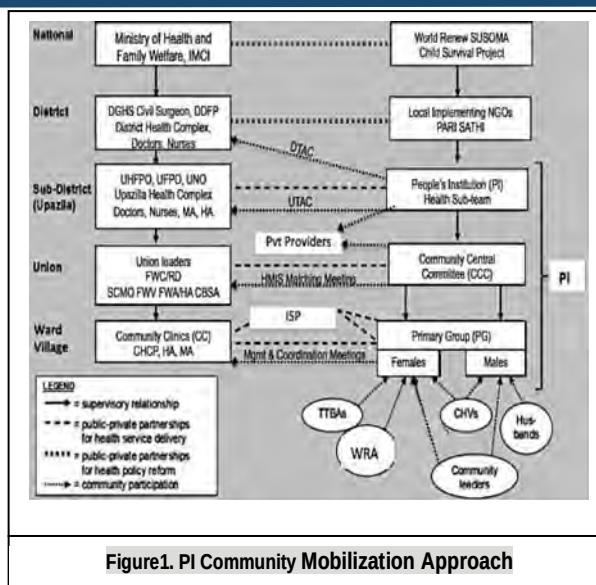


Figure1. PI Community Mobilization Approach

Methodology

The Operations Research (OR) focused on 3 areas, each with associated research questions:

1. *PI model group formation*: How do PI primary groups form? How do PI model approaches engage poor and marginalized women of reproductive age (WRA) and promote MNC practices?
2. *Social capital in the PI model*: What is the degree of implementation of the PI model? What are the structural and cognitive social capital characteristics of intervention group PG members? Is membership in a PI associated with higher levels of social capital at endline when compared with non-member levels of social capital?
3. *PI model and health outcomes*: Is the PI model more capable than the status quo in 1) increasing care-seeking and utilization of MNC services, 2) increasing maternal-newborn health practices 3) increasing quality and availability of MNC health services 4) creating more equitable MNC and health outcomes and 5) reducing and creating equity in costs?

Study questions were addressed using mixed-method design with 4 components:

1. Qualitative process evaluation with intervention group only baseline and endline interviews.
2. Investigation of social capital with intervention group only pretest-posttest measurement (Social Capital survey).
3. Quantitative program evaluation with quasi-experimental pretest-posttest, intervention comparison group design (KPC study).
4. Health facilities assessment with an intervention area only pretest-posttest design (RHFA).

Participants were women of reproductive age (15 to 45 years old) from Netrokona District. For the qualitative process evaluation interviews, participants were 81 PI group members and non-members, CHVs/TTBAs, and lead staff from the local implementing NGOs selected with random purposive quota and snowball sampling. For the social capital investigation survey, participants were 300 PI group members and non-members randomly selected from a list of villages in each of the intervention *upazilas*. Inclusion criteria for the qualitative process evaluation and investigation of social capital were being a married WRA and lower socio-economic status (non-elite). For the quantitative program evaluation KPC survey, respondents in the intervention group consisted of 2,500 mothers of children 0-2 years from the 20 unions of the intervention *upazilas* and respondents in the comparison group were 2,500 mothers of children 0-2 years from the 15 unions of nearby *upazilas* with usual government services (Kalmakanda and Barhata). Randomized cluster sampling was used in which 40 clusters were selected (20 intervention and 20 comparison). For the health facility assessment, data regarding MNCH services in the intervention area were obtained from 30 facilities and health workers using systematic random sampling. Ethical approval for the study was obtained from the Research Review Committee and the Ethical Review Committee of icddr,b and from LAMB.

Findings

PI model group formation. The process of PI model group formation, capacity building, and involvement in promoting MNC was documented in OR reports. The development of trust and unity of vision (social cohesion) among members was reported as important for PI groups to function, select leaders, make decisions, and manage Emergency Health Funds (EHFs) and health savings accounts. By endline the PI groups demonstrated trust and the ability to resolve problems that arose, showed commitment to working together to overcome barriers to MNC, and had established strong referral systems and PPP linkages with health officials and facilities.

Social capital in PI model implementation. Analysis of social capital scales created from the social capital tool, which differed from 2012 to 2014, showed significant association ($p < 0.001$) between social capital and PI group membership status at year 3 and 5 of the project. Enhanced structural social capital was evidenced by involvement in groups (65% in 2012 to 64% in 2014) and group leadership (11% to 19%), and in greater joining together to address common issues (46% to 64%) and work out conflicts (33% to 69%). Enhanced cognitive social capital was evidenced by greater household resourcefulness in time of personal crisis (34% to 90%) and interpersonal levels of trust (40% to 52%).

PI model and health outcomes. The KPC study documented significantly greater percentage increases ($p \leq 0.05$) over the duration of the project in the intervention versus the comparison group in receipt of 4 or more ANC visits from medically trained providers (157% in intervention versus 3% in comparison), institutional deliveries (143% versus 49%), deliveries assisted by skilled birth attendants (136% versus 2%), postpartum care of mothers (114% versus 36%) and newborns (132% versus 39%), and care-seeking from a qualified provider for ANC complications (42% versus 12%), postpartum complications (48% versus -24%) and pneumonia (46% versus -9%). Additionally, significant percentage increases ($p \leq 0.05$) were seen in the intervention compared with the comparison group in use of clean birth kits during home deliveries (663% versus 68%), thermal care of the newborn (334% versus 69%), delayed bathing (104% versus 70%), and exclusive breastfeeding (12% versus -15%). The percentage improvement in quality of ANC, active management of the third stage of labor (AMTSL), and provision of essential newborn care was also significantly greater in the intervention versus the comparison group. There was a significantly greater percentage reduction in the equity gap (rich-to-poor ratio) in the intervention versus the comparison group for births attended by a SBA, PNC for mother and newborn, and households that treat water effectively. Out of pocket costs for all MNC increased slightly or stayed the same in the intervention group, except for a 50% decrease in care for complications, while costs for institutional delivery in the comparison group increased markedly. The RHFA documented that MNC service availability increased in the intervention area, with ANC services increasing 50%, institutional deliveries 467%, sick child care 67%, laboratory services 113%, and MNCH supplies and drugs 16% to 211%.

Conclusions and Limitations

The study confirms that the PI model can be systematically and effectively established in poor rural underserved *upazilas* in Bangladesh to increase the social capital of poor marginalized women and empower them to work with government officials and health providers to improve household and community MNC and increase utilization of quality health services in hard-to reach families and communities. The PI model intervention strengthened public-private partnerships thereby enhancing access to resources for marginalized households. It improved the MNC practices of poor mothers and families, increased the quality of MNC services in their communities, and established an *upazila*-wide enabling environment to strengthen and sustain MNC gains. The PI model shows promise of being more capable than existing approaches in increasing utilization of MNC services, care-seeking for complications and pneumonia, health practices, and quality and equity in care. The finding that the intervention group had significantly greater gains than the comparison group in each of these areas points to the utility of the total package of the PI model intervention in achieving greater MNC outcomes.

A limitation of this study is that it used different samples for the KPC and social capital studies, did not collect comparison data for the social capital study, and constructed different social capital scales with 2012 and 2014 data.

Recommendations and Use of Findings

These are the recommendations made based on the findings:

1. That the PI model intervention receives ongoing support by Government of Bangladesh (GOB) and NGOs and be considered for scale-up among marginalized communities with low health outcomes in Bangladesh that are interested in improving MNC health services and outcomes.
2. That the duration of PI model intervention be longer than 5-years to sustain MNC behavior change and care-seeking from the formal health care sector. Although the project was able to achieve rapid uptake of the model in 2-years and achieve independently functioning PI groups by year five, incorporation of support mechanisms for group and public-private partnership structures beyond 5-years could increase sustainability of the model and health gains.
3. That learnings from the PI model intervention be applied to the Community Clinic Support Groups of the GOB MOHFW that are actively working in the whole country in improving child and maternal health activities.
4. That continuing research and scholarship be conducted to enhance the impact and sustainability of the PI model in various settings.
5. That the international global health community adapt relevant PI model approaches to promoting MNC in their specific contexts.

The World Renew **Healthy Mother Healthy Child (SUSOMA)** Project in Netrokona District in Bangladesh is supported by the American people through the United States Agency for International Development (USAID) through its Child Survival and Health Grants Program. The **SUSOMA** project is managed by World Renew under Cooperative Agreement No. **GHS-A-00-09-00009-00**. The views expressed in this material do not necessarily reflect the views of USAID or the United States Government.

SUSOMA

Child Survival Project

Final Evaluation

Netrokona Dissemination

August 12, 2014



USAID CSHGP 2009-2014

Agenda of Presentation:

- **Project Overview**
- **Evaluation Methodology**
- **Assessment Results**
- **Field Visit Findings**
- **Conclusions & Recommendations**



The SUSOMA Child Survival Project

USAID CSHGP 2009-2014

Goal:

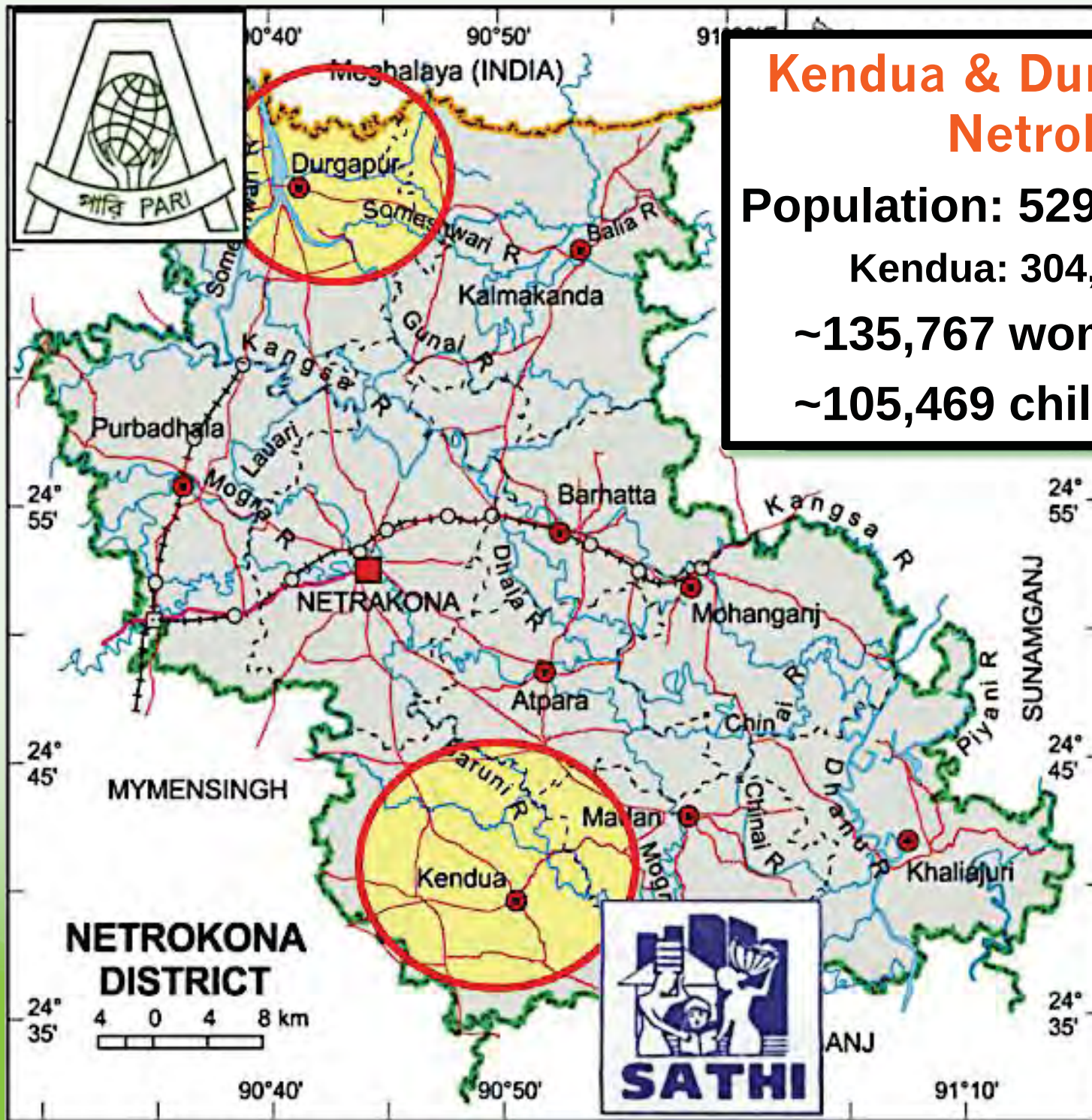
To reduce mortality and improve health status among marginalized mothers and newborns

Strategic Objective:

Improved household and community MNCH behaviors and increased utilization of quality services



Project Area Profile



Kendua & Durgapur Sub-districts Netrokona District

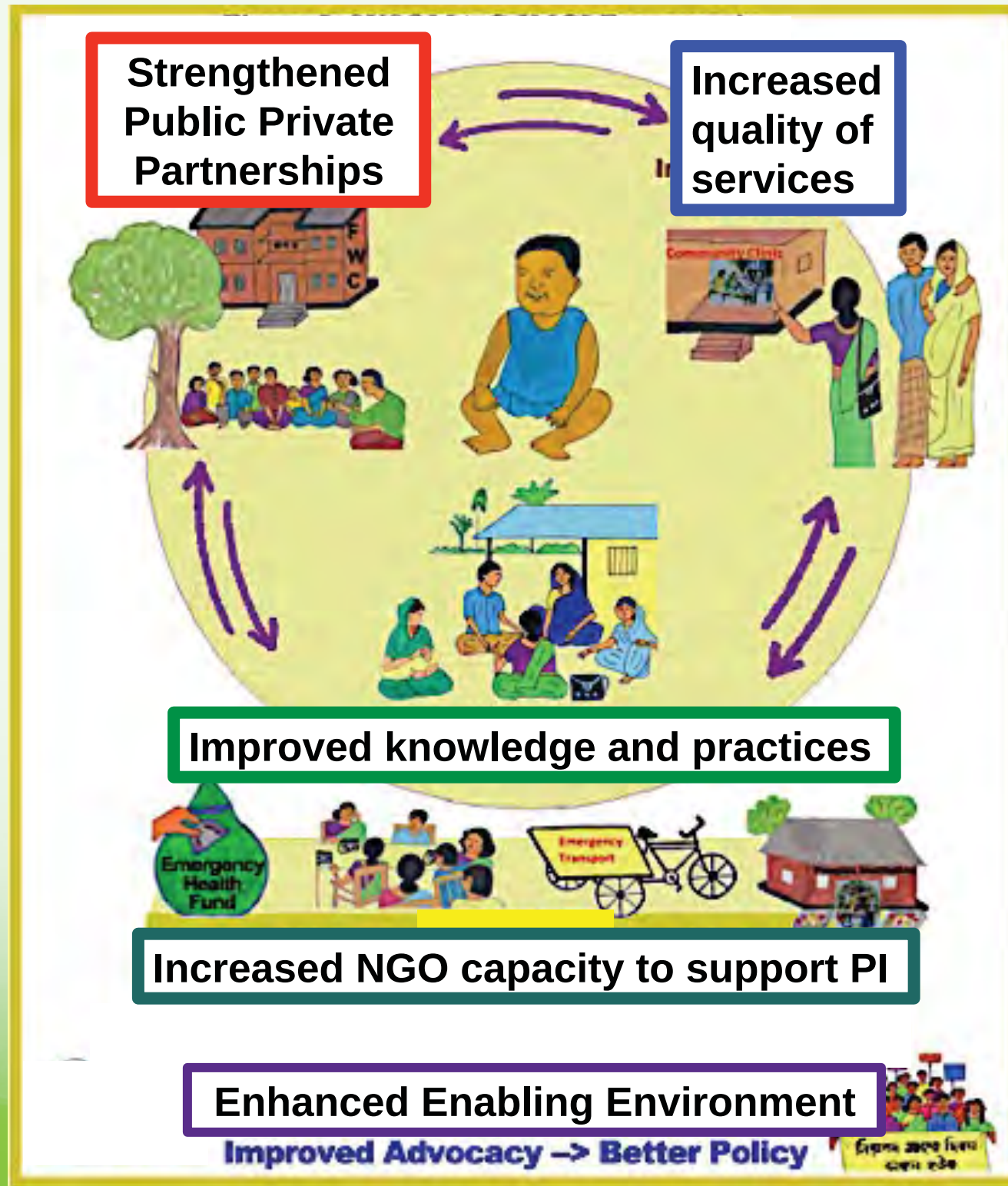
Population: 529,602

Kendua: 304,729; Durgapur: 224,873

~135,767 women age 15-49

~105,469 children age 0-5

SUSOMA C-IMCI Results Framework Overview



SUSOMA C-IMCI Results Framework Overview

- People's Institution
- GO-PI linkages
- Emergency Funds

Strengthened Public Private Partnerships

Increased quality of services

- Training
- Referrals
- Track HF utilization

Community-based MNCH education

Improved knowledge and practices

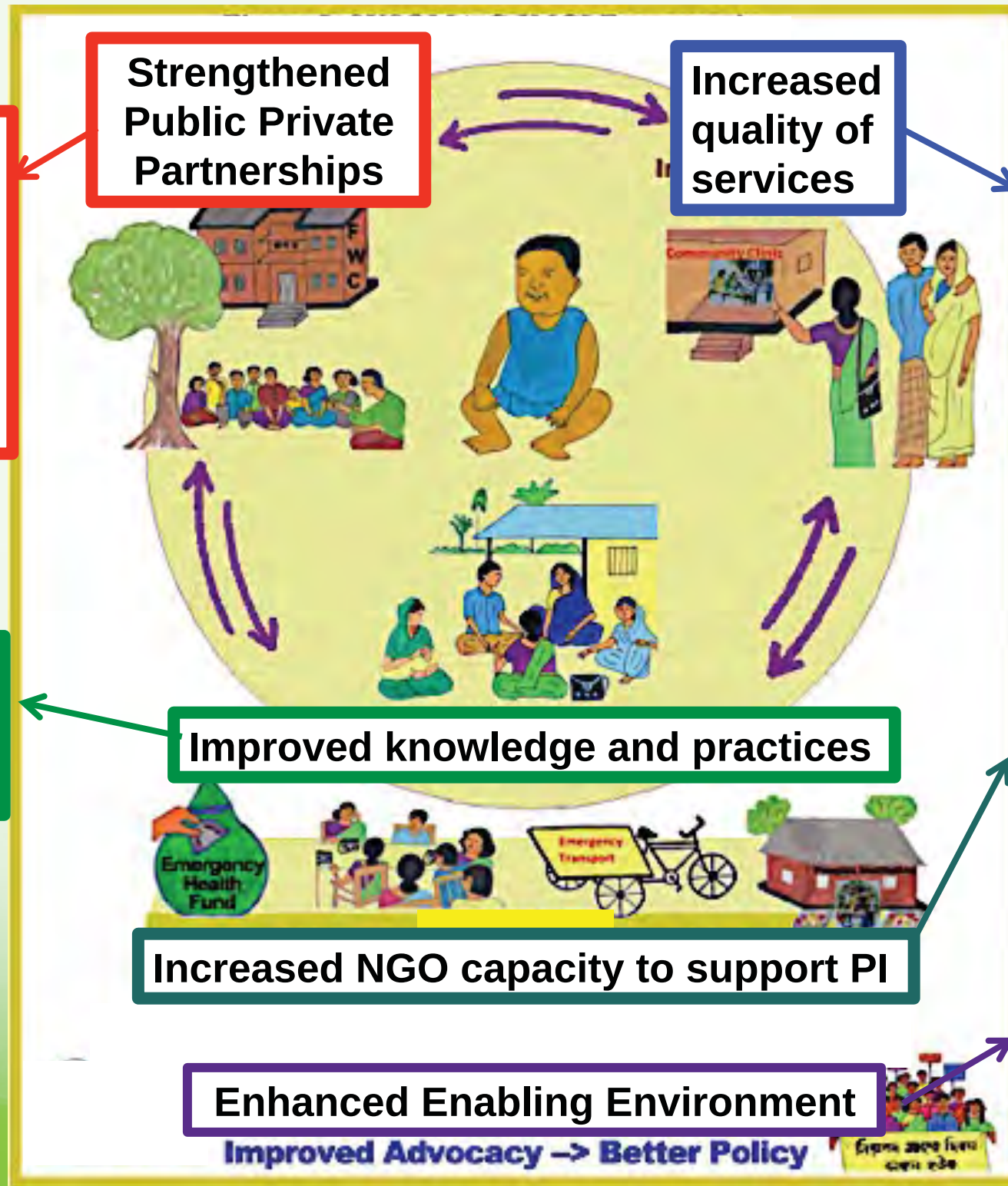
- PARI SATHI
- Learning exchanges
- PI GOB registration

Increased NGO capacity to support PI

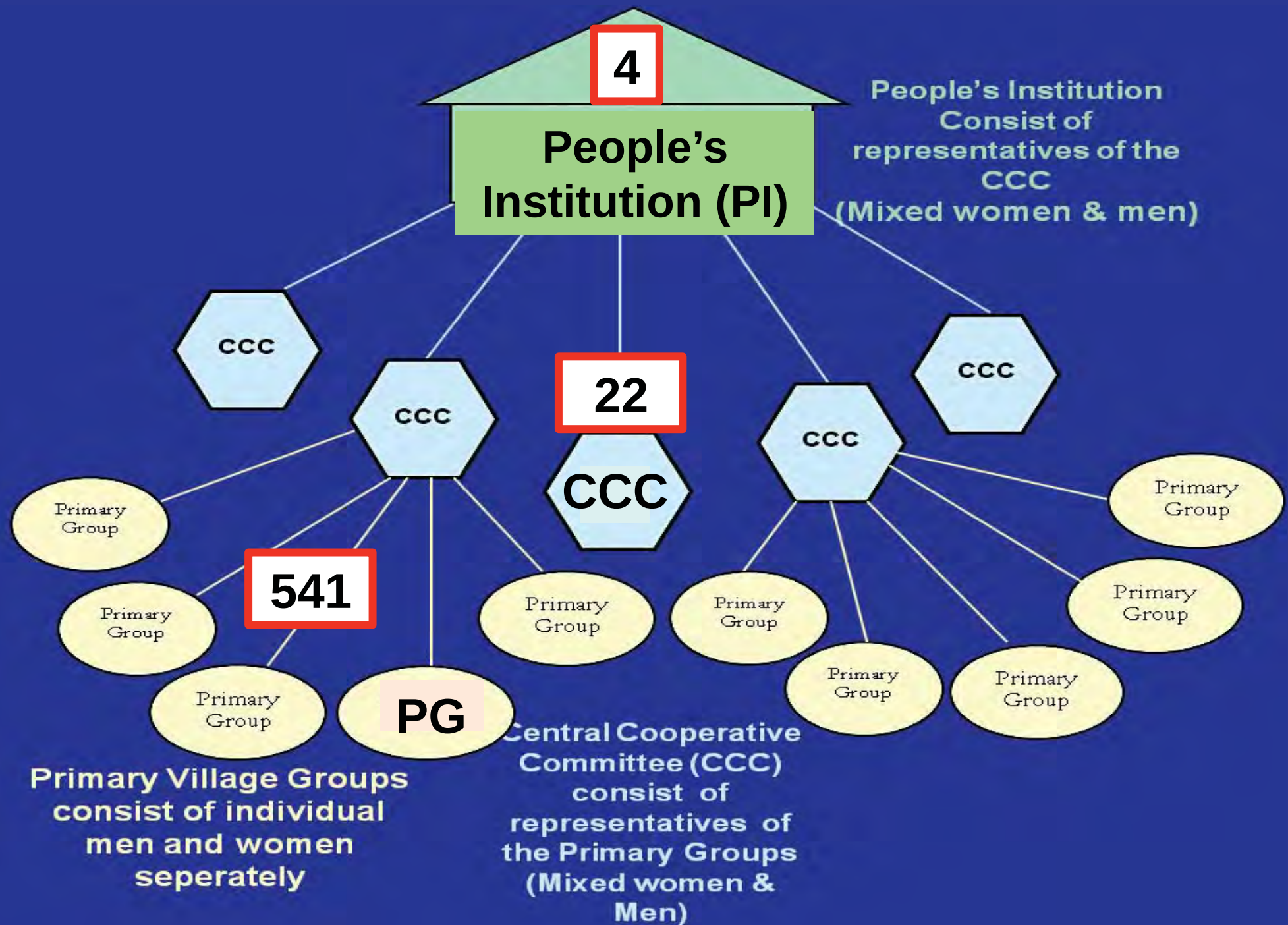
Enhanced Enabling Environment

- HMIS
- Resources
- Advocacy

Improved Advocacy → Better Policy



People's Institution (PI) Model



Intervention Highlights

- 1. World Renew/PARI/SATHI established capacity of the 3-tier PI system through activation, training & support, guidance**
 - ~ 50% of families reached in each village
 - Active Emergency Health Funds and Health Savings
- 2. Volunteers promoted MNC through monthly household counseling, referral, group teaching, community dramas & events**
 - 537 CHV and 541 TTBA volunteer trained providers in villages
- 3. Extensive trainings of community health providers in collaboration with LAMB and Joyramkura**
 - 44,132 training event participants
GO health workers (158); partner staff (867)
Village Doctors, CHVs TTBAAs, and PI leaders (43,107);
- 4. PI members advocated for quality improvement of MNC**
 - PI's active in management of 90% Community Clinics
 - Monthly HMIS 'matching meetings' to track MNCH

Sub-district Profiles

	<u>Kendua</u>	<u>Durgapur</u>
Population	305,000	245,000

Health Facilities

Upazilla Health Complex	1	1
Union FWC/RD	13	7
Community Clinic	30	25
Private NGO facilities	0	4

PI Model Groups

# villages	505	289	216
# primary groups	541	326	214
# union groups (CCC)	22	13	9
# People's Institution	4	1	3



Agenda of Presentation:

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Evaluation Principles

Evaluations are joint activities:

Participatory evaluations encourage problem analysis and solution development by project staff and partners (and not just by an external evaluator)

1. **Monitoring** – day to day implementation progress
 - *How fast are we going? Are we using the strategies?*
2. **Midterm Evaluation** -- program improvement
 - *Are we going in the right direction? Do we need to make adjustments to get to our goals?*
3. **Final Evaluation** -- documenting accomplishments and lessons learned
 - *Have we arrived? What did we learn? What will continue?*



Final Evaluation (FE) Objectives

(from June 2013 CSHGP FE Guidelines)

1. Provide overview of **project goals, objectives, key intervention strategies** implemented
2. Determine the extent to which the project **accomplished the results** and present evidence of these accomplishments.
3. Describe key factors that contributed to **what worked or did not work** regarding of some or all aspects of the program.
4. Demonstrate how the project contributed to **learning and evidence to improve MOH policies and practices** and **global learning** about community-oriented health programming.
5. Provide a **record of results obtained and the processes by which they were achieved**, so that USAID . . . help others understand what should be done to reproduce these results.

Evaluation Focus

Used to examine attainment of SUSOMA program objectives

Accomplishments

- What results were achieved and how?

Challenges

- What worked or did not work and why?

Sustainability

- What can be sustained, scaled-up, shared?

Impact

- What evidence links results with the PI model?
(Operations Research by icddr,b)



The Evaluation Team



The SUSOMA Final Evaluation Team

Evaluation Team Member Name	Title
1. Ms. Grace Kreulen	Independent consultant
2. Ms. Kohima Daring	Country Consultant
3. MS. Nancy Ten Broek	Development Consultant
4. Mr. Alan Talens	Backstop, World Renew
5. Mr. Dayal Chandra Paul	Executive Director, Supoth
6. Mr. Gabriel Rozario	Executive Director, Pari
7. Mr. Apurba Ghagra	Director, Sathi
8. Ms. Catherine Guda	Assistant Director, Sathi
9. Ms. Shagota Chisim	Capacity Developmt Manager, VR
10. Mr. Mukarram Hussein Musa	Coordinator, Susoma Sathi
11. Mr. Prafullo Hajong	Coordinator, Susoma Pari
12. Mr. Shukumar Ghagra	Project Manager, Susoma
13. Mr. Mitra Bardhan Paul	SUSOMA Training Coordinator
14. Mr. David Kreulen, PhD	Visitor
15. Ms. Kim	Visitor
16. Mr. Silas Bhaskey	Program Manager, SUJIBON

FE Schedule

3, 4 Aug Workshop 1 & 2, Dhaka

Project review, quantitative data review, develop field questions

5, 6, 7 Aug Field interviews, Netrakona (Teams A, B, C)

7 Aug Visit with irddc,b, Dhaka (Team C)

8 Aug Day off (Teams A & B return Dhaka)

9, 10 Aug Workshops 3 & 4

Compile all findings, triangulate data, draw conclusions

12 Aug Final evaluation dissemination, Netrokona

Evaluation Team Activities

- 1. Review endline quantitative & qualitative data**
- 2. Agree on evaluation activities, key stakeholders & questions**
- 3. Conduct field interviews & compile information**
- 4. Discuss findings considering all evaluation data**
- 5. Develop conclusions and recommendations**
- 6. Present findings to partners**
- 7. Compile written report for granting agency (USAID)**



Agenda of Presentation:

- **Project Overview**
- **Evaluation Methodology**
- **Assessment Results**
 - **KPC Survey**
 - **Health Services Delivery Assessment**
 - **Child Survival Sustainability Assessment**
- **Field Visit Findings**
- **Conclusions & Recommendations**



KPC Survey

Knowledge Practices and Coverage Survey
Durgapur and Kendua populations

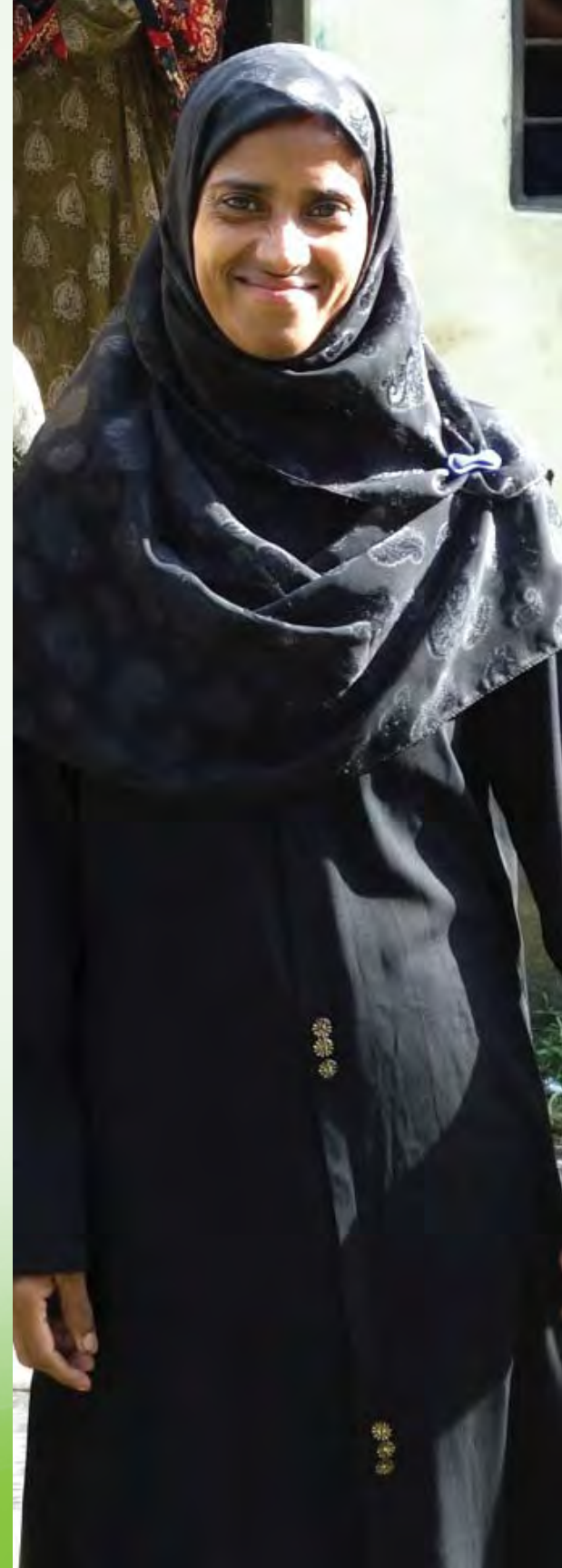
KPC: 43 items related to antenatal care, delivery, postnatal care, neonatal health, nutrition and breastfeeding, child health

Sample: 679 mothers of children less than 1 year of age obtained by cluster sampling

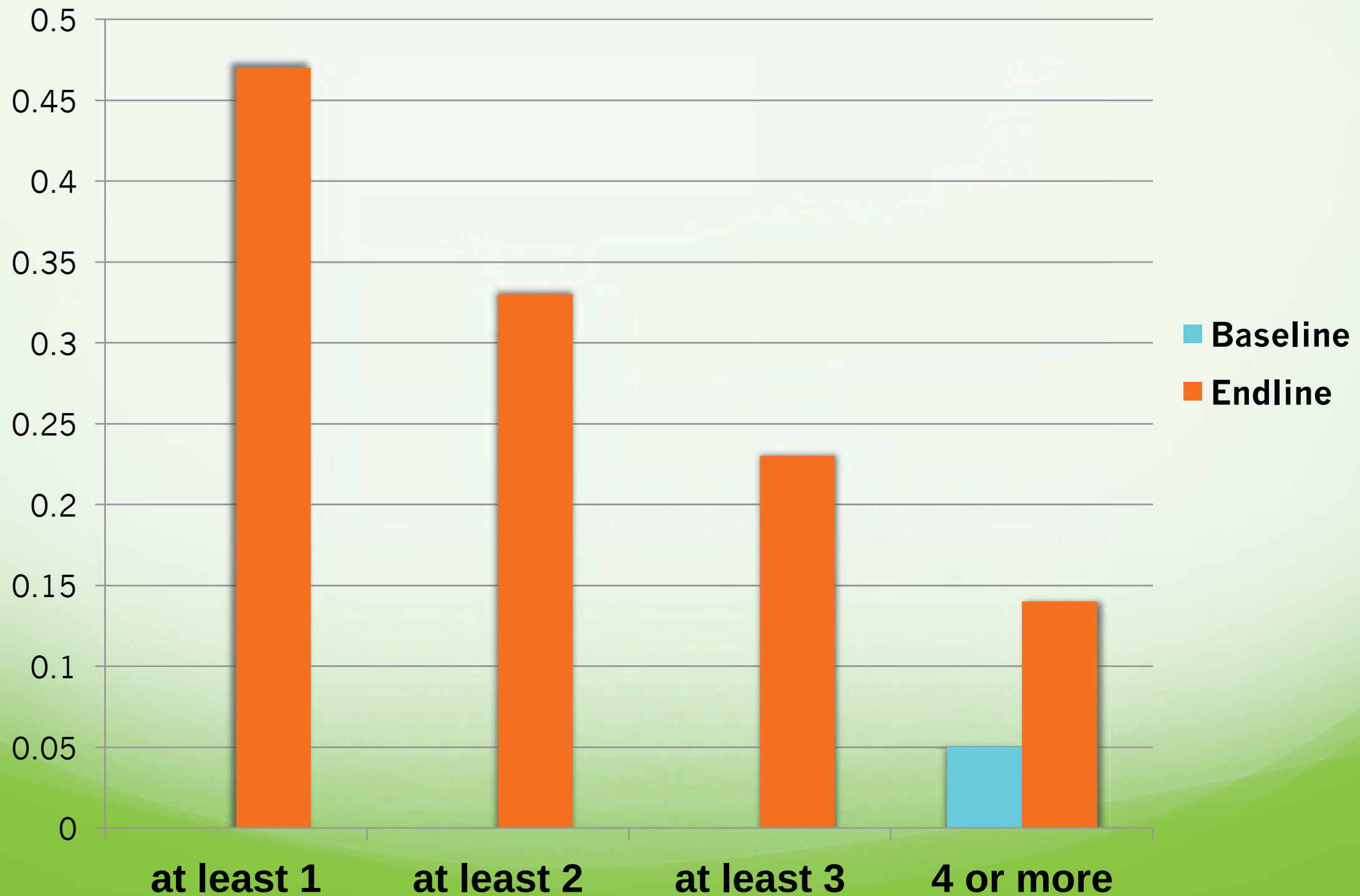
Interviews:

Baseline – 2009

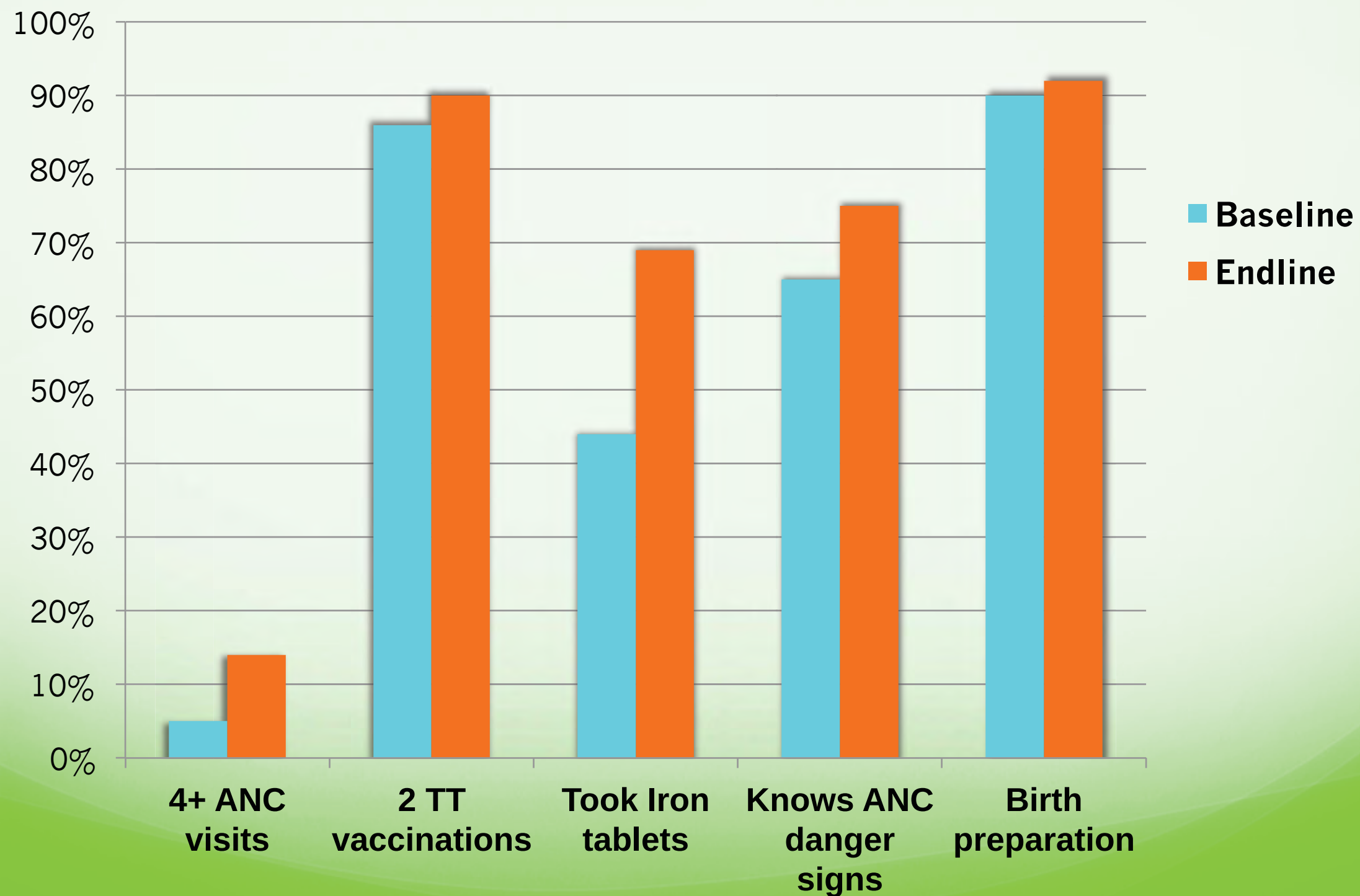
Endline – 2014



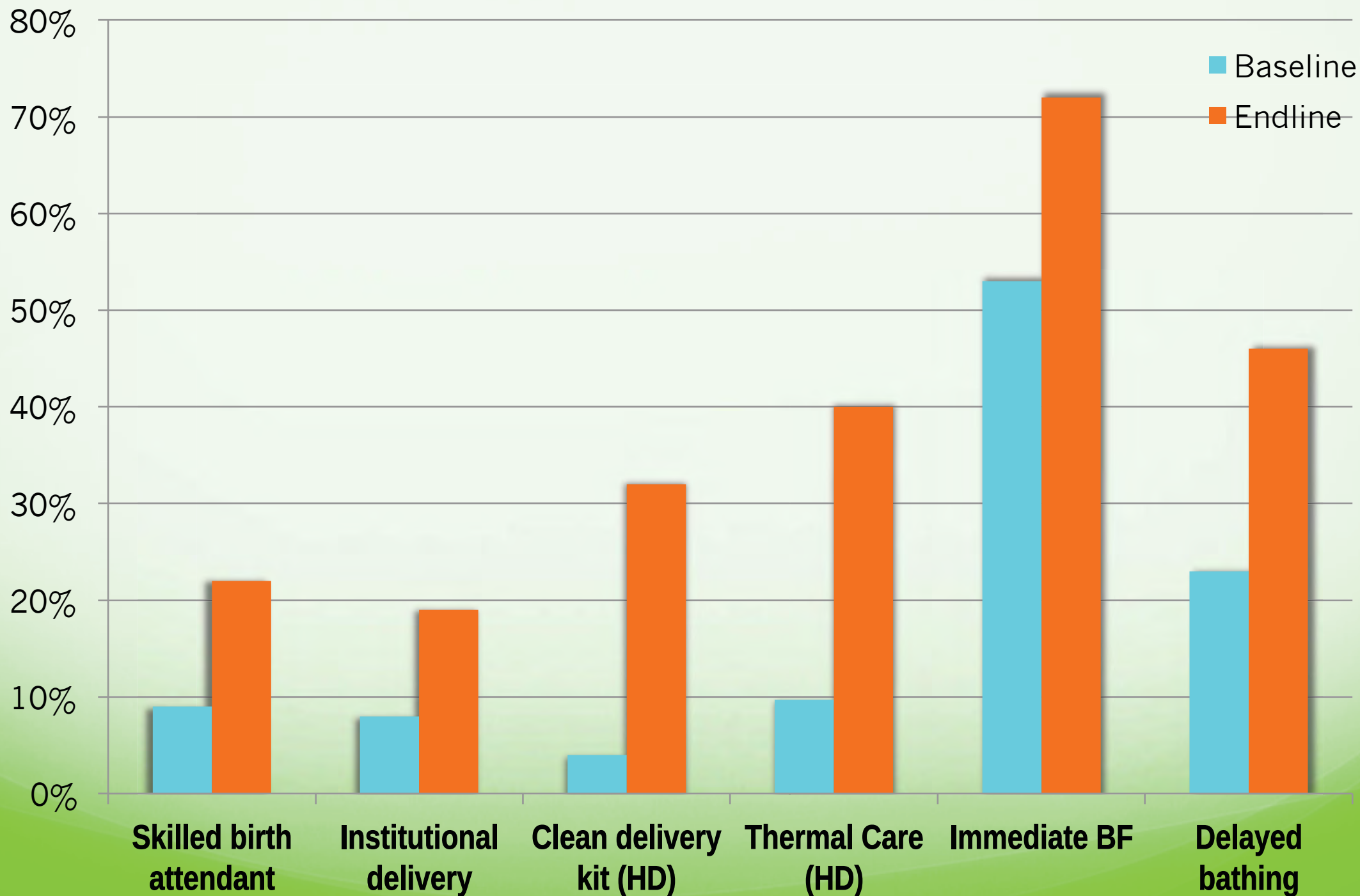
KPC Results: Antenatal Care Visits



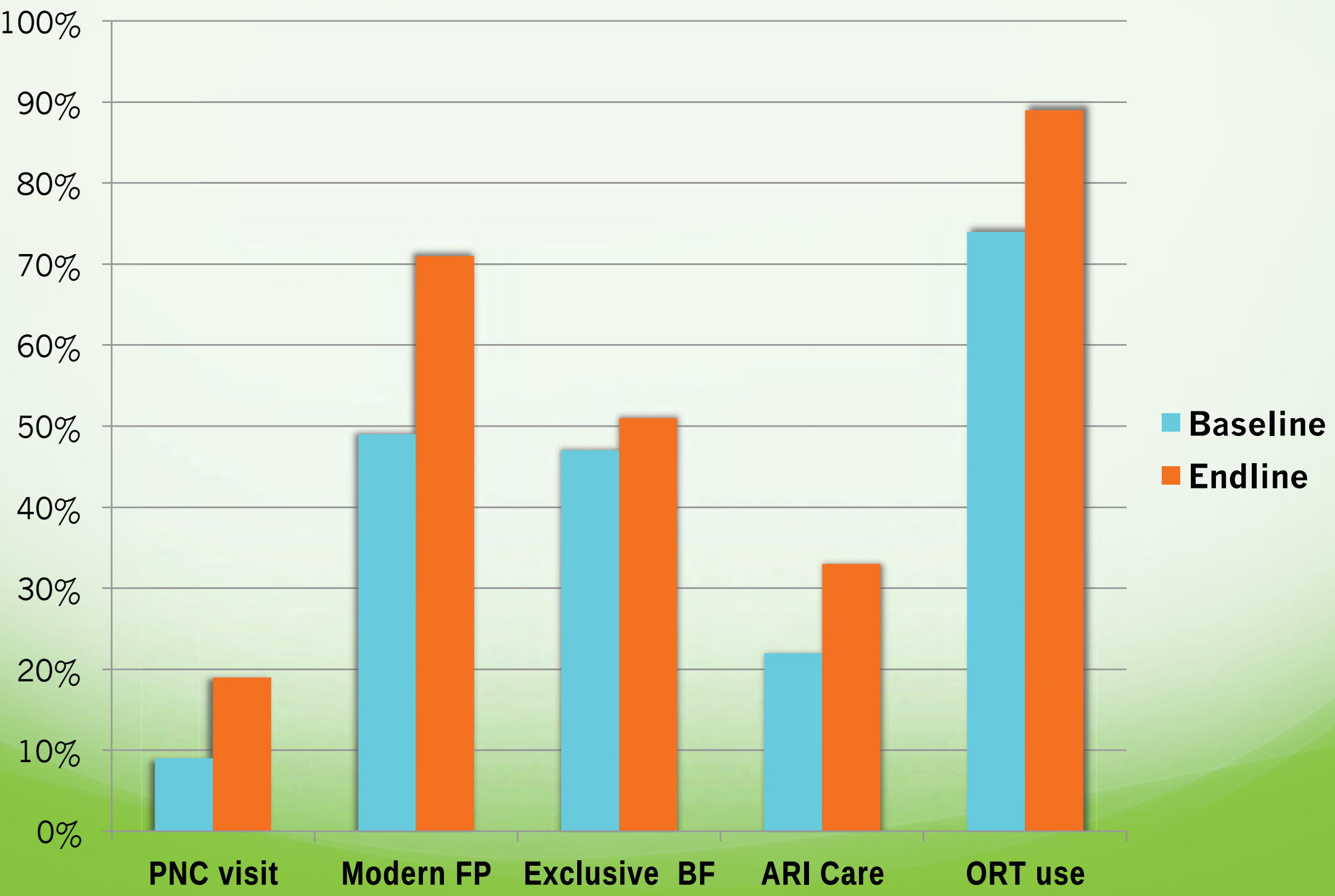
KPC Results: Antenatal Practices



KPC Results: Delivery + Newborn Practices



KPC Results: Postnatal + Child Care Practices

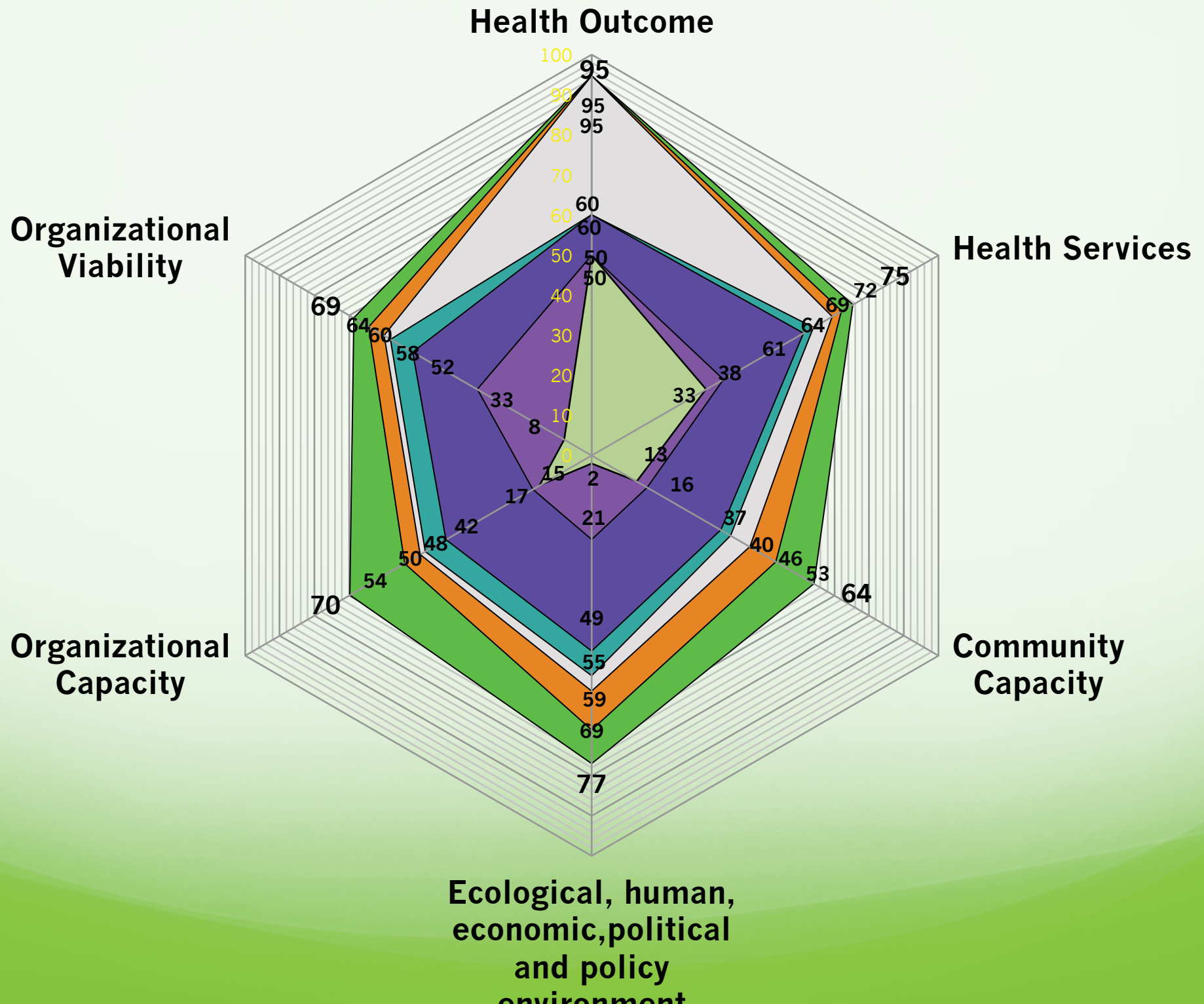


Health Facility Assessment

HF random sample: UHC (2) , FWC/RD (7), CC (21), Pvt (1) facilities

	Baseline 2009	Endline 2014
All essential infrastructure present	13%	27%
Adequate basic laboratory services	3%	30%
External supervision w/in last 3 months	7%	57%
Child: Quality assessments performed	18%	13%
all essential supplies available	13%	23%
ORS available	43%	77%
sick child care	60%	100%
MNC: ANC at least once a week	60%	90%
Delivery services all days	3%	17%
ANC supplies: BP Cuff	33%	100%
Neonatal drugs: antibiotics	13%	33%
ANC drugs: Iron Folate	67%	100%
Up-to-date records of ANC & deliveries	14%	38%

SUSOMA PI Sustainability Assessment



Operations Research Study

DM Emdadul Hoque, PI, ICDDR,B

Objectives

1. To evaluate the performance of PI model groups in reaching marginalized and poor populations
2. To assess PI model effects on MNCH, care-seeking for illnesses, and compliance with referral, quality of care and utilization of services
3. To describe the process of PI group formation in model implementation
4. To assess the effect of social capital on PI outcomes.

Methods:

- Qualitative process evaluation of PI model implementation
- Investigation of social capital as it relates to the PI model
- Quantitative comparison of program effects from baseline to endline.

Findings: Report pending

Preliminary analysis indicates significant increases in social capital in primary group members vs. nonmembers

Agenda of Presentation:

- **Project Overview**
- **Evaluation Methodology**
- **Assessment Results**
- **Field Visit Findings**
- **Conclusions & Recommendations**



Stakeholder Interviews

Stakeholder group	
Government Officials	9 persons
GO health workers	9 groups
CHV, TTBA, Village Doctor	5 groups
Community Clinic, Pvt Clinic	8 groups
Pis, CCCs, Primary Groups	14 groups
Mothers, Husbands, In-laws	4 groups
SUSOMA and NGO staff	4 groups



Findings from Field Interviews

Accomplishments:

- Well-established PI groups actively working for the community
- Well integrated government provider – community linkages
- Extensive training and capacity building occurred
- Emergency health funds and referrals improving access to care

Challenges:

- Health facility infrastructure
- Initial lack of trust and hesitancy to get involved in PI group
- Initially only women in PI groups, now men's groups forming

Sustainability:

- PI will continue to promote MNCH at grassroots level and with the Government health facilities
- CHV and TTBA work for their communities will continue

Impact:

- The PI model is associated with improved MNCH in communities



Agenda of Presentation:

- **Project Overview**
- **Evaluation Methodology**
- **Assessment Results**
- **Field Visit Findings**
- **Conclusions & Recommendations**



Commendations

1. Commend government officials on a well functioning partnership with community-based People's Institutions to promote MNCH
2. World Renew and PARI & SATHI created well-balanced trained dedicated project teams that effectively established the PI Model in Kendua and Durgapur



Key Conclusions

- 1. SUSOMA increased community capacity for MNCH and involvement with the health system by establishing the PI model with marginalized people.**
- 2. SUSOMA effectively established public-private health system collaboration** in which the poor are active with government facilities and government officials are awakened to their needs
- 3. Access to quality MNCH services for the poor was increased** by establishment of emergency health funds, a special referral system with priority care status, and the public-private partnership.
- 4. The MNCH practices of marginalized mothers and families have improved**



Key Conclusions

- 5. The Pis helped to increase access to safe and facility-based delivery** by increasing awareness of mothers, creating demand, networking and advocacy with influencing others, training CSBAs, and providing emergency health funds.
- 6. SUSOMA integrated sustainability into the PI group model** in terms of financing, monitoring capacity, continuing trainings for groups and volunteer workers, fostering of public-private networks between PI members, GO officials, and health workers.
- 7. SUSOMA strengthened the capacity of PARI and SATHI** to support the PI model, promote rural MNCH, and work with MOHFW at upazilla and district levels.



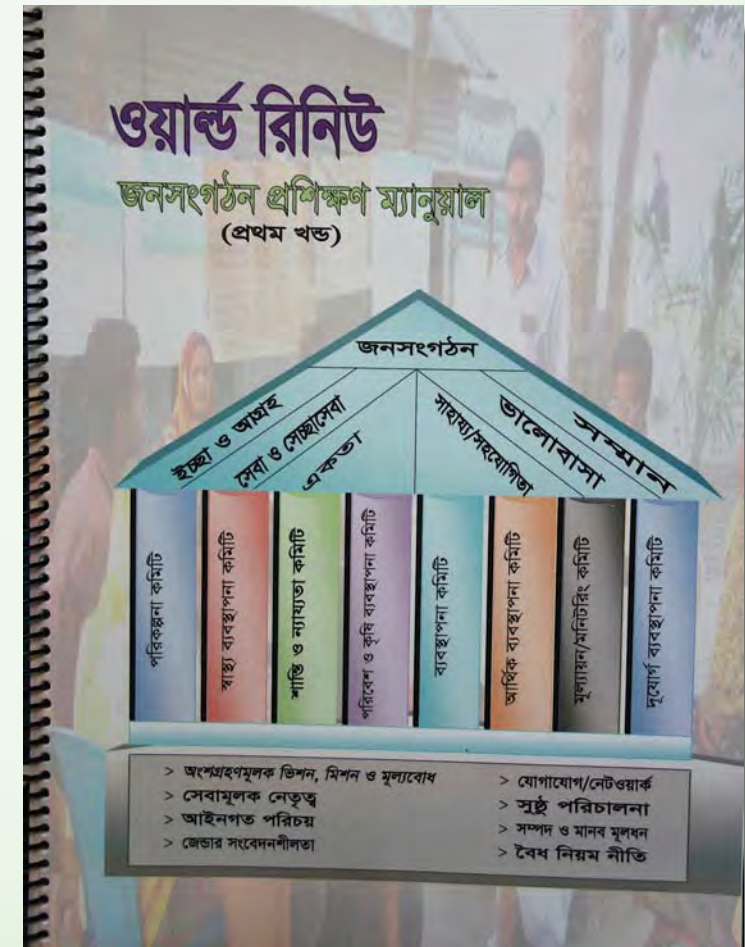
SUSOMA Best Practices

- 1. The PI Model** of empowerment and local governance to increase social capital of marginalized poor women and improve MNC health status of the community
- 2. Emergency health funds** built and managed by PI groups for payment of health transport and services
- 3. SUSOMA's referral system** established jointly with government health facilities
- 4. Matching meetings** between PI and GO providers focused on integrating HMIS to include MNCH field data.
- 5. PI involvement in the management and upkeep of Community Clinics**
- 6. Volunteer system of MNCH promotion** utilizing community-based CHVs and TTBAAs



Recommendations

- That the success of the SUSOMA PI model be actively shared with others and considered for scale-up in other settings.
- That there be continuing engagement between PARI, SATHI, government and the PI groups to promote sustainability of project achievements.
- That the PI Manual compiled during the SUSOMA project be translated into English for wider dissemination.



The People's
Institution Manual

Thank You !

Child Survival and Health Grants Program Project Summary

Dec-11-2014

Christian Reformed World Relief Committee (Bangladesh)

General Project Information

Cooperative Agreement Number:	GHS-A-00-09-00009
WORLDRENEW Headquarters Technical Backstop:	Alan Talens
WORLDRENEW Headquarters Technical Backstop Backup:	Stephanie Sackett
Field Program Manager:	Sukumar Ghagra
Midterm Evaluator:	Franklin Baer
Final Evaluator:	Grace Kruelen
Headquarter Financial Contact:	Stephanie Sackett
Project Dates:	9/30/2009 - 9/29/2014 (FY2009)
Project Type:	Innovation
USAID Mission Contact:	Sukumar Sarker
Project Web Site:	www.crwrc.org

Field Program Manager

Name:	Sukumar Ghagra
Address:	Bangladesh
Phone:	
Fax:	
E-mail:	sgsupoth@gmail.com
Skype Name:	

Alternate Field Contact

Name:	Nancy TenBroek (Regional Health Advisor (Asia))
Address:	Baridhara DOHS Baridhara DOHS Dhaka 1000 Bangladesh
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Fax:	011 (88)02 8419171

E-mail:

ntenbroek@crwrc.org

Skype Name:

nancy-tb

Grant Funding Information

USAID Funding: \$1,428,543

PVO Match: \$496,422

General Project Description

CRWRC, a 2009 Innovation category grantee, is implementing the SUSOMA (*Shusto Sontan O Ma*, Bangla words which mean "healthy child and mother") Project in in two rural sub-districts of northern Bangladesh where a large population of poor and ethnic minorities live. The project goal is to reduce mortality and improve health status among the most marginalized mothers and newborns. Household and community behaviors will be improved and utilization of maternal and newborn care (MNC) services will be increased through establishment of a public-private collaboration -- the People's Institution.

The People's Institution model is an innovative community mobilization and empowerment strategy that can be used to reach the poorest and most marginalized members of a community. The community organizations formed within this model interact and collaborate with both the formal and informal health care systems in ways that lead to stronger, more sustainable systems.

CRWRC is implementing the project in partnership with two local nongovernmental organizations, PARI and SATHI, and will be integrated into the Government of Bangladesh's Community Integrated Management of Childhood Illness (C-IMCI) strategy, which has been expanded to include newborns. Community health volunteers (CHVs) and trained traditional birth attendants (TTBAs) will help caretakers improve their knowledge and health behaviors, particularly related to MNC, and increase demand for quality services through linkages with health facilities, which will result in better access to health services.

Project Location

Latitude: 24.89	Longitude: 90.73
Project Location Types:	Rural
Levels of Intervention:	Health Center Health Post Level Home Community
Province(s):	--
District(s):	Netrokona District
Sub-District(s):	Durgapur, and Kendua Sub-Districts

Operations Research Information

OR Project Title:	Building Public-Private Partnerships to Improve Maternal, Newborn and Child Health in Bangladesh
Cost of OR Activities:	\$265,000
Research Partner(s):	Government of Bangladesh (GOB), International Center for Diarrheal Disease Research, Bangladesh (ICDDR,B), University of Michigan
OR Project Description:	CRWRC is partnering with the International Center for Diarrheal Disease Research, Bangladesh (ICDDR,B) and indirectly with University of Michigan and the Government of Bangladesh to conduct operations research (OR) to test whether the People’s Institution model is more effective, equitable, and cost-effective than currently available programs in the area.

The OR will use a quasi-experimental design composed of three phases: (1) formative research, (2) evaluative research, and (3) qualitative process documentation. The study will evaluate the effectiveness of the People's Institution model on increaseing caretakers' knowledge, household practices, and care-seeking behavior. Included in the parameters to be measured are social constructs such as social capital and social mobilization, which contribute to empowerment of the poor and disenfranchised. The OR will also explore equity, attitudes and accountability of the community, and the cost-effectiveness of the model.

Partners

SATHI (Sustainable Association for Taking Human Development Initiatives. (Subgrantee)	\$433,540
PARI (Participatory Action for Rural Innovation) (Subgrantee)	\$297,671
ICDDR,B (International Center for Diarrheal Research,Bangladesh) (Subgrantee)	\$219,998
Government of Bangladesh (Collaborating Partner)	\$0

Strategies

Social and Behavioral Change Strategies:	Community Mobilization Group interventions Interpersonal Communication Social Marketing Mass media and small media
Health Services Access Strategies:	Emergency Transport Planning/Financing Addressing social barriers (i.e. gender, socio-cultural, etc) Community-based health insurance scheme/Community financing mechanisms Implementation with a sub-population that the government has identified as poor and underserved Implementation in a geographic area that the government has identified as poor and underserved
Health Systems Strengthening:	Quality Assurance Conducting capacity assessment of local partners Supportive Supervision Developing/Helping to develop job aids Providing feedback on health worker performance Monitoring CHW adherence with evidence-based guidelines Referral-counterreferral system development for CHWs Community role in supervision of CHWs Community role in recruitment of CHWs Coordinating existing HMIS with community level data Community input on quality improvement
Strategies for Enabling Environment:	Advocacy for revisions to national guidelines/protocols Stakeholder engagement and policy dialogue (local/state or national) Advocacy for policy change or resource mobilization Building capacity of communities/CBOs to advocate to leaders for health
Tools/Methodologies:	BEHAVE Framework Sustainability Framework (CSSA) Rapid Health Facility Assessment LQAS Participatory Rapid/Rural Appraisal MAMAN Framework Lives Saved Calculator

Capacity Building

Local Partners:	Local Non-Government Organization (NGO) Traditional Healers Health CBOs Other CBOs

Government sanctioned CHWs
Non-government sanctioned CHWs
TBAs
Private Providers (Other Non-TBA)

Interventions & Components

Maternal & Newborn Care (100%)

- Recognition of Danger signs
- Newborn Care
- Post partum Care
- Integation. with Iron & Folic Acid
- Normal Delivery Care
- Birth Plans
- Emergency Transport
- Neonatal Vitamin A
- Kangaroo Mother Care (skin to skin care)

IMCI Integration

CHW Training
HF Training

Operational Plan Indicators

Number of People Trained in Maternal/Newborn Health			
Gender	Year	Target	Actual
Female	2010	230	
Female	2010		343
Male	2010		38
Male	2010	26	
Female	2011	1281	
Female	2011		1159
Male	2011		129
Male	2011	142	
Female	2012	1330	
Female	2012		1632
Male	2012		54
Male	2012	148	
Female	2013	1245	
Female	2013		2441
Male	2013		414
Male	2013	138	
Number of People Trained in Child Health & Nutrition			
Gender	Year	Target	Actual
Female	2010	0	
Female	2010		0
Male	2010		0
Male	2010	0	
Female	2011	0	
Female	2011		0
Male	2011		0
Male	2011	0	
Female	2012	0	
Female	2012		0
Male	2012		0
Male	2012	0	

Female	2013	0	
Female	2013		0
Male	2013		0
Male	2013	0	
Number of People Trained in Malaria Treatment or Prevention			
Gender	Year	Target	Actual
Female	2010		0
Female	2010	0	
Male	2010		0
Male	2010	0	
Female	2011		0
Female	2011	0	
Male	2011		0
Male	2011	0	
Female	2012		0
Female	2012	0	
Male	2012		0
Male	2012	0	
Female	2013		0
Female	2013	0	
Male	2013		0
Male	2013	0	

Locations & Sub-Areas

Total Population:

484,920

Target Beneficiaries

	Bangladesh - WorldRenew - FY2009
Children 0-59 months	96,571
Women 15-49 years	124,313
Beneficiaries Total	220,884

Rapid Catch Indicators: DIP Submission

Sample Type: 30 Cluster				
Indicator	Numerator	Denominator	Percentage	Confidence Interval
Percentage of mothers with children age 0-23 months who received at least two Tetanus toxoid vaccinations before the birth of their youngest child	648	753	86.1%	3.5
Percentage of children age 0-23 months whose births were attended by skilled personnel	70	753	9.3%	2.9
Percentage of children age 0-5 months who were exclusively breastfed during the last 24 hours	237	502	47.2%	6.2
Percentage of children age 6-23 months who received a dose of Vitamin A in the last 6 months: card verified or mother’s recall	942	1314	71.7%	3.4
Percentage of children age 12-23 months who received a measles vaccination	849	893	95.1%	2.0
Percentage of children age 12-23 months who received DTP1 according to the vaccination card or mother’s recall by the time of the survey	844	893	94.5%	2.1
Percentage of children age 12-23 months who received DTP3 according to the vaccination card or mother’s recall by the time of the survey	811	893	90.8%	2.7
Percentage of children age 0-23 months with a febrile episode during the last two weeks who were treated with an effective anti-malarial drug within 24 hours after the fever began	6	749	0.8%	0.9
Percentage of children age 0-23 months with diarrhea in the last two weeks who received oral rehydration solution (ORS) and/or recommended home fluids	84	114	73.7%	11.4
Percentage of children age 0-23 months with chest-related cough and fast and/or difficult breathing in the last two weeks who were taken to an appropriate health provider	29	130	22.3%	10.1

Percentage of households of children age 0-23 months that treat water effectively	32	1816	1.8%	0.9
Percentage of mothers of children age 0-23 months who live in households with soap at the place for hand washing	392	1816	21.6%	2.7
Percentage of children age 0-23 months who slept under an insecticide-treated bednet (in malaria risk areas, where bednet use is effective) the previous night	107	1816	5.9%	1.5
Percentage of children 0-23 months who are underweight (-2 SD for the median weight for age, according to the WHO/NCHS reference population)	605	1816	33.3%	3.1
Percentage of infants and young children age 6-23 months fed according to a minimum of appropriate feeding practices	417	1314	31.7%	3.6
Percentage of mothers of children age 0-23 months who had four or more antenatal visits when they were pregnant with the youngest child	40	753	5.3%	2.3
Percentage of mothers of children age 0-23 months who are using a modern contraceptive method	890	1806	49.3%	3.3
Percentage of children age 0-23 months who received a post-natal visit from an appropriately trained health worker within two days after birth	59	740	8.0%	2.8

Rapid Catch Indicators: Mid-term

Sample Type: 30 Cluster				
Indicator	Numerator	Denominator	Percentage	Confidence Interval
Percentage of mothers with children age 0-23 months who received at least two Tetanus toxoid vaccinations before the birth of their youngest child	534	582	91.8%	3.2
Percentage of children age 0-23 months whose births were attended by skilled personnel	76	582	13.1%	3.9
Percentage of children age 0-5 months who were exclusively breastfed during the last 24 hours	115	194	59.3%	9.8
Percentage of children age 6-23 months who received a dose of Vitamin A in the last 6 months: card verified or mother’s recall	252	301	83.7%	5.9
Percentage of children age 12-23 months who received a measles vaccination	185	233	79.4%	7.3
Percentage of children age 12-23 months who received DTP1 according to the vaccination card or mother’s recall by the time of the survey	228	233	97.9%	2.6
Percentage of children age 12-23 months who received DTP3 according to the vaccination card or mother’s recall by the time of the survey	198	233	85.0%	6.5
Percentage of children age 0-23 months with a febrile episode during the last two weeks who were treated with an effective anti-malarial drug within 24 hours after the fever began	0	324	0.0%	0.0
Percentage of children age 0-23 months with diarrhea in the last two weeks who received oral rehydration solution (ORS) and/or recommended home fluids	48	57	84.2%	13.4
Percentage of children age 0-23 months with chest-related cough and fast and/or difficult breathing in the last two weeks who were taken to an appropriate health provider	15	52	28.8%	17.4

Percentage of households of children age 0-23 months that treat water effectively	12	582	2.1%	1.6
Percentage of mothers of children age 0-23 months who live in households with soap at the place for hand washing	326	582	56.0%	5.7
Percentage of children age 0-23 months who slept under an insecticide-treated bednet (in malaria risk areas, where bednet use is effective) the previous night	112	582	19.2%	4.5
Percentage of children 0-23 months who are underweight (-2 SD for the median weight for age, according to the WHO/NCHS reference population)	197	582	33.8%	5.4
Percentage of infants and young children age 6-23 months fed according to a minimum of appropriate feeding practices	347	379	91.6%	4.0
Percentage of mothers of children age 0-23 months who had four or more antenatal visits when they were pregnant with the youngest child	65	582	11.2%	3.6
Percentage of mothers of children age 0-23 months who are using a modern contraceptive method	334	579	57.7%	5.7
Percentage of children age 0-23 months who received a post-natal visit from an appropriately trained health worker within two days after birth	67	582	11.5%	3.7

Rapid Catch Indicators: Final Evaluation

Sample Type: 30 Cluster				
Indicator	Numerator	Denominator	Percentage	Confidence Interval
Percentage of mothers with children age 0-23 months who received at least two Tetanus toxoid vaccinations before the birth of their youngest child	629	697	90.2%	3.1
Percentage of children age 0-23 months whose births were attended by skilled personnel	153	697	22.0%	4.3
Percentage of children age 0-5 months who were exclusively breastfed during the last 24 hours	156	305	51.1%	7.9
Percentage of children age 6-23 months who received a dose of Vitamin A in the last 6 months: card verified or mother’s recall	510	662	77.0%	4.5
Percentage of children age 12-23 months who received a measles vaccination	187	304	61.5%	7.7
Percentage of children age 12-23 months who received DTP1 according to the vaccination card or mother’s recall by the time of the survey	263	304	86.5%	5.4
Percentage of children age 12-23 months who received DTP3 according to the vaccination card or mother’s recall by the time of the survey	222	304	73.0%	7.1
Percentage of children age 0-23 months with a febrile episode during the last two weeks who were treated with an effective anti-malarial drug within 24 hours after the fever began	8	377	2.1%	2.1
Percentage of children age 0-23 months with diarrhea in the last two weeks who received oral rehydration solution (ORS) and/or recommended home fluids	60	67	89.6%	10.4
Percentage of children age 0-23 months with chest-related cough and fast and/or difficult breathing in the last two weeks who were taken to an appropriate health provider	19	57	33.3%	17.3

Percentage of households of children age 0-23 months that treat water effectively	78	1686	4.6%	1.4
Percentage of mothers of children age 0-23 months who live in households with soap at the place for hand washing	663	1686	39.3%	3.3
Percentage of children age 0-23 months who slept under an insecticide-treated bednet (in malaria risk areas, where bednet use is effective) the previous night	69	967	7.1%	2.3
Percentage of children 0-23 months who are underweight (-2 SD for the median weight for age, according to the WHO/NCHS reference population)	257	954	26.9%	4.0
Percentage of infants and young children age 6-23 months fed according to a minimum of appropriate feeding practices	133	662	20.1%	4.3
Percentage of mothers of children age 0-23 months who had four or more antenatal visits when they were pregnant with the youngest child	95	697	13.6%	3.6
Percentage of mothers of children age 0-23 months who are using a modern contraceptive method	1185	1670	71.0%	3.1
Percentage of children age 0-23 months who received a post-natal visit from an appropriately trained health worker within two days after birth	124	669	18.5%	4.2

Rapid Catch Indicator Comments

Rapid CATCH 2008 Indicators were used in this KPC.

At baseline 20 clusters (unions) were sampled in the two intervention areas and another 20 unions were sampled in the two comparison upzilas. Only results from the intervention area were entered into the data form. See the KPC report in the final DIP for the results in the comparison area.

At midterm 30 clusters (villages) were sampled in the two intervention areas; a survey was not conducted in the comparison upzilas.

Endline Data for the following indicators: Antenatal Care, Tetanus Toxoid, Skilled Birth

Attendants, Post-Partum Visit, skilled Birth Attendant and Current Contraceptive Use among Mothers of Young Children were obtained from samples of respondents of mothers of children age 0-11 months instead of mothers of 0-23 months. Baseline data recalculated for appropriate comparison. (USAID informed of these changes)

**Health Services Delivery Assessment
Durgapur and Kendua Unions, Netrakona
District
Comparing Endline (June 2014) to Baseline
(November 2009)**

**Using the
Rapid Health Facility Assessment (R-HFA)
For core maternal, neonatal and child health (MNCH)
services at the primary level**

**District Health and Family Welfare Department, Netrakona;
Child Survival Program, USAID
World Renew, LAMB**

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1. Introduction

1.1. Background: World Renew implemented a USAID-funded five-year Child Survival Program for Netrokona (sub-districts of Durgapur and Kendua.), a remote northern district with high newborn and maternal mortality (1). The project's goal was to reduce mortality among the most marginalized mothers and newborns by building sustainable public-private partnerships with the community organizations (People's Institutions) that can mobilize poor families to access quality maternal and newborn health services. The **Strategic objectives** of the project included:

- Strengthen public-private partnerships with the peoples institutions for maternal and newborn health
- Improve utilization of quality maternal and newborn care services, and
- Enhance the enabling environment for maternal and newborn health.

World Renew focused all its efforts on a **maternal and newborn intervention package**, using the government's integrated strategy for childhood illness (Community IMCI) that was expanded to include maternal and newborns. The project, implemented with 2 local partners PARI and SATHI, provided community- based services and health promotion delivered at the household level by trained traditional birth attendants (TTBAs) and unpaid Community Health Volunteers (CHVs).(2)

1.2. Purpose of the Rapid Health Facilities Assessment (RHFA): As part of the setup of the child survival program in Durgapur and Kendua the baseline assessment was done to evaluate the maternal, newborn and child health services (MNCH) in the 3 levels of Health Facilities in the project area (district hospital, first level and community- based) in the areas of staffing (qualifications, training, supervision); health infrastructure (facilities, medicines, supplies); and health worker performance regarding management of childhood illnesses. (2) The endline RHFA was done to assess progress in each of these areas at the end of child survival project.

1.3. Outcomes from the RHFA:

1.3.1. Provide a baseline and endline on staffing, infrastructure and knowledge and practices of health workers regarding IMCI for the three levels of health facility in Durgapur and Kendua Unions, to measure improvements achieved during the project period.

1.3.2. Develop the capacity of the survey team (both Pari and Government Health Staff) to conduct a health facilities assessment and understand the value of the information collected.

1.4. Durgapur and Kendua Health Systems: Government Health services in Netrokona district are ultimately under the jurisdiction of the Civil Surgeon (CS, health) and Deputy Director (DD, family planning). Each Upazilla (sub-district) has an Upazilla

Health Complex (UHC) and a mixture of Union Health and Family Welfare Centers (FWC), Rural Dispensaries (RD), and Community Clinics (CC) (see table 1 below). Durgapur also has a number of private/NGO clinics. Actual staffing of Government facilities is generally less than the allotted posts, due to both overall health worker shifts to Urban areas and the remoteness of Netrakona district, in particular (Table 2, below).

Table 1. Health Facilities in Durgapur and Kendua Upazilas (update)

UNIT TYPE		Upazilla Health Complex	Family Welfare Center	Rural Dispensary	Community Clinic (open)	Private Clinic/ NGO
UPAZILLA						
Durgapur	2009	1	6	1	25 (18)	4
	2014	1	6	1	25 (25)	3
Kendua	2009	1	4	9	30 (30)	0
	2014	1	8	5	35 (35)	0
Total	2009	2	10	10	55 (48)	4
	2014	2	12	15	60 (60)	3

Table 2.1 Health Staff by Directorate, Total Posts and Posts Currently Filled (2009)

Directorate	Type of Staff	Durgapur		Kendua	
		Total posts	Posts filled	Total posts	Posts filled
Health	Medical Doctors (health complex and sub-health center)	9	3	8	6
	Medical Officer(Union Level) New-Created	6	6	13	2
	Dental Surgeon	1	0	1	0
	Nursing Staff (health complex)	11	5	10	3
	Medical Assistant (Health complex/sub-HC)	3	3	15	9
	Medical Assistant (Union)	6	3	2	1
	Technologists (lab, pharmacy, Leprosy etc)	11	10	20	20
	Support staff (accounts, stores, guards, drivers, ayahs, etc)	29	19	40	34
	Health Inspector/Assistant	11	9	17	16
	Health Assistant	40	24	60	31
Total		124	82	186	122
Family Planning	Doctors	4	3	6	5
	Family Welfare Visitor	7	7	13	12
	Family Welfare Assistant	38	33	unk	59
	Family Planning Assistant	7	3	--	--
	SACMO (Medical Asst.)	5	1	5	3
	Community Skilled Birth Attendants	unk	23	unk	37
	Pharmacist	5	2	0	0
	Support staff	18	11	unk	unk
Total		107*	83	120*	116

Table 2.2 Health Staff by Directorate, Total Posts and Posts Currently Filled (2014)

Directorate	Type of staff	Durgapur		Kendua	
		Total post	Post filled	Total post	Post filled
Health	Medical Doctors(Health complex and sub-health center	16	4	8	6
	Medical Officer(Union Level) New-Created	6	3	13	3
	Dental Surgeon	1	0	1	1
	Nursing Staff (health complex)	16	11	14	8
	Medical Assistant (Health complex/sub-HC)	3	3	2	2
	Medical Assistant (Union)	6	6	13	11
	Community Health Care Provider(CHCP) CC level	25	25	38	35
	Technologists (lab, pharmacy, Leprosy etc)	9	8	20	9
	Support staff (accounts, stores, guards, drivers, ayahs, etc)	29	19	40	34
	Health Inspector/Assistant	11	9	17	10
	Health Assistant	40	40	60	50
total		162	128	226	169
FAMILY PLANNING					
Family Planning	Doctors	5	0	2	1
	Family Welfare Visitor	13	9	16	16
	Family Welfare Assistant	38	35	74	62
	Family Planning Assistant	7	3	3	3
	SACMO (Medical Asst.)	5	2	4	4
	Community Skilled Birth Attendants	Unk*	22	Unk*	21
	Pharmacist	5	2	1	0
	Support staff	18	8	19	16
total		113	81	140	123

* Where the total number of posts for the position was unknown, the number of staff posted was used in the total. Therefore the total presented may underestimate the actual total.

1.5. Facilities:

1.5.1. Upazilla Health Complex (UHC): There is one UHC per Upazilla. These are administered by the Upazilla Health and Family Planning Officer (UHFPO) and are staffed by doctors, nurses, technologists and support staff according to the number of beds (officially 31 or 50) (3). In line with the government's commitment to implement Integrated Management of Childhood Illness (IMCI) protocols, UHC's are being set up with IMCI corners where medical assistants or Senior Nurses with IMCI training treat under-five children. All UHC's have facilities for normal deliveries and a number have been upgraded to deliver Emergency Obstetric Care

(EmOC), including cesarean sections. The catchment area for an UHC is normally .2-.45 million people **(4)**.

1.5.2. Rural Dispensaries (RD): Rural Dispensaries operate at the Union level and serve a population of 20-30,000. Along with the UHC they operate under the Health Services wing of the Ministry of Health and Family Welfare (MOHFW). Staff postings at RD's include Medical Officers, Medical Assistants (sub-assistant medical officers or SACMO's) and Pharmacists.

1.5.3. Union Health and Family Welfare Centers (UHFWC): UHFWC's also operate at the Union level and serve a population of 20-30,000. They operate under the Family Planning wing of the MOHFW. They have a post for a medical officer but are normally staffed by Medical Assistants and Family Welfare Visitors (FWV's). Medical Assistants and FWV's are targeted to get IMCI training by the government, but not all have received it. UHFWC's were originally built with a room in which to do normal deliveries, however only a few 'upgraded' facilities are currently doing deliveries.

Community Clinics (CC): Each CC was envisioned to provide basic health care to a population of 6,000 families. Although many buildings were constructed in the 1990's most were closed, or were used for purposed other than health. The current government has been committed to re-opening community clinics since 2009 and staffing them with Female Welfare Assistants (FWA's), Female Health Assistants (HA's) trained as community skilled birth attendants (CSBA's) and Community Health Care Providers (CHCP's). The CHCP is a new cadre of health care provider, developed specifically to work at Community Clinics. The first training started in April of 2012 (5).

1.6. Staff:

1.6.1. Medical Doctors: Most doctors are posted to hospitals, though there are posts for medical officers down to the union level.

1.6.2. Senior Nurses: Female senior nurses traditionally have had a 3 year training in general nursing with an additional year in normal obstetrics. The government nursing curriculum has been updated and a three year general diploma in nursing is now the standard. In 2010 a 6 month advanced midwifery certificate course was launched for diploma midwives to expand their skills as nurse-midwives. In addition, a direct entry three year diploma in midwifery course was launched in December of 2012 **(6)**. Diploma nurses are mainly posted to hospitals (district, upazilla and municipality 50 bed). They perform normal deliveries, and some have had extra training in emergency obstetric care and/or IMCI

1.6.3. Medical Assistants/ Sub-Assistant Community Medical Officers (SACMO's):

MA's have a three year medical training and are posted to UHC outpatient clinics, and Rural Dispensaries. SACMO's are posted to Upazilla Health and Family Welfare Centers. Many have been trained in IMCI and run under-five clinics.

1.6.4. Family Welfare Visitors: FWV's work under the Directorate of Family Planning.

They have an 18 month training that includes family planning and normal delivery. They are targeted to receive IMCI training. FWV's are posted to Maternal Child Welfare Centers (MCWC's), Family Planning Clinics at UHC's, and FWC's. They are also the supervisors of the new Community Skilled Birth Attendant cadre. None have been trained since 1995. (7)

1.6.5. Community Skilled Birth Attendants (CSBA's): Female Welfare Assistants (FP

Directorate) and Female Health Assistants (Health Directorate) are given 6 month's training in antenatal (ANC), normal delivery and post natal (PNC) care to function as skilled delivery attendants in the home. CSBA's also carry on their normal responsibilities as FWA's and HA's and provide health education and family planning services at Community Clinics and in the home. FWA's were meant to visit homes one every two months. (7) The CSBA was considered the community health worker for purposes of the RHFA.

1.6.6. Community Health Care Providers (CHCP's): CHCP's receive 12 weeks of pre-

service training (six weeks theoretical and 6 weeks practical)(MOHFW website, 2012). 237 CHCP's had been trained in Netrakona Upazilla by the end of the third phase (16 May, 2014) (5). In addition, CHCP's have received a three day community IMCI course to increase their skill in treating under-five children.

1.7. The WHO has been instrumental in developing the IMCI strategy which encompasses a range of interventions to prevent and manage major childhood illness (ARI (mostly pneumonia), diarrhea, measles, malaria, or malnutrition) both in health facilities and in the home.

Implementation of the IMCI strategy involves the following three components:

- Improvements in the case management skills of health staff through the provision of locally adapted guidelines on integrated management of childhood illness and activities to promote their use.
- Improvements in the health system required for effective management of childhood illness.
- Improvements in family and community practices.

The Government of Bangladesh decided to pilot the IMCI strategy in 1998. After adaptation of the generic guidelines, implementation started in 2001 in three upazillas, and plans made for rapid scaling up after an evaluation of the program in 2003. (8)

2. Methodology

2.1. Introduction: A Rapid Health Facility Assessment (R-HFA) was carried out in Durgapur and Kendua Upazillas of Netrakona District in November 2009 and June 2014. Staff from CRWRC Child Survival Project (CSP) and partner organization, Pari, initially approached the Civil Surgeon of Netrakona for his permission and cooperation in conducting the RHFA in facilities under his authority. In addition, the DD Family Planning was consulted as some of the staff to be interviewed is under his authority. Dates for the survey workers' training and data collection were set in consultation with these local authorities to ensure maximum cooperation from the health facility staff. Authorities were aware of the period of time over which the survey would be conducted, but were not told which facility would be assessed on which day, to enable the survey to be conducted under as normal day to day conditions as possible.

2.2. Instruments and their Adaptation: The survey instrument was based on the Rapid Health Facility Assessment tool developed by a team at MEASURE Evaluation. The tool was designed to provide valid data on indicators of health service quality and access that would be comparable across child survival programs in different countries (9). The principal investigator and World Renew's Regional Health Advisor for Asia were briefed by the developer of the tool during an 'e-Illuminate' session online before the baseline survey, as well as following the suggestions given in the detailed instruction manual.

Adaptation of the questionnaire was done in consultation with World Renew (CSP, Health Specialist) before the baseline survey, retaining the optional questions that were appropriate for the context.

As the survey team had previous experience collecting data using collection forms written in English, only the consent form and exit interviews were planned to be translated ahead of the training for the baseline survey. In the end, the data collectors found the English of the survey forms more difficult than anticipated, and translation was done as the forms were reviewed during training. The clinical observation, exit interview, health worker interview and community health worker interview (modules 1, 2, 4 and 5) were translated into Bengali by a World Renew staff before the endline survey and back translated by an outside source. Piloting of the translated forms took place during training.

- 2.3. Training and Teams: For both the baseline and endline a three day's training was conducted at the Pari office in Durgapur with the assistance of World Renew, Pari and LAMB. There were 6 supervisors and 7 field investigator at the baseline and 7 supervisors and 7 field investigators at the endline training. The supervisors were mainly government health staff (MA's and FWV's) who had IMCI training. The field staff was mainly community supervisors and field workers from Pari, some of whom had previously been involved in data collection for knowledge practice and capacity (KPC) surveys.

On the first two days of the training the questionnaires the first four modules (Clinical Observation, Exit interview, Health facility check list and Health Worker Interview) were reviewed, meanings clarified, notes taken in Bengali (baseline) and practiced using role plays. The third day the supervisors and field investigators were divided into teams and went to health facilities to practice the first four questionnaires in an actual setting. After the field practice, questions were clarified and translations revised. The community health worker interview (module 5) was also reviewed and teams for the respective unions were given the forms they would need for data collection in the facilities they had been assigned.

The World Renew CSP staff, along with the principal investigator also acted as field supervisors for the field practice sessions and during the first two days of the actual data collection of the baseline. In addition for the endline a monitoring and evaluation officer from LAMB assisted with field supervision as well as overseeing data entry for all six days of the survey.

Since the government staff was from the area where the survey was being conducted care was taken not to assign them to survey their own facility. The original plan was to assign government health staff from Kendua to assess facilities in Durgapur and vice versa. Lack of suitable housing for the survey team in Kendua, however, made this impractical, and so government HW's stayed in his/her own home and came to a designated center each morning to travel to the health facility to be assessed that day with their team. This means that government staff was sometimes interviewing staff that they knew personally, not an ideal situation. They were cautioned not to give any 'tips' to HF staff and CHW's that were to be interviewed, such as day of interview (so that they would make sure to show up) or what information would be collected.

- 2.4. Data collection: The RHFA used five modules to collect data on health service delivery access and quality. The data collection teams consisted of two members: one supervisor who did the clinical observation on child illness assessments and health worker interviews as well as checking all forms for completeness at the end of each day; and

one field investigator who did the exit interviews with the child's care giver, the health facility check lists and community health worker interviews. Information collected for each module included the following:

- 2.4.1. Clinical Observation: The primary health worker doing clinical care for sick children was observed during consultations. Adherence to IMCI guidelines for diagnosis, treatment and explanation of treatment prescribed for three major illnesses of childhood (fever, diarrhea with and without blood and pneumonia) was assessed.
 - 2.4.2. Exit Interviews: This assessed what the care giver understood the diagnosis to be, what medicines had been given and what the caregiver understood the treatment dosage and schedule to be (quality of counseling by health worker)
 - 2.4.3. Health Facility Check List: The check list covered availability of essential infrastructure, equipment, supplies and drugs necessary to care for newborns, pregnant and delivering mothers and children under five.
 - 2.4.4. Health Worker Interview: Information was collected from the health worker who was the primary person seeing under-five children in the facility regarding initial education, recent in-service education / relevant training, and supervision of their work. Information was also collected from registers regarding antenatal, delivery and under-five consultations for fever/ diarrhea/ pneumonia in the last three months.
 - 2.4.5. Community Health Worker Interview: This brief questionnaire focused on services provided by the CHW, training received in the last three years, type of supervision provided by their supervisor, any register information maintained and treatment given to ill children.
- 2.5. Sampling: Sampling was done to determine 1. Which health facilities would be assessed; 2. Which clinical cases /exit interviews would be observed and 3. Which Community Health workers would be interviewed. Different sampling methods were used for each group as follows:
- 2.5.1. Health Facilities: The sampling frame included all health facilities which provided primary care (not just referral) for childhood illnesses. Four categories of facility were targeted for sampling in the instructions: hospital OPD, health center, health post and private office. In the Bangladesh context these translated to 1. Outpatient Department of Upazilla Health Complexes; 2. Upazilla Health and Family Welfare Centers and Rural Dispensaries; 3. Community Clinics and 4. Private / NGO clinics. Only Community Clinics which were determined to be open

and functioning by the relevant government authority were included in the sampling frame. The total number of facilities eligible for sampling at baseline was 73 and at endline, 86. According to the guidelines given in the instructions a sample of 28 would give a 95% confidence interval of +/- 15% for indicators which have Health Facility as the denominator. Since we had six to seven teams of two and five days in which to complete the survey it was decided to sample 30 facilities. Sampling was done on a sample proportionate to size basis to ensure balanced sampling from the different levels of health facility (see table 3 below). At least one facility was sampled from each category. Once the sample size was determined the sample was chosen using systematic random sampling.

Table 3: Sampling for Health Facilities and Population estimates

Facility Level	Type of facility included	Baseline			Endline		
		Samp-ling frame	Percent of total	Final Sample Size	Samp-ling frame	Percent of total	Final Sample Size
1	UHC OPD	2	2.7	1	2	2.3	1
2	FWC / RD	20	27.4	8	21	24.4	7
3	Community Clinic	48	65.8	20	60	69.8	21
4	Private / NGO	3	4.1	1	3	3.5	1
total		73	100	30	86	100	30

- 2.5.2. Clinical observations/ Exit Interviews: Six clinical observations/ exit interviews were targeted for each facility (30 x 6= 180 cases). As per the manual the first six children who attended the clinic and presented with fever/malaria, diarrhea (with or without blood) and/or pneumonia / difficulty breathing were chosen for observation. In general health facilities opened after 10 am and there were a number of facilities who had less than 6 eligible patients to interview. In addition, one facility did not open the day of the survey visit at baseline. Overall 63 out of an anticipated 180 child assessments and exit interviews were observed (35%) at baseline and 141 (78%) at endline (see table 4, below).

Table 4: Sampling Targets and Final Sample

Target	Targeted	Final sample baseline	Final sample endline
Number of health facilities	30	29	30
Facilities with under-five sick children the day of the survey	30	17	30
Child Observations (6/facility x 30 facilities)	180	63	141
ARI cases observed	Na	42	83
Fever / malaria observed	Na	34	34
Diarrhea observed	Na	19	40
Health Worker Interviews	30	29	30
CHW interviews	13 (baseline) 20 (endline)	13	20

2.5.3. Community Health Workers: A systematic random sample of 13 out of a total of 40 Community Health Workers (33%) was chosen from the sampling frame provided by the government authorities at baseline and 20 out of 60 (33%) at endline.

2.6. Population Estimates for Utilization Rates: Current population of the catchment area for each health facility was not available. Therefore standard government of Bangladesh figures for the expected catchment area of each type of facility were used (see table 5, below). This was compared with total population figures for Durgapur and Kendua Upazillas from the 2001 census (baseline) and 2011 census (endline), upgraded by estimated population growth rates/year. (10, 11) Since less than ½ of functioning health facilities in the two upazillas were sampled (30/73 for baseline and 30/86 at endline, see table 1, above) and the catchment area of some of the facilities overlap (Durgapur UHC and most of the clinics in the same union as well as the private clinic) we would expect the utilization rates to be artificially low.

Table 5: Population estimates for Under Five and ANC utilization analysis 2009 and 2014

Facility/ Area	Government estimate of catchment population	Population estimate from 2001 census, upgraded for 2009*	Estimated Under-fives/ catchment area for 2009 [@]	Estimated deliveries/ catchment area for 2009 [!]	Population estimate from 2011 census, upgraded for 2014*	Estimated Under-fives/ catchment area for 2014 [@]	Estimated deliveries/ catchment area for 2014 [!]
UHC	.2-.45 million		22,000	5772		24800	4100
UHFWC/ RD	20-30,000		2,200	577		2480	424

CC	6000		660	173		744	136
Total for HF sample areas using GoB estimate	514,000 (2009) 466,000 (2014)		56,540	14,834		60,264	10,348
Durgapur/ Kendua Upazillas (total)		540,136	59,415	15,588	543,682	67417	11145

*minimum GoB catchment area estimates used; @based on 11% of population for 2009 and 12.4% for 2014 (2011 figure); ¹based on birth rate for 2009 of 28.86/1000 population and for 2014 the 2011 figure of 20.5 births/1000 population was used.

- 2.7. Informed Consent and Confidentiality: The consent form was translated into Bengali and piloted during the training period. The supervisor was responsible to obtain the consent from the health worker observed/interviewed and each caregiver interviewed. Interviews were conducted as much as possible in quiet areas, away from other observers. In some facilities, however, there was no secluded area in which to conduct the exit interviews. All answers, however, were kept confidential once recorded.
- 2.8. Data checking, Entry and Analysis: All forms were checked for completeness by the team supervisor each day. In addition, the Principal Investigator reviewed all forms before data entry to double check for completeness as well as check the supervisors' assessment of health worker performance for treatment and counseling (on modules one and two). All forms were transported to the CSP Dhaka office where data entry was done by the CSP statistician for the baseline. For the endline assessment data was entered each evening by two data entry assistants. Data from all the forms was entered directly into the Excel package formulated by the creators of the tool. A random selection of forms was visually checked with data entered into the excel spreadsheet. In addition all data from modules 1 and 2 were double checked against entry to ensure accuracy.
- 2.9. Initial feedback: Although data collectors are encouraged to give initial feedback to health care workers before leaving the facility in the R-HRA instructions, this did not seem appropriate for this survey. Since each team included non-government and non-medical personnel it was felt that any feedback on areas for improvement might not have been well accepted. Therefore feedback was limited to thanking all participants and giving positive comments on tasks that were being done well.

3. Results

3.0 Intro:- Core Indicators: Twelve key indicators are calculated from the data collected by the R-HFA. The indicators focus on four key areas of health service

delivery: Access; Inputs; Processes and Performance. A summary of the indicators is given in Table 6, below (see Appendix for details):

Table 6: List of Key Data Variables/ Key Indicators to be reported
(reference- Rapid Health Facility Assessment Data Entry & Analysis Forms)

Area	#	Domain	Indicator
Access	1	Service Availability	% HF that offer three basic child health services
Inputs	2	Staffing	% staff in HF who provide clinical services working on the day of the survey
	3	Infrastructure	% essential infrastructure in HF to support child preventive / curative care available on the day of the survey
	4	Supplies	% essential supplies in HF to support child preventive / curative care available on the day of the survey
	5	Drugs	% first line medications for child services available in HF/ CHW on the day of the survey
	6	Information System	% HF / CHW that maintain up-to-date and complete records of sick U5 children (age, diagnosis, treatment) AND show evidence of data use
	7	Training	% HF / CHW where interviewed HW reports received in-service or pre-service education in child health in last 12 mo.
	8	Supervision	% HF / CHW that received external supervision at least once in the last 6 months
Performance	9	Utilization	# clinical encounters (annualized / CHW/HF) for sick children per U5 population in project area OR % HF with adequate population service coverage
	10	HW Performance: Assessment	% clinical encounters in HF in which ALL essential assessment tasks were made by HW for sick child
	11	HW Performance: Treatment	% clinical encounters (HW/CHW) in which treatment was appropriate to diagnosis for malaria, pneumonia, and/or diarrhea
	12	HW Performance: Counseling	% clinical encounters in HF in which the caretaker whose child was prescribed an antibiotic, anti-malarial, or ORS can correctly describe how to administer ALL prescribed drugs

Ten additional ‘optional indicators’ are included in the data collection / analysis format. These 10 focus on additional aspects of inputs, processes and performance which are also important for quality health service delivery, but may not be applicable to the country / area of assessment, or how health services are provided. Of the optional indicators, numbers 2,3 (inputs) and 4,5, 8 (processes) were included for this assessment (see table 7, below). Optional indicators 1 (availability of immunizations) and 9a (utilization of immunization services) were not appropriate for the facilities assessed, since the Expanded Program on Immunization (EPI) is still a vertical program. Although some of

the facilities assessed were able to report EPI data for their area, this did not accurately cover all EPI activity. In addition, government indicators in Bangladesh are based on children less than 12 months of age. Optional Indicators 6 (Malaria Drug (ACT) Logistics and 7 (ITN/LLN logistics) were not included since only one of the two target upazillas is considered a high risk malaria area.

Table 7: Optional Indicators Included in R-HFA Assessment

Area	#	Domain	Indicator
Inputs	Opt 2	Availability of guidelines	% HF with all nationally-mandated immunizations in stock on day of survey
	Opt 3	Infection Control	% HF with all infection control supplies and equipment on day of survey
Processes	Opt 4	HF-Community Coordination	% HF with routine community participation in management meetings OR have a system for eliciting client opinion, AND evidence that client feedback is reviewed
	Opt 5	Community Referral	% HF that received at least one referral from CHV in the last month
	Opt 8	Laboratory	% HF with adequate basic laboratory services on site or ability to send out

Rapid Health Facility Assessment Data Entry & Analysis Forms: Optional Indicators

Reporting on results of the HFA will be organized by indicator, looking first at the health facilities and then Community Health Workers and comparing endline to baseline results.

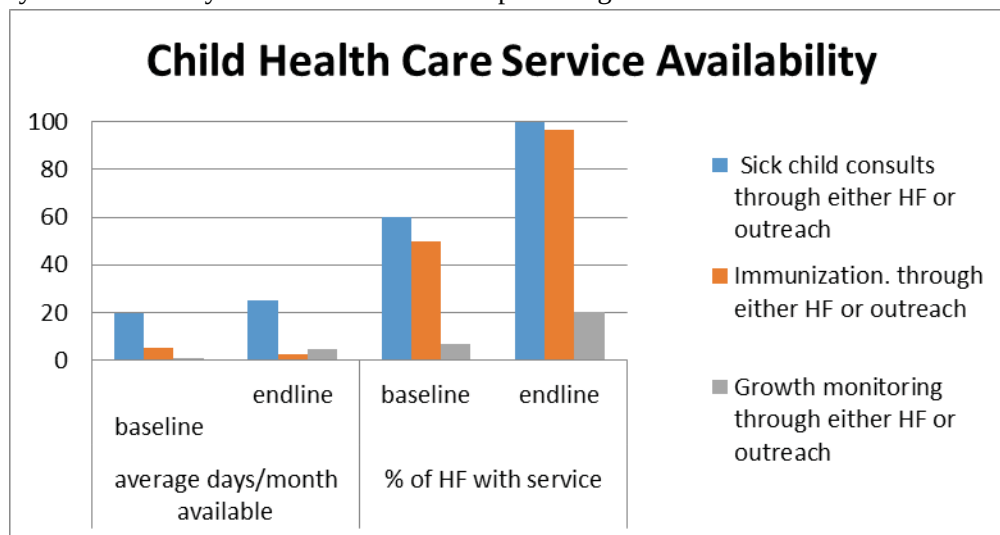
3.1 Indicator 1: Access to Health Care

- 3.1.1 **Geographic Access:** This indicator measures the proportion of the population with year-round geographic access (within 5 km. or one hour) to an authorized provider of curative child health services. Since neither GPS equipment nor detailed maps delineating the catchment area of each facility were available for Durgapur and Kendua unions, geographic access was not calculated for this report.
- 3.1.2 **Service Availability for Children:** This indicator measures the proportion of Health Centers that offer the three basic child health services, growth monitoring, immunization and sick child care. The proportion of facilities offering sick child care went from 60% at baseline to 100% at endline, a laudable improvement. Availability of immunization services at a facility increased to 97% at endline . Immunization is still a vertical program provided by specialized teams of health workers. Using this system Bangladesh has been able to achieve quite high levels of

immunization coverage (76% of children received all basic vaccinations by one year of age, **(12)** but it means that most health centers are involved in immunization days through outreach clinics rather than immunization days administered and reported on by the facility staff.

The Bangladesh government is committed to improving child health through implementation of the Integrated Management of Childhood Illness package developed by the WHO. Despite the emphasis in IMCI on taking every opportunity to weight children and plot their growth, growth monitoring was rarely available, with only 7% of facilities providing this service at baseline and 20% at endline (see figure 1, below).

Figure 1: Service Availability for Children: Sick child care; Immunization; Growth Monitoring. Days/month/facility available and % of HF providing the service



3.1.3 Availability of ANC services: At baseline **60% of facilities offered Antenatal Check-up services at ≥ 4 times per month**, averaging 10 days/ month/facility. This increased to 90% of facilities offering ANC check-up services at endline, averaging 19.5 days/month/facility.

3.1.4 Availability of Delivery Services: Only one out of 30 (3%) facilities, the Upazilla Health Complex, offered delivery services every day at baseline, which increased to 5 out of 30 (17%) at endline. The facilities offering delivery services at endline included two Upazilla Health and Family

Welfare Centers and one Community Clinic as well at the Upazilla Health Complex and private clinic.

3.2 Inputs:

3.2.1 Indicator 2: Staffing

An impressive 80% of facilities had all of their clinical staff present on the day of the survey at baseline. In 7 of the 30 facilities, however, there was no clinical staff posted. At the FWC and CC level a clinic is sometimes run by a pharmacist or lab technician who sees patients as well as gives out medicines / does lab tests. Small facilities, such as CC's, where only one or two clinical staff are posted were more likely to have all staff present, compared to the UHC and Private clinic which had 75% and 70% of clinical staff present on the day of the survey, respectively.

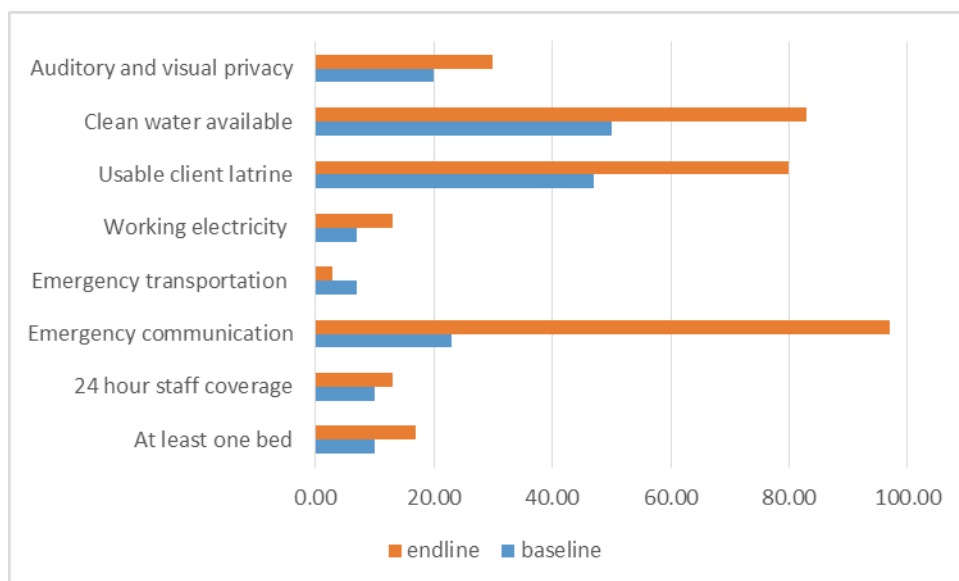
At endline 4/30 (14.7%) facilities had all of their clinical staff present. There are a couple of possible reasons for the large discrepancy between the baseline and endline data for staffing. One reason could be that more posts have been created for clinical staff at facilities, but many of those posts are yet to be filled, or not all staff show up every day. Whereas there were no clinical staff at many of the community clinics at baseline, by endline there were 1-4 clinical staff (mainly CSBA's and CHCP's) posted to each of the clinics, although only one or 2 staff were often present at the time of the survey. Another possibility is that in the endline survey data collectors recorded the number of government sanctioned posts as the total sanctioned posts and at the baseline the number of posts actually filled was used as the denominator. For example, for the Upazilla Health Complex there are 16 actual posts for doctors but only 4 of those posts are currently filled, On the day of the survey there were three medical officers present. On the survey form the data collector had originally entered 23 as the sanctioned posts for doctors (the total number for the Upazilla Health Complex, union level health facilities and a dental surgeon for the upazilla).

3.2.2 Indicator 3: Infrastructure

Although the infrastructure section of the questionnaire collected information on a number of variables, three main data were used to calculate the indicator: a useable client latrine; water from a protected water source on or near grounds; and auditory and visual privacy.

Using these standards, **only 13% of facilities surveyed had all essential infrastructure (latrine, water, privacy)** at baseline and the average proportion of infrastructure items present per HF was 22%. At endline 27% had all three and the average proportion present per HF was 42%. Figure 2, below, shows availability of all basic infrastructure items assessed. The most commonly available item, clean water, was present in less than 50% of facilities at baseline but increased to 83% at endline. About 45% of facilities had a latrine which was working and available for client use at baseline and that nearly doubled by the end of project (83%). Less than one in 5 facilities assessed provided both audio and visual privacy to their clients during assessment at baseline and one in three at endline. Many more facilities had the potential for auditory and visual privacy (consultancy rooms with doors that closed) than actually enforced a one patient at a time rule. Even where there was a separate room for consultations, several children and their caretakers were often lined up on the same bench as the child being seen, or crowded in the doorway. The other infrastructure item that made a significant increase during the period of the child survival project was availability of emergency communication (from 23 to 97%). This is due largely to individual health care providers having a personal mobile phone which they can use to make emergency calls.

Figure 2: Proportion of infrastructure items available at all Health Facilities: November 2011 and June 2014.



3.2.3 Indicator 4: Supplies

3.2.3.1 Supplies- Child Care: Only 13% of facilities assessed had all essential supplies necessary to care for sick children (infant scale; scale for children/adults; timer or watch, pitcher and cup/spoon for ORS) at baseline which had increased modestly to 23% at endline. None of the individual items were available in even 50% of the facilities at baseline but all items except a means of timing infant respirations was available on over 50% of facilities at endline (see Table 8, below). The nurse running the IMCI corner at the Upazilla Health Complex showed us several government issued respiration timers, still in the box, which had never worked. This severely limits the ability of caregivers to follow the IMCI protocols for sick children, even if they have had the training. In addition 17% had a functioning autoclave and 7% a functioning refrigerator at baseline, increasing to 20% and 13% respectively by end of project.

3.2.3.2 Supplies- Maternal and Newborn Care: Not unexpectedly, with only 2 of the facilities reporting deliveries in the last 3 months, only 3% of facilities had all of the essential supplies for delivery and neonatal care at baseline (see individual items, below). The private facility was the only one with all essential supplies. Availability of essential supplies has increased as more

facilities are open for deliveries. The biggest improvement is in the availability of a working infant scale (57%, up from 13%).

3.2.3.3 Supplies- ANC: Even though 60% of facilities provided ANC at least 4 days per month and 90% at endline, **only 3% (the private clinic) had all the essential supplies.** The most common item, a functioning blood pressure cuff, was only available in 33% of facilities at baseline, but increased to 100% at endline (see list below). The next most commonly available item at endline was hemoglobin testing reagents (27%).

Table 8: Supplies for Child Care, Maternal and Newborn Care and Antenatal Care 2009 and 2014

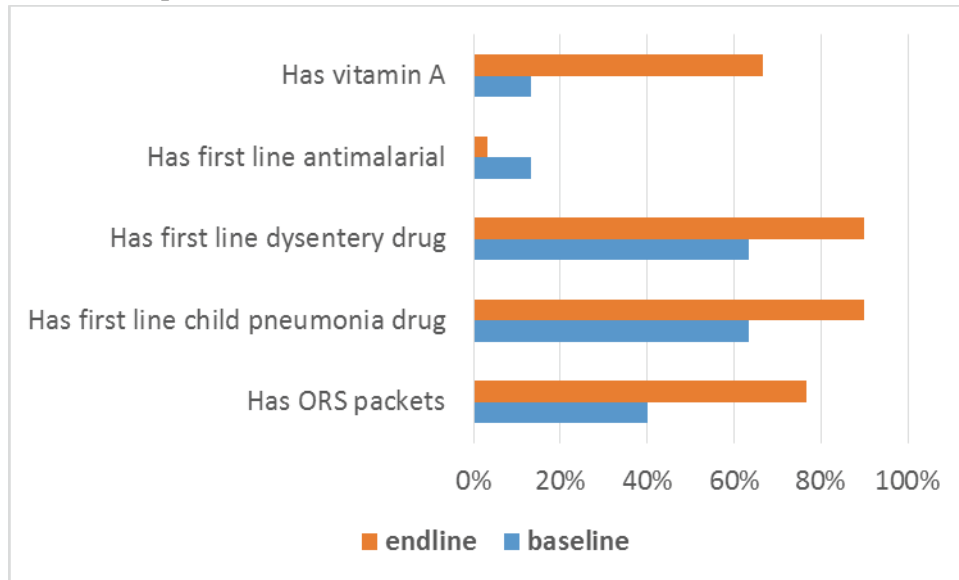
Supply Item- Available, Functioning, Seen by data collector	%	
Supplies for Child Care	2009	2014
Has functioning and accessible infant scale	27	73
Has functioning and accessible scale for children/adults	37	90
Has functioning timer or watch	47	40
Has pitcher for ORS	30	73
Has cup or spoon for ORS	30	53
Supplies for Maternal and Newborn Care		
Has functioning neonatal resuscitation equipment	13	20
Has functioning and accessible infant scale	13	57
Has functioning vacuum extractor	3	3
Has neonatal wraps for warming	10	33
Has partographs	3	3
Supplies for Antenatal Care		
Has functioning refrigerator	7	10
Has functioning blood pressure equipment	33	100
Has hemoglobin testing reagents	3	27
Has syphilis testing kits	3	7
Has malaria test kits	3	10
Has urine albumin test strips	3	13

3.2.4 Indicator 5: Drugs

3.2.4.1 Drugs for Childhood Illnesses: Overall drugs to treat childhood illnesses were more available at endline compared to baseline (see figure 3 below). Cotrimoxizole (first line drug for pneumonia and bloody diarrhea) was available in 63% of facilities at baseline and 90% of facilities at endline. ORS, the preferred treatment for non-bloody diarrhea was only available in 43% of facilities at baseline, but increased to 77% at endline. First line

malarials were available at fewer facilities at endline compared to baseline. Staff explained that they normally do not treat malaria but sent patients for a malaria test if they have malarial pattern fever.

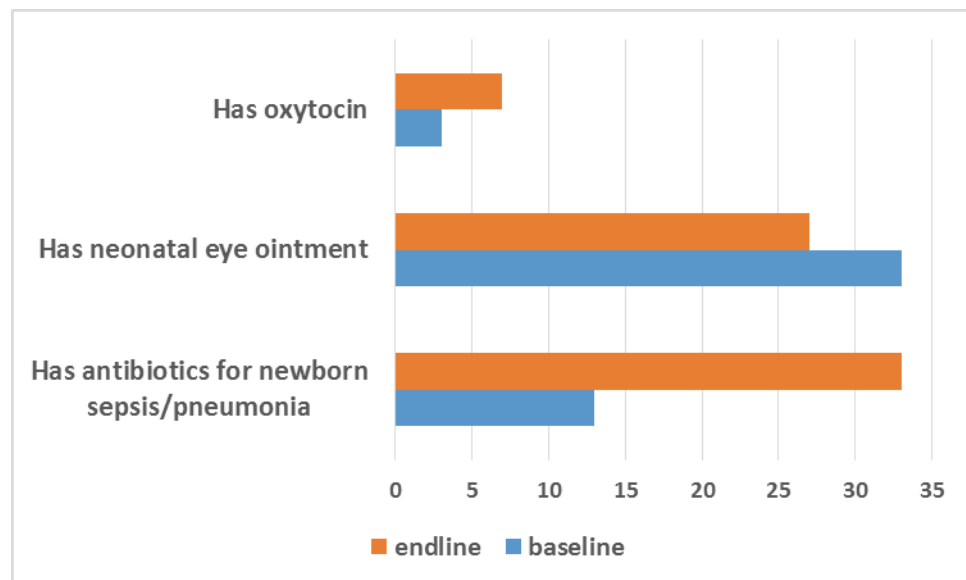
Figure 3: Childhood Illnesses- Percent of facilities with drugs in stock when surveyed: baseline compared to endline.



Note: Cotrimozizole is first line antibiotic for both pneumonia and bloody diarrhea

3.2.4.2 Drugs for MNC Care: A much larger proportion of facilities had the antibiotics for newborn sepsis/pneumonia at endline (33%) compared to baseline (13%), however 2/3 of facilities were still without these essential drugs (see figure 4, below). Oxytocin, for preventing and treating post-partum hemorrhage was only available at one of the sampled facilities at baseline and 2 of five facilities which do deliveries at endline. Neonatal eye ointment was less available at endline compared to baseline.

Figure 4: Drugs for MNC care; endline compared to baseline

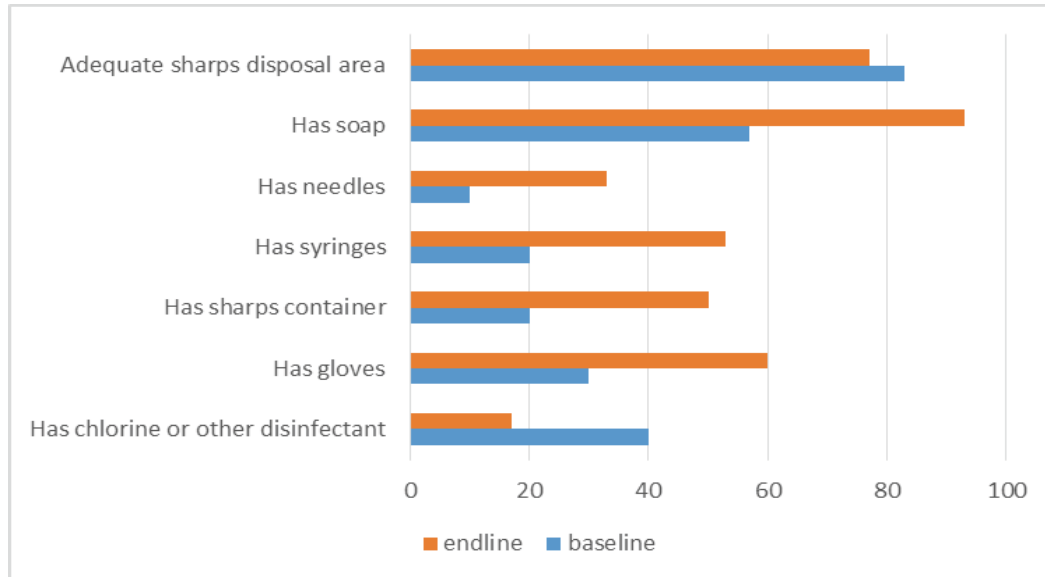


3.2.4.3 Drugs for ANC: Tetanus toxoid is generally given as part of the government vaccination program and is not stored in facilities without a proper cold chain (below UHC level) therefore the low levels of availability is not surprising (7% baseline; 3% endline). Iron/folate tablets were available in 67% of facilities at baseline but had increased to 100% at endline. ITN's are sometimes distributed by private/NGO programs in Durgapur, but IPT is not currently being used, even in high risk malaria areas.

3.2.5 Optional Indicator 2: Availability of Guidelines: None of the facilities had all of the guidelines for patient care at baseline or endline. At endline facilities had, on average, 21% of the seven guidelines listed, up from 7% at baseline. The most common guideline available at endline was for ANC (33%; 0% at baseline) followed by sick child care (30%; 23% at baseline), maternal post-partum care (27%; 0% at baseline) and neonatal care (23%; 7% at baseline). Only two facilities were able to show guidelines for delivery care (0 at baseline) and immunizations (3 at baseline). One SacMO stated that he received IMCI guidelines during training but they were at home, and he didn't need to refer to them during patient consultations. In contrast, the nurse seeing under-five children at the Upazilla Health Complex in Durgapur had a copy of the guidelines on her table and referred to them regularly when prescribing treatment.

- 3.2.6 **Optional Indicator 3: Infection Control:** Overall availability of supplies for infection control was better at endline compared to baseline (see figure 5, below). More facilities had soap, sterile needles and syringes, sharps containers and gloves. Chlorine was less available at endline, with only 17% of facilities able to show they had supplies compared to 40% at baseline.

Figure 5: Proportion of facilities with select infection control supplies and equipment: endline compared to baseline



3.3 Processes

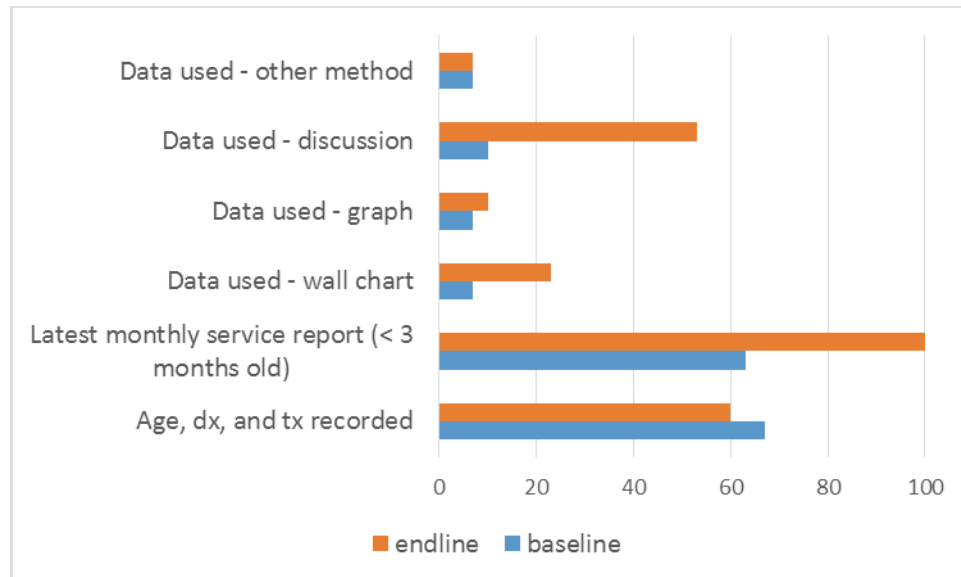
3.3.1 Indicator 6: Information Systems

3.3.1.1 Information System- Child: Having all information elements is described as:

1. Up-to-date records of sick U5 children (age, diagnosis, treatment for all children seen);
2. Service report submitted in last three months; AND
- 3.) at least one evidence of data use.

During the project period service delivery reporting was switched from manual counting and form fill-up to computerized reporting. Monthly reports are now required to be submitted by every facility. Evidence of data being used also increased at endline, especially in wall charts (from 7 to 23%) and in discussions (from 10 to 53%).

Figure 6: Proportion of HF with various elements of an Information System: endline vs. baseline



3.3.1.2 Information System- MNC: Complete MNC information was defined as;

- 1.) Having an ANC register with complete information (EDD, TT, BP);
- 2.) Last ANC register entry within 7 days **AND**
- 3.) A delivery register with last entry within 30 days.

None of the facilities met the criteria for this indicator at baseline. When only the criteria for ANC information was included only three facilities (10%) met the criteria. At endline 7% of facilities met the entire MNC indicator criteria, 63% had complete information on BP and 73% had an ANC entry within the last seven days.

3.3.2 Indicator 7: Training

3.3.2.1 Training- Child Health: 37% of the health workers

interviewed had had training in a child health topic in the last 12 months at baseline. Nine of the health workers (30%) had had recent training on immunization, two (7%) on nutrition and one each (3%) on malaria management, and IMCI.

At endline 87% of health workers interviewed had had training on a child health topic in the last 12 months. 37% had had training on immunization, diarrhea case management and pneumonia case management. 27% had had training on malaria case management.

23% of those interviewed at endline had had IMCI training in the past 12 months compared to only 3% of those interviewed at baseline.

Table 9: Percent of HW who had training on child health topics in the past 12 months: baseline and endline

Training	baseline	endline
Immunization	30	37
Pneumonia mgmt	0	37
Diarrhea mgmt	0	37
Malaria mgmt	3	27
ITN use	0	7
Nutrition	7	17
BF promotion	0	33
IMCI	3	23

3.3.2.2 Training- Maternal -Neonatal Care: Only 3 % of HW's interviewed reported receiving in-service or pre-service training in maternal neonatal care in last 12 months at baseline. One person reported training in infection control. At endline, however, 37% reported recent training in neonatal care; 47% in post natal care; 40% ANC training; 20% in infection control; 7% in the active management of third stage of labor and 23% in OB/neonatal emergencies and referrals.

3.3.3 Indicator 8: Supervision

Supervision of health workers is an area of concern in Bangladesh. This data bears out the low levels of supportive supervision received by health care workers at primary care centers. **Only 7% of HW interviewed reported receiving external supervision** which included more than just delivering supplies in the previous three months at baseline. 30% reported a supervisory visit to deliver supplies. One person (3%) reported a supervisor checking drug supplies, discussing problems, and providing feed-back. At endline 87% of health workers reported a supervisory visit from their supervisor: 37% for delivering supplies/ checking reports/ observing their work; 27% received feedback on their work during the visit; 7% received technical supervision/ updates/ discussed problems; and 17% had drug supplies checked.

- 3.3.4 Optional Indicator 4: HF Community Coordination:** 73% of facilities had at least one method for community participation AND at least one way to incorporate information at baseline. This had increased to 90% at endline. The most common method of community participation was community participation in HF management committee meetings (70% baseline; 83% endline) followed by engagement of CHW's/TTBA's (57% baseline; 77% endline). The most common mechanism for incorporating the information was via community discussions (70% baseline; 90% endline) and by changing health worker behavior (60% baseline; 53% endline).
- 3.3.5 Optional Indicator 5: Community Referrals:** At least one referral from a Community Health Worker in the last month was reported by 38% of facilities at baseline and 80% at endline.
- 3.3.6 Optional Indicator 8: Laboratory Facilities:** As expected availability of all basic maternal-child laboratory services was only available at 3% of facilities at baseline and endline (private clinic). Only two of the facilities had laboratory facilities of any kind available on site, the private clinic and the UHC. Community clinics are not intended to do any laboratory exams onsite. At endline a greater proportion of the facilities had the ability to at least send out for testing of glucose (27%); urine dip stick (17%) and CBC (10%). On average 10% of the laboratory services listed were available at each of the facilities at endline. This would increase to over 30% if the community clinics were excluded from the calculation.

3.4 Performance

- 3.4.1 Indicator 9: Utilization of Services:** As noted in the methodology section, using government estimates of catchment area for the various levels of health facility may overestimate the actual population served, and consequently underestimate service utilization.
- 3.4.1.1 Utilization of Child Curative Services:** Out of 30 facilities in the sample, one was closed on the day of the survey and another 5 had no child visits in the last three months, or were unable to show a child health register at baseline. Only 7 out of the remaining 25 (7/30=23%) of health facilities met the standard of at least 1 sick child visit/under-five child in the catchment area in the previous year. Using the total number of under five children estimated from

the catchment figures as the denominator, this averaged to 0.26 sick child visit/under five child/year for all areas. If we use the number of under five children based on half of the population estimate as the denominator (to adjust for proportion of Health Facilities surveyed and take into account for possible overlapping of service areas), the average visit per under-five child is 0.52/ child/year. Overall, the annualized figure for child visits for all facilities surveyed was 15,248, or an average of 508 visit/ facility/ year.

At endline all 30 facilities were open on the day they were surveyed and all had under-five child visits in the last three months, however four facilities did not have an under-five register available as it was locked in a cabinet (the person holding the key was absent or at a satellite clinic that day). Only 5/30 (17%) of individual facilities met the standard of at least 1 sick child visit/under-five child in the catchment area in the previous year. Using the total number of under five children estimated from the catchment figures as the denominator, this averaged to 0.27 sick child visit/under five child/year for all areas- surprisingly similar to the baseline results. If we use the number of under five children based on half of the population estimate as the denominator (to adjust for proportion of Health Facilities surveyed and take into account for possible overlapping of service areas), the average visit per under-five child is 0.54/ child/year.

Overall, the annualized figure for child visits for all facilities surveyed was 18,188 (nearly 3000 more than baseline), or an average of 606 visit/ facility/ year (nearly 100 visits/facility/year more than baseline).

3.4.1.2 Utilization of ANC Services: In addition to the one facility that was closed on the day of the survey, another 25 were unable to show an antenatal register, or had no ANC visits in the last three months at baseline. **Of the 4 facilities that were giving ANC, only 1, (1/30=3%) the private clinic, met the criteria for the indicator of at least 2 ANC visits/ antenatal woman/year.** Using the adjusted population figures (1/2 of estimated deliveries using 2009 population estimate for the two Upazillas as

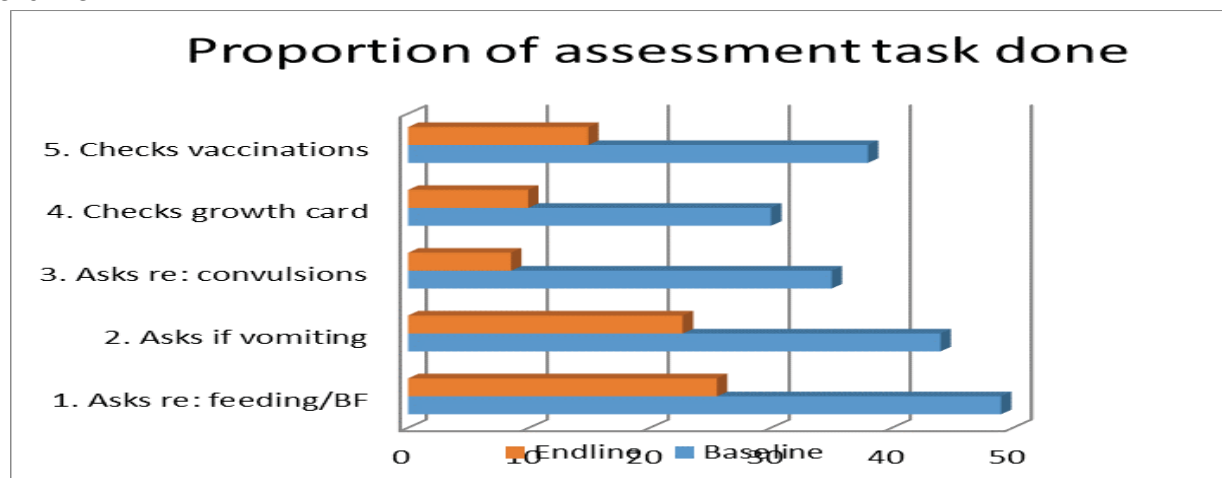
denominator) the overall ANC service utilization rate for the survey area was 0.2 visits/ antenatal woman/year. . Overall the annualized number of antenatal visits for the survey area for the two unions was 1,528 or 51 visits/facility/year.

At endline the figures for ANC were much improved. While 6 of 30 facilities could not show an active ANC register, 5 of 30 (17%) met the criteria of at least 2 ANC visits/ antenatal woman/year. Using the adjusted population figures (estimated deliveries for ½ the population using 2014 population estimate for the two Upazillas as denominator) the overall ANC service utilization rate for the survey area was 1.3 visits/ antenatal woman/year, over 6 times the figure at the 2009 baseline. Overall the annualized number of antenatal visits for the survey area for the two unions was 7088, or 236visits/facility/year.

3.4.2 Indicator 10: Health Worker Performance:

3.4.2.1 Child Assessment: Strong emphasis is placed on systematic assessment of children in IMCI. The assessment methods used are not high-tech nor time consuming, but enable health workers to make accurate diagnosis of the primary illness a large proportion of the time, as well as assess overall health and well-being of the child. The health workers observed in the survey did not do well, overall, in regards to following assessment protocols. **In only 2 facilities (7%) were all 5 assessment tasks done** 80% or more of the time at baseline and endline. Looking at individual assessment tasks asking about breast feeding was most common, followed by asking about vomiting and checking on vaccinations. Completion of assessment tasks was much lower at endline compared to baseline (see figure 7, below)

Figure 7: Proportion of child assessment tasks completed by task. N=63 at baseline; N=141 at endline



3.4.2.2 Child treatment: There were 8/17 (47%) facilities at baseline and 16/30 (53%) at endline (where under-five children with one of the three targeted symptom groups were seen on the day of the survey) in which treatment was according to the protocol at least 80% of the time (see table 10, below). **Looking at individuals, all treatment matched the protocol for 35 children (56%) at baseline and 78% at endline.** When data from the registers for the last three months was analyzed, the proportion of facilities with correct treatment of 80% or more of children was 40% at baseline and 50% at endline. Looking at individual cases, the figure increased to 68% overall (78% at endline) of children being treated according to protocol.

Table 10 Under-five assessment and treatment indicators: baseline and endline

Under five assessment indicators		baseline	endline
Indicator #10	% patients in a facility for whom all 5 assessment tasks were done at least 80% of time	7%	7%
Indicator #11	% sick children in HF for whom all treatments were according to protocol at least 80% of time	43%	53%
Alternative Indicator #11	Number of HF in which $\geq$ 80% sick children treated by protocol	40%	60%
Alternative Indicator #11	index value - % sick children treated by protocol (average per HF)	66%	78%
For comparison to Indicator #12	% caretaker in a facility counseled about drugs by HW	47%	47%
Indicator #12	% caretakers who can correctly state how to administer all prescribed drugs	32%	36%

3.4.2.3 v Exit interview of caretakers: 53 caretakers were interviewed at baseline and 141 at endline (see table 11, below). Of those interviewed only 32% at baseline and 36% at endline were able to correctly state how to take all medicines prescribed (medicine; amount per dose; times per day to be taken and how many days). IMCI guidelines were used as the standard for correct dosage, therefore this indicator is a measure of correct prescribing as well as correct explanation to and understanding by the caretaker. It is noted that a full course of medication is often not given by health care workers to ensure that drug supplies will last the month. Therefore if a caretaker was given 2 days of co-trimoxizole for ARI or bloody diarrhea (correct course, five days) and s/he stated 2 days was how long the medicine was to be given, it would be counted as incorrect.

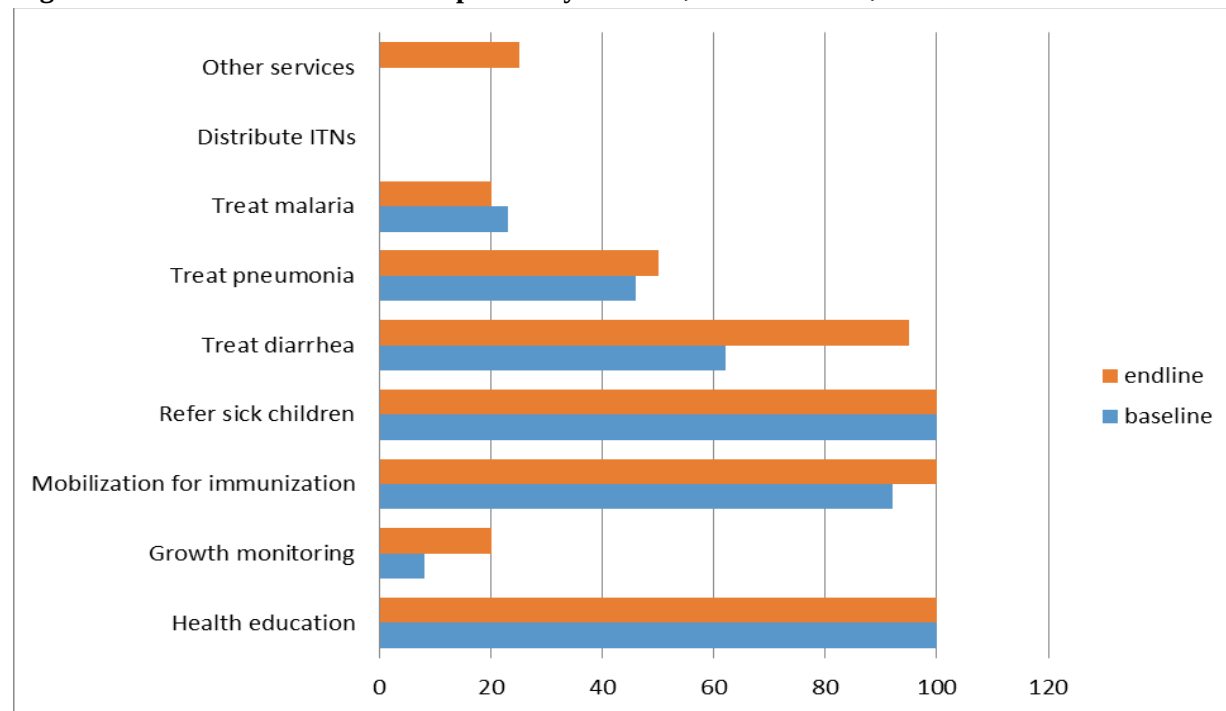
Table 11: Caretaker interview information

Exit interview summary		baseline	endline
Exit Interviews	Number of caretakers interviewed	63	141
	Number of ARI cases identified by caretaker	40	84
	Number of malaria/fever cases identified by caretaker	29	40
	Number of diarrhea cases identified by caretaker	19	37
	Number of caretakers who did not know diagnosis	3	4
	Number of cases for which at least one drug prescribed	45	140

3.5 Community Skilled Birth Attendants (CSBA's)

Community Skilled Birth Attendants were interviewed as the community health worker for the RHFA. As well as being available for home deliveries and Antenatal care, the CSBA's provide a number of services for children (see Figure 8, below). All reported doing health education and referring sick children, 92% said they mobilized children for immunization (100% endline). Around 50% of CSBA's reported treating diarrhea and pneumonia at baseline and over 90% said they treated diarrhea at endline. Growth monitoring was mentioned by less than 10% at baseline, increasing to 20% at endline. Following are the results from the CHW interviews which apply to the Core indicators, above.

Figure 8: Child Health Services Reported by CSBA's, n=13 baseline; n=20 endline



3.5.1 Indicator 4: CHW Supplies- 23% of the CSBA's interviewed at baseline and 0% of those interviewed at endline had adequate supplies, defined as both a CSBA manual and a functioning timer.

Although 46% of CSBA's at baseline reported that they treat pneumonia, only 31% of them had either a functioning timer or a watch with a second hand. Overall 62% were able to show their CSBA manual. 85% reported having a CSBA manual at endline, but none had a timer.

3.5.2 Indicator 5: CHW Drugs- Only 15% of the CSBA's met the criteria for adequate drugs at baseline (ORS, Cotrimoxizole, anti-malarial), even though 54% reported treating under five children. None of the CSBA's interviewed at endline had antimalarials, but 40% had cotrimoxizole and 20% had ORS in stock. This indicator was hard to assess as CSBA's were sometimes interviewed at home and not at the community clinic where they work.

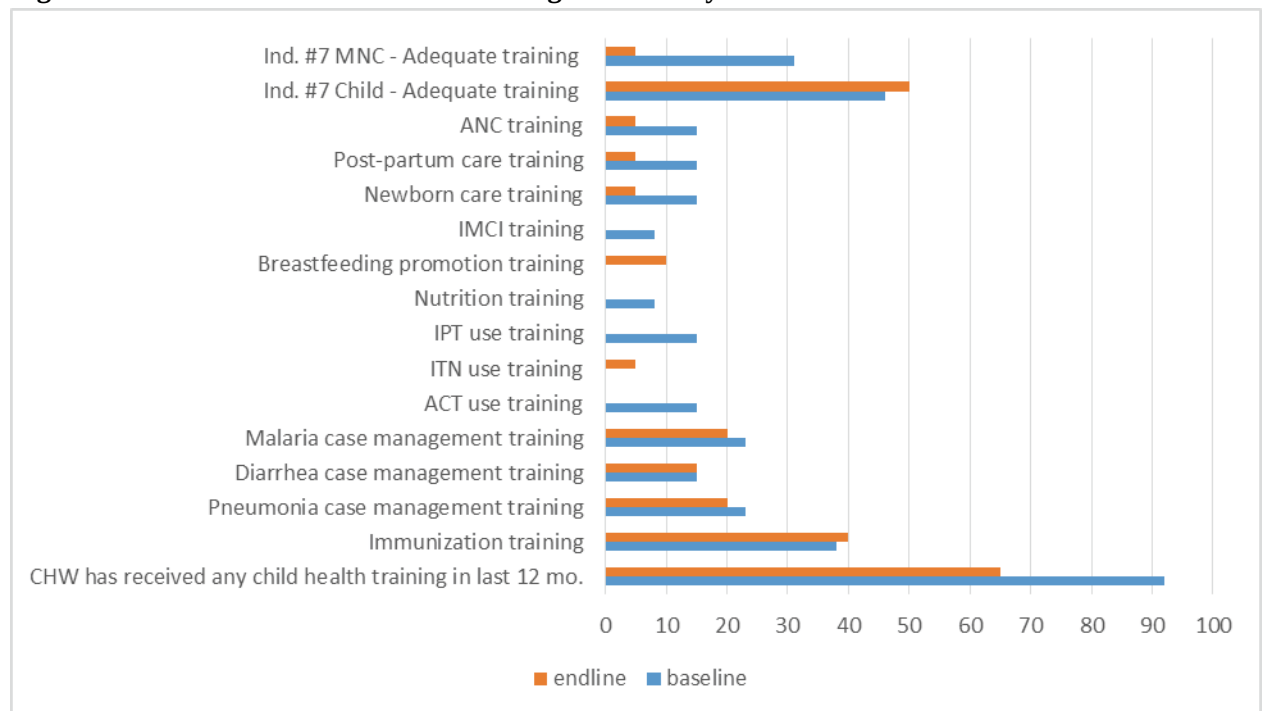
3.5.3 Indicator 6: Adequate Information System: None of the CSBA's met the criteria for complete and up to date register at baseline. 31% of CSBA's were able to show a child health register, but only 8% (2 CSBA's) had registers with complete information on age, diagnosis and

treatment. At endline only 15% of CSBA's were able to show their registers (most were interviewed at home), but all had complete information. 2/3 of the registers had entries within the last 7 days.

3.5.4 Indicator 6: Adequate Training: CSBA's fared slightly better than other health workers assessed in terms of recent training. 46% had had at least one training in child health in the last year and 31% had had at least one training in maternal newborn care at baseline. At endline 50% of CSBA's had at least one child health related training, but only 5% had at least one maternal health related training in the previous 12 months.

3.5.5 Indicator 8: Adequate Supervision- Although 85% of CSBA's reported a visit by their supervisor in the last three months at baseline, only 23% (3 of 13) met the criteria for adequate supervision (a visit within 3 months that included more than just delivery of supplies). At endline 75% of CSBA's reported a supervisory visit in the last three months, and 30% met the criteria for adequate supervision.

Figure 9: Pre-service or In-Service Training Received by CSBA's in the last 12 months



3.5.6 Indicator 11: Correct Treatment of Child Illness: Overall 53% of ARI and diarrhea cases treated by CSBA's were according to the IMCI protocols at baseline. Looking at the indicator by health worker, however, only 15% (2) of CSBA's treated over 80% of cases according to the

protocol. At endline assessment 43% of cases treated by the CSBA's interviewed were according to IMCI protocol. This may give an unbalanced picture, however, as only CSBA's who had their registers with them were included in this assessment.

4.0 Discussion: Results of the survey have been compiled onto graphs to give an 'at a glance' view of how facilities did overall in inputs, processes and provision of services. These are presented as Balanced Scorecards of Health Facility Child Health services, Health Facility Maternal Neonatal services and Community Health Worker services. Arrows have been added to draw attention to areas which are below 50% of the minimum standard. Red arrows indicate areas of specific concern- where standards are extremely low and/or improvement in standards could result in saving the lives of many mothers and children

4.1 Health Facility based Child Health Services: Baseline; The striking feature of this score card (see figure 10.1 below) is that only three out of 16 indicators met the targets set as minimum standards for primary care of children under five. The proportion of posted staff present on the day of the survey was reasonably high, and efforts of facility staff to engage with the community was also a strong point, It is encouraging that on average HF's had 60% of essential information system elements in place, (including complete register data on under-fives, quarterly reports and use of reported data for dissemination), but this was still well below the standard of 80%.

Endline; Although there is still room for improvement impressive strides have been made to improve child health services in the two target Upazillas. Child consultation supplies and drugs needed to treat IMCI illnesses increased over the 50% mark at endline. Treatment according to protocol is still under 50% so this is a crucial area for improvement. Part of the reason for the low score in this area is the practice at some facilities of giving only 2 or 3 days of medication per child so that monthly supplies do not run out before the end of the month. Another practice that may have affected treatment results is to use second line antibiotics in preference to first line antibiotics when they get close to their expiration date to avoid wastage. It is noted here that the national IMCI guidelines were updated in 2012 to include Amoxicillin as drug of choice for pneumonia, but there is still no procurement or supply in the public sector (14). The government medical assistants who took part in the survey confirmed that they have received no updates instructing them to change to amoxicillin, nor drug supplies in their facility (13).

Although the government can be applauded for increasing the number of posts for clinical staff at community clinics, actual staffing levels were still low in practice. Utilization of clinics will continue to improve as people in the community are

confident that competent caregivers will be available at the clinics. In addition, one staff at a Upazilla Health and Family Welfare Center complained that with the current emphasis on Community Clinics, other health facilities are suffering for both staff and supplies.

One reason for the low scores on patient assessment could be related to the fact that CHCP's who see patients at Community Clinics only have a three day training. In addition, other staff who received IMCI training more than three years ago may have become complacent regarding asking all the assessment questions.

The government of Bangladesh is already committed to rolling out IMCI across the country and much progress has been made. Further improvement of basic infrastructure (timers, scales and ORS cups and spoons), basic drugs (ORS, cotrimoxizole, antimalarials), and basic training (on the IMCI protocols), would go a long way to improving performance outcomes for treatment of childhood illness above the 80% benchmark.

Figure 10.1: Balanced Score Card: Health Facility, Child Health- Baseline

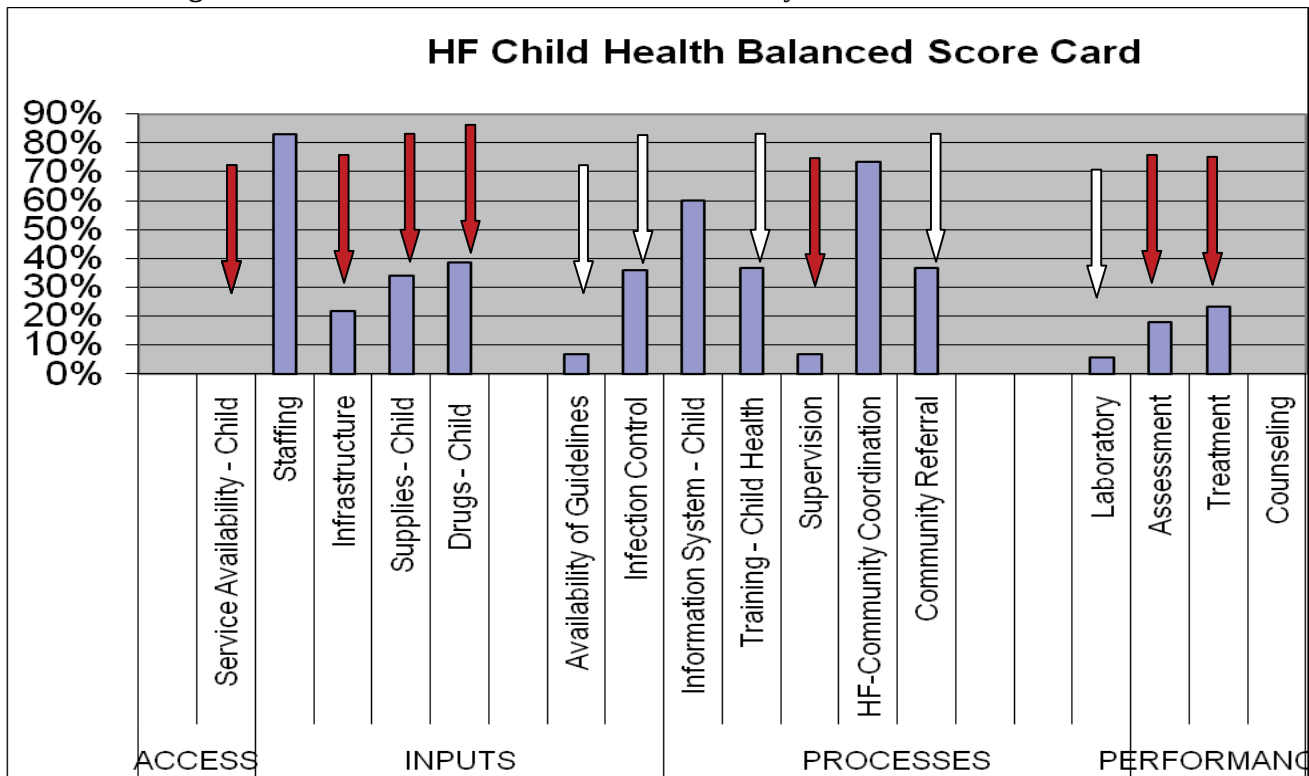
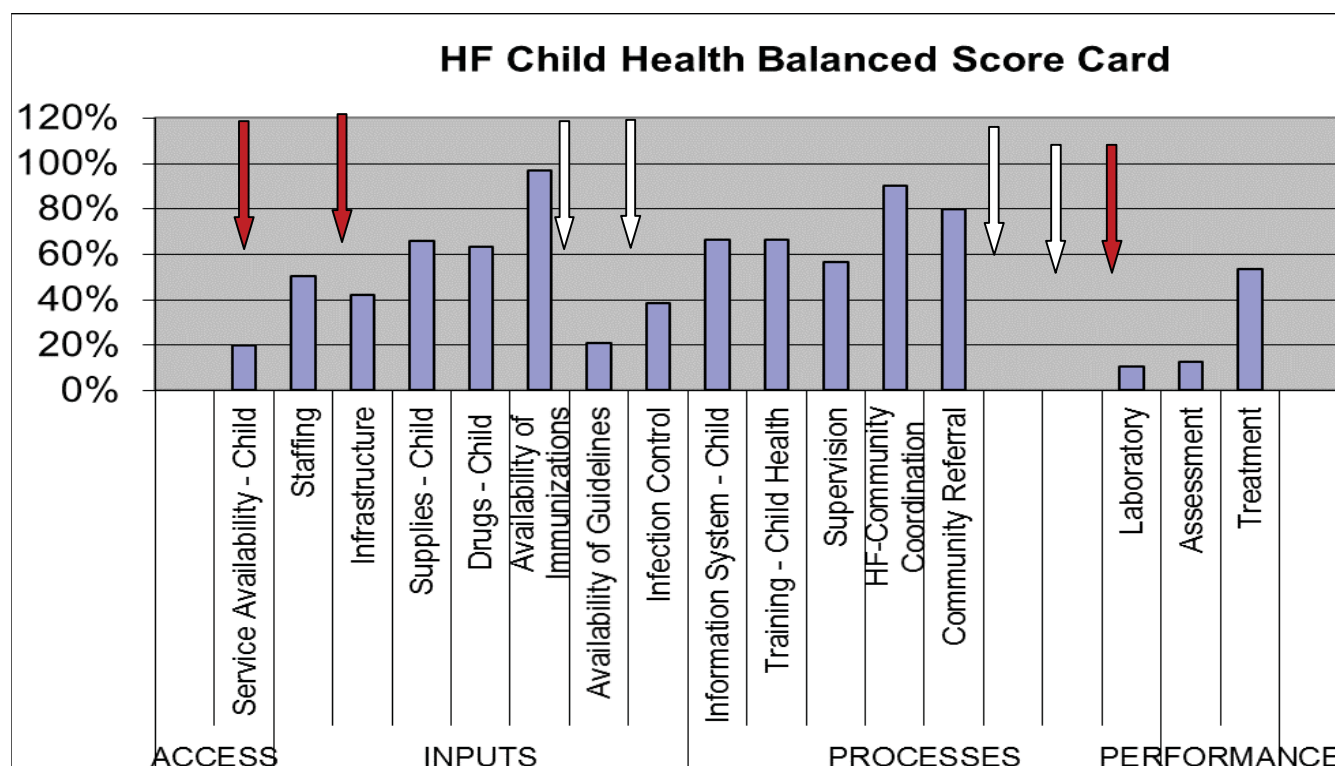


Figure 10.2 **Balanced Score Card: Health Facility, Child Health- Endline**



4.2 Health Facility based Maternal Neonatal Services: Baseline; Apart from staffing and HF-Community coordination, mentioned above, only one MNC specific indicator, availability of ANC services, was met in over half of facilities. Although 60% of HF's had ANC services available at least 4 days a month, the infrastructure, supplies, drugs, training and guidelines to support the service were sadly lacking at baseline (see figure 11.1, below). Providing basic ANC is neither expensive nor technologically intensive, but requires political will and good supervision, as well as provision of essential inputs. One reason for the poor results in delivery and newborn care was that only the UHC and private clinic were set up to do deliveries

Endline; Even though there were improvements in infrastructure, supplies and drugs for maternal and neonatal health- there is still much room for improvement. The increase in availability of ANC to over 90% was an important benchmark, but if essential supplies and drugs are missing there will be less impact from those visits on maternal and neonatal health. The upgrading of some FWC's and Community Clinics to provide delivery care is a big step in the right direction to provide skilled

delivery care for more women in rural areas. The improvements in supervision of health care workers should also continue to bear fruit in improved patient care.

Figure 11.1: Balanced Score Card: Health Facility, Maternal Newborn Health: baseline

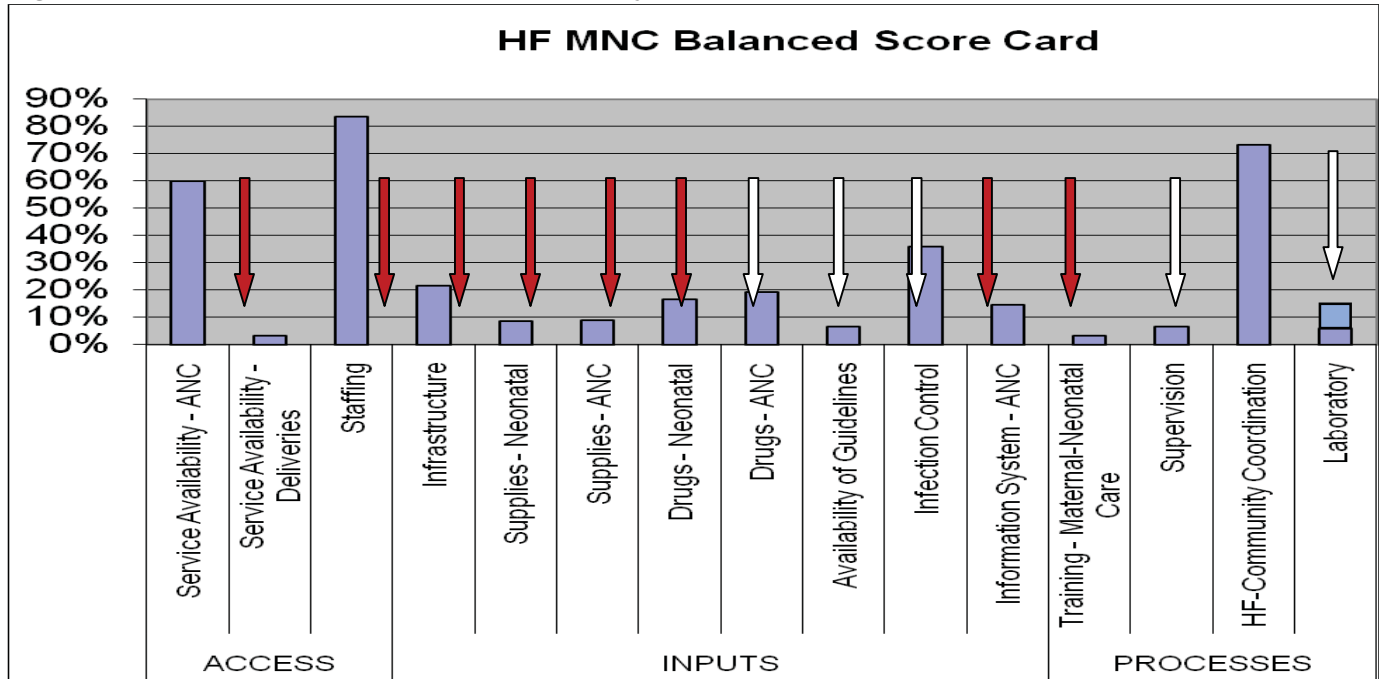
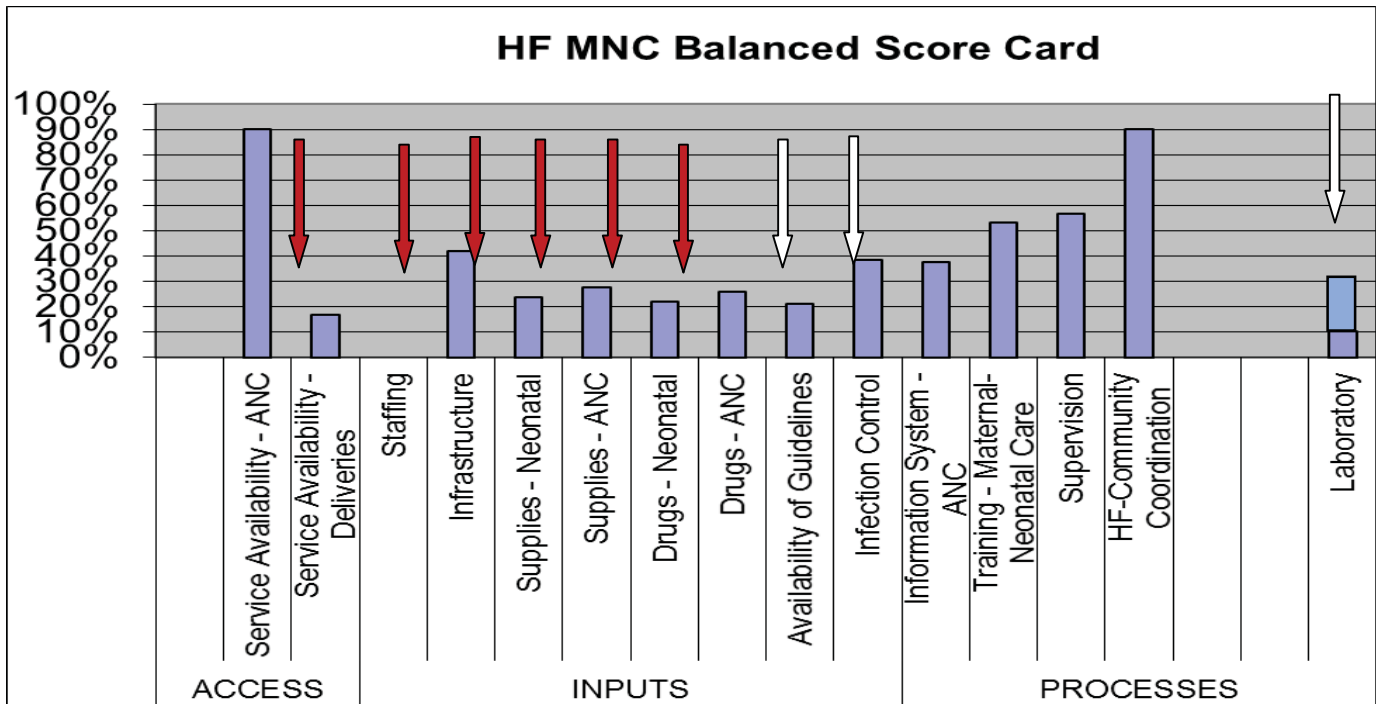


Figure 11.2 Balanced Score Card: Health Facility, Maternal Newborn Health: endline



4.3 Community Health Worker Health Services: Baseline; CHW's / CSBA's are the level of health worker surveyed which the CSP is most likely to engage with on a regular basis since they work at the household level in communities. At baseline CHW's scored highest in the balanced scorecard on performance, with 53% of individuals cared for by CHW's for diarrhea and ARI being treated according to protocol (see figure 12.1, below). Comparing this to treatment of the same conditions in health facilities (register data), the figures were 83% for ARI and 93% for diarrhea cases. Their poor performance compared to HF staff at baseline may be due to relative inexperience in seeing patients, training received, or the particular sample of CHW's who were interviewed.

CHW's also lacked supplies (the indicator only required a CHW manual and timer for counting respirations as 'adequate supplies'), drugs, adherence to an information system and active supervision. The government has set up a system of supervision whereby FWV's at the union level oversee the work of CSBA's. This is complicated from the offset, since those trained as CSBA's (HA's and FWA's) are hired by two different directorates in the health ministry (health and family planning). In addition, FWV's have their own responsibilities as health workers in facilities as well as their supervisory role. One way of helping this situation might be to increase the role of the community committees associated with the community clinics and/or the peoples' institution, in keeping both the CSBA's and those who supervise them accountable to the needs of the community they serve.

The fact that this is a new cadre of worker may have something to do with the relatively higher level of recent pre-service or in-service education. Never the less, levels of performance indicate additional training with follow-up clinical supervision is still needed.

Endline; Improvements were seen in availability of supplies and drugs available to the CSBA's, but numbers are still low. This may be partly explained by the fact that many of the CSBA's were interviewed at home, and so these numbers may be artificially low. There was also some improvement in the quality of supervision given CSBA's, but this is an area for ongoing input. It is concerning that the proportion of CSBA treatment that was according to protocol actually decreased. Again, this may be partially due to the fact that not all CSBA's had access to their register at the time of interview. Also, since a new cadre of health worker, the Community Health Care Provider, has been introduced to provide under-five care at community clinics CSBA's may be seeing less patients and losing their skills.

4.4 Additional Comments: Malaria; The indicators for malaria were removed from the balanced score card since the two upazillas surveyed are under different protocols. Durgapur Upazilla is a high risk area for malaria and Kendua is not. Even so, there seemed to be a lot of variance regarding how health workers in Durgapur managed cases of fever. According to IMCI protocol (and verified by GoB IMCI staff in the ministry of health) all children with fever should be considered cases of malaria and treated with the appropriate dose of chloroquine. Due to limited availability of malaria drugs in the government facilities and confusion regarding IMCI protocol, the MA staffing the IMCI corner at the UHC stated he only considers children with fever not associated with diarrhea or ARI to be a possible case of malaria. These children are sent for a malaria blood test, and only those who are positive are treated. The proportion of children with fever who are positive for malaria is very small.

Not all health facilities have malaria testing, and hardly any have current stocks of chloroquine. In some centers, at baseline, an NGO was present during the clinic and provided malaria testing using a new quick test that doesn't require a microscope. This was not observed at endline.

Figure 12.1: Balanced Score Card, Community Health Worker; baseline

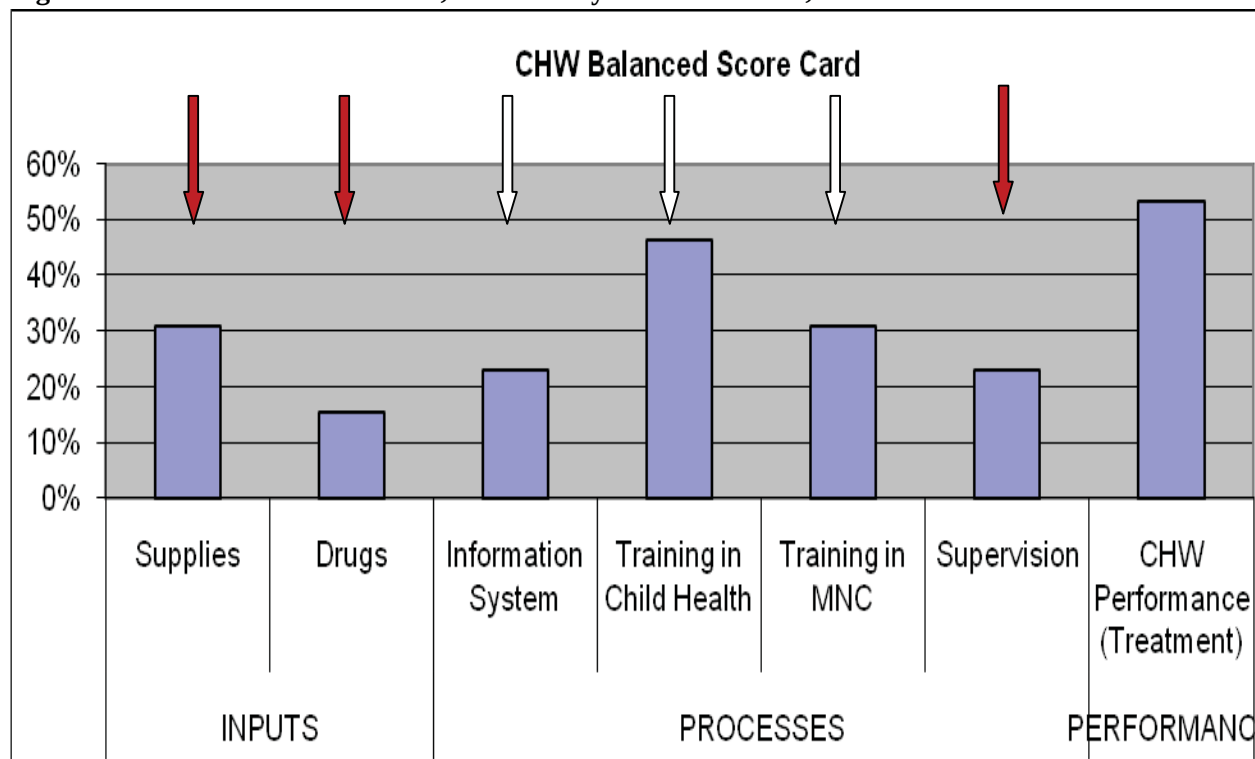
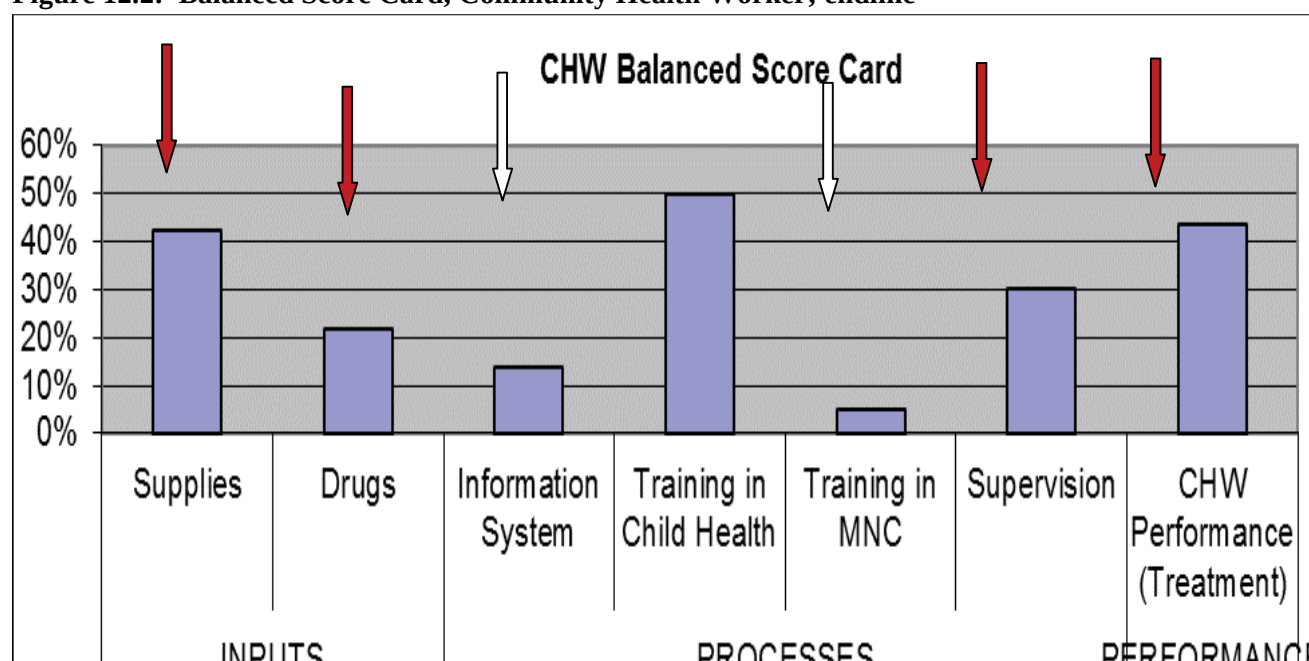


Figure 12.2: Balanced Score Card, Community Health Worker; endline



5.0 Conclusion: Significant improvements were seen between the baseline and endline assessments. The most striking were the increase in numbers of children being seen at both community clinics and upazilla health and family welfare centers- and the corresponding increase in the infrastructure and medicines to support those visits. The increase in ANC and delivery services also have the potential to improve health outcomes for women and their children. The increase in supervision of health care staff increases the potential for sustaining and increasing improvements in health care, as does improved relationships between facilities and the communities that they serve.

The decrease in assessment of children according to IMCI guidelines is concerning. Increased patient load and inadequate staffing may be contributing to this finding as well as inadequate refresher training and supervision.

The frequent prescribing of less than a full course of antibiotics for children is a concerning finding which needs to be addressed by the Government. If they are unable to maintain adequate drug supplies to meet the demand for child treatment then a decision has to be made whether it is better to provide a full course of treatment for less children or only partially treat all children. Neither is a satisfactory solution.

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HF Child Health Balanced Score Card

Area of Analysis		Baseline	Endline
ACCESS			
	Service Availability--Child	7%	20%
INPUTS	Staffing	83%	54%
	Infrastructure	22%	42%
	Supplies - Child	34%	66%
	Drugs - Child	39%	63%
	Availability of Guidelines	7%	21%
	Infection Control	36%	38%
PROCESSES	Information System - Child	60%	60%
	Training - Child Health	37%	87%
	Supervision	7%	57%
	HF-Community Coordination	73%	90%
	Community Referral	37%	80%
PERFORMANCE	Laboratory	6%	10%
	Assessment	18%	13%
	Treatment	23%	53%
	Counseling	0%	0%

HF Maternal Newborn Health Balanced Score Card

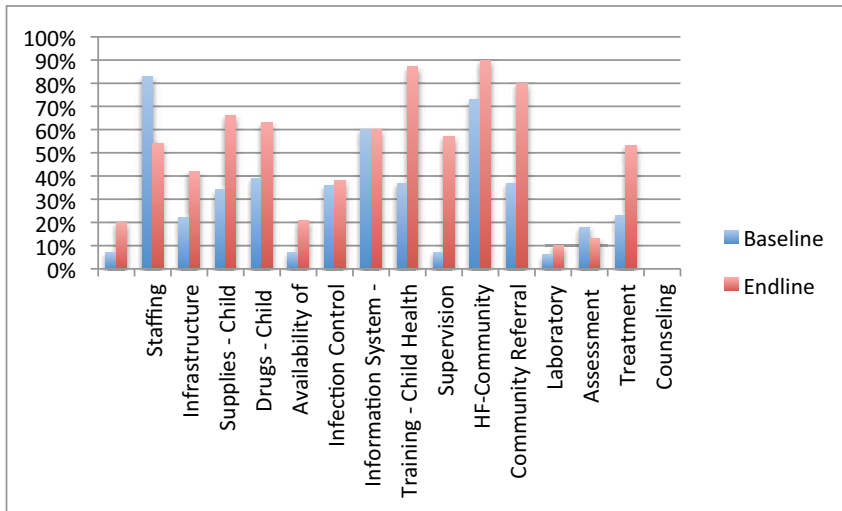
Area of Analysis		Baseline	Endline
ACCESS			
	Service Availability - ANC	60%	90%
	Service Availability - Deliveries	3%	17%
INPUTS	Staffing	83%	54%
	Infrastructure	22%	42%
	Supplies - Neonatal	9%	22%
	Supplies - ANC	9%	28%
	Drugs - Neonatal	17%	22%
	Drugs - ANC	19%	26%
	Availability of Guidelines	7%	21%
	Infection Control	36%	38%
PROCESSES	Information System - MNC	14%	38%
	Training - Maternal-Neonatal Care	3%	53%
	Supervision	7%	57%
	HF-Community Coordination	73%	90%
	Laboratory	15%	32%

CHW Balanced Score Card

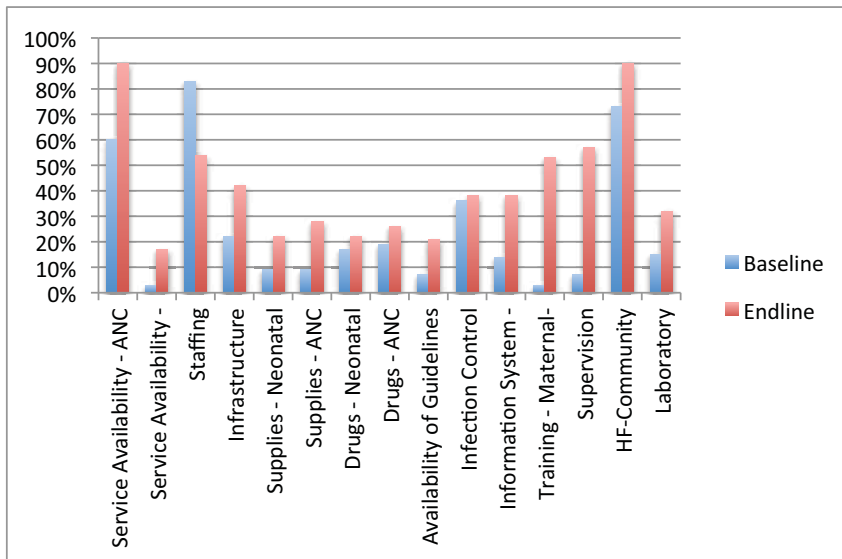
Area of Analysis		Baseline	Endline
INPUTS	Supplies	31%	43%
	Drugs	15%	22%
PROCESSES	Information System	23%	14%
	Training in Child Health	46%	50%
	Training in MNC	31%	5%
	Supervision	23%	30%
PERFORMANCE	CHW Performance (Treatment)	53%	43%

* did not have health register for evidence bc interviewed at home

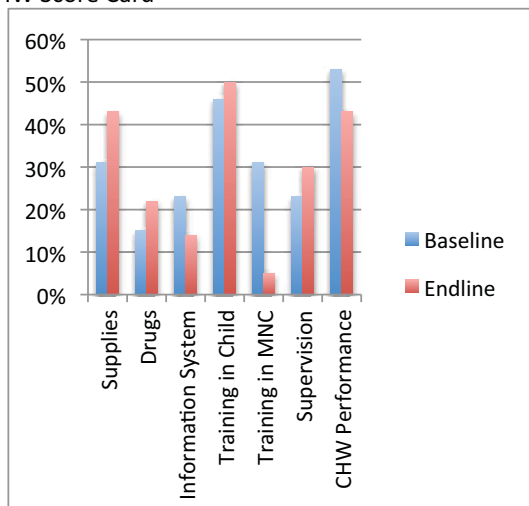
Child Health Score Card



Maternal Newborn Health Score Card



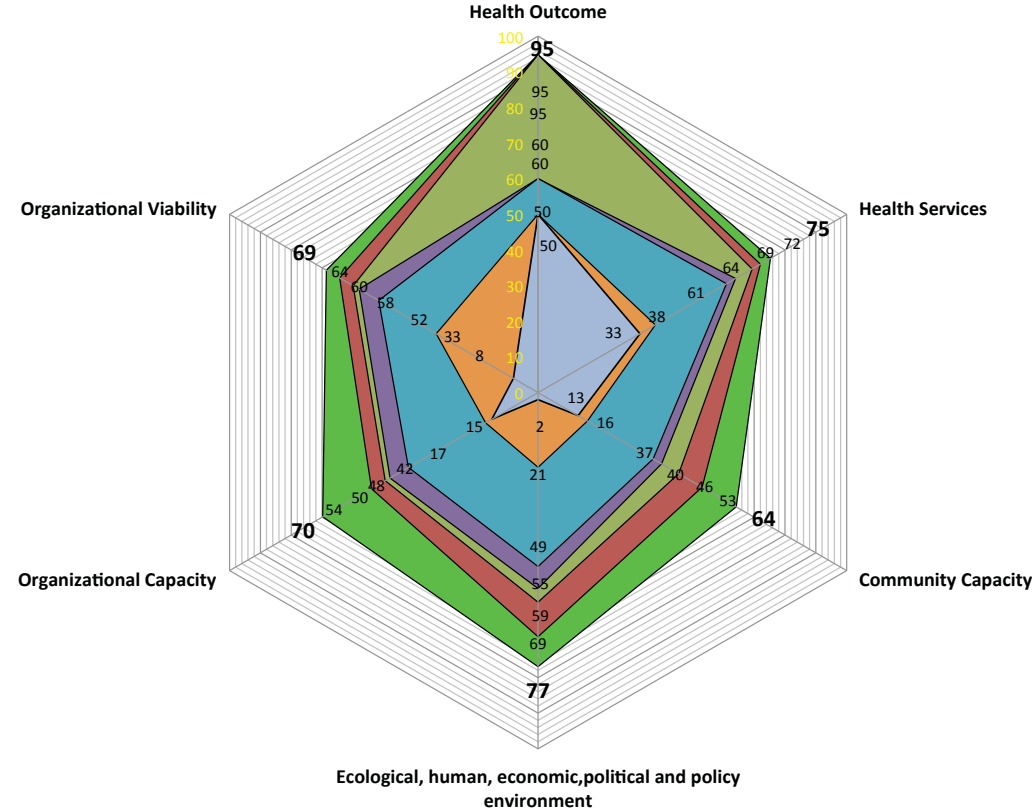
CHW Score Card



no	Component	CSSA April,14	CSSA October,13	CSSA April,13	CSSA October,12	CSSA April,12	CSSA October,11	BaselineIndices
1	Health Outcome	95	95	95	60	60	50	50
2	Health Services	75	72	69	64	61	38	33
5	Community Capacity	64	53	46	40	37	16	13
6	Ecological, human, economic,political and policy environment	77	69	59	55	49	21	2
3	Organizational Capacity	70	54	50	48	42	17	15
4	Organizational Viability	69	64	60	58	52	33	8

Child Survival Sustainability Assessment(CSSA) SUSOMA

CSSA April,14 CSSA October,13 CSSA April,13 CSSA October,12 CSSA April,12 CSSA October,11 BaselineIndices



Child Survival Sustainability Assessment(CSSA) SUSOMA

Component 1: Health Outcomes	% of Target	% Achievement as of April, 2014	Score for Dashboard
1. Percentage of Delivery conducted by TTBA's	8%	31.1%	0
2. Percentage of Deliveries conducted by Skilled personnel	15%	21.15%	142
3. Pregnant mothers are immunized with TT	85%	92.5%	108
4. Pregnant mothers are known at least Two danger signs of pregnancy.	70%	81.3%	116
5. Percentage of pregnant mothers who received 4 times ANC visit during pregnancy	15%	23.1%	156
6. Percentage of newborn who feed colostrums within 1 hour.	70%	77.8%	111
7. Mothers known at least 2 complications after delivery.	80%	77.7%	97
8. Mothers have known at least 2 danger signs of neonatal.	80%	88.1%	110
9. Percentage of mothers/neonates who received visits within 42 days after delivery.	40%	23.1%	58
10. Percentage of neonatal who weighted birth weight.	100%	68.0%	50
Component 2: Health Services	Target	% Achievement as of April, 2014	Score for Dashboard
1. PI created health fund for addressing maternal and newborn illness	100%	80%	80
2. One CHV visit 100 household per month	100%	40%	40
3. One CHV visit neonatal mothers at least 2 times per month	100%	93%	92
4. One CHT visit 15 CHVs monthly	100%	100%	100
5. One CHT visit 15 TTBA's monthly	100%	100%	100
6. Pregnant mothers visited by TTBA's per month in last 6 months.	100%	100%	100
7. One meeting with H/C in last 6 month	100%	53%	52
8. Percentage of mothers refers to H/C in last 6 month.	100%	38%	37
Component 3: Organizational Capacity	Target	% Achievement as of April, 2014	Score for Dashboard
1. PI has policies which are followed regularly and reviewed as necessary	100%	61%	61
2. PI has registration	100%	100%	100
3. They hold meeting regularly(monthly)	100%	79%	79
4. There are equal opportunities for members of training and planning	100%	68%	20
5. There is an agreement to work in participatory with other like minded organization	100%	78%	77
6. PI has visionary and every PI has 5 good leaders	100%	72%	72
7. PI has fund raising plan as well as capacity	100%	78%	77
8. PI has transparency accounting system	100%	83%	82

9. PI representatives visit to union committee and primary groups in quarterly	100%	59%	59
Component 4: Organization Viability	Target	% Achievement as of April, 2014	Score for Dashboard
1. PI executive committee is well aware of the policies and they practice that.	100%	63%	63
2. PI implement community based health program	100%	78%	78
3. PI has training program for group members on health	100%	58%	58
4. PI is well known about GO/NGO health services	100%	79%	79
5. There is clear accountability and regular monitoring system	100%	64%	64
Component 5: Community Capacity	Target	% Achievement as of April, 2014	Score for Dashboard
1. All members of the groups are doing savings and managed by themselves	100%	79%	78
2. Group is well respected and accepted in the society	100%	73%	73
3. All groups have their own bye-laws which they follow	100%	63%	63
4. They have skilled leaders and changes leadership body in each year through participatory process.	100%	53%	52
5. Groups members can properly write the passbooks and understand about the record keeping	100%	54%	54
Component 6: Ecological, human, economic, political and policy environment	Target	% Achievement as of April, 2014	Score for Dashboard
1. Community people advocate for safe motherhood	100%	76%	75
2. Community people involved in the running of community clinics	100%	100%	100
3. Clinics staffed and have supplies and medicines	100%	70%	69
4. Community people aware of civil rights and they are enjoying	100%	56%	56
5. PI leaders attend meeting with local elite persons in last 6 month.	100%	85%	84

Note: Into the dashboard use the score for every indicator according to target and achievement. It mentioned that the score is not percentage. Some indicators achievement is more according to target, like, Percentage of Deliveries conducted by Skilled personnel. here the target is 15% and achievement is 21.15%. thats why its score is 142.

Achieving Universal Coverage of Maternal, Newborn and Child Health through Building Public-private Partnerships in a High-mortality District: Findings from a Baseline Survey in Netrokona, Bangladesh



Dewan Md. Emdadul Hoque

Shumona Sharmin Salam

Muntasirur Rahman

Nancy Tenbroek

Helen Rema

Rezaul Karim

Michael Savic

Alan Theodore Talens

Shams El Arifeen

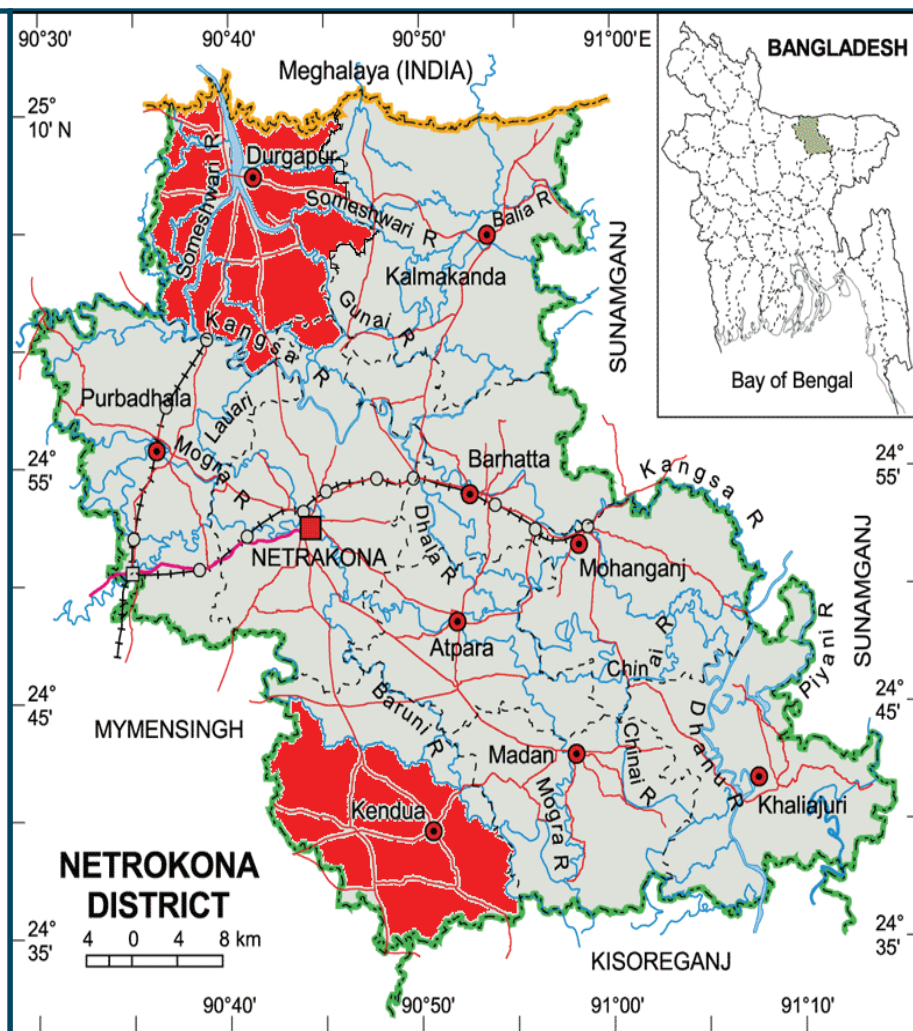
Background

- Bangladesh has experienced significant progress in reducing maternal, child and infant mortality
- Deaths during the neonatal period are high and contribute to 57 percent of child deaths (BDHS 2007)
- Interventions to reduce maternal, child and neonatal deaths exist but the impact of these are limited by poor coverage and quality.
- Improving maternal, newborn and child health requires a continuum of care addressing both women and children

Background

Christian Reformed World Relief Committee (CRWRC)

- SUSOMA - 5 year child survival project from 2009
 - Innovative “People’s Institution” model
 - Independent, self-sustaining Community based organization
 - Sustainable public-private partnerships
- Durgapur and Kendua upazila of Netrokona district



Objective

Explore the baseline coverage of selected maternal, newborn and child-health indicators in the study area to help plan implementation of interventions

Methods

Study area:

- Intervention – Durgapur, Kendua
- Comparison - Barhatta, Kalmakanda

Study design:

- Quasi-experimental
- 20 clusters from each areas

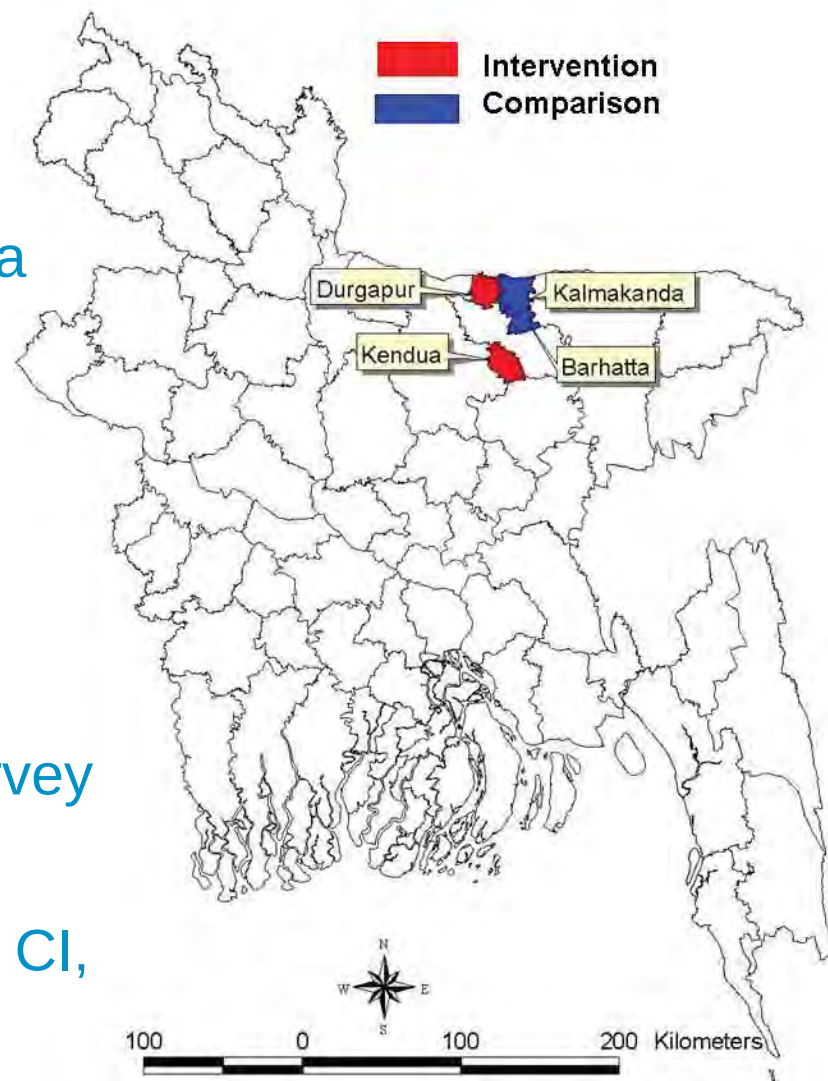
Study population:

Women (15-49 years) with a birth outcome in 2 years preceding the survey

Sample size:

2,499 women from each areas (95% CI, 80% power, design effect 1.5)

Survey period: February to April 2010



Findings on key coverage indicators

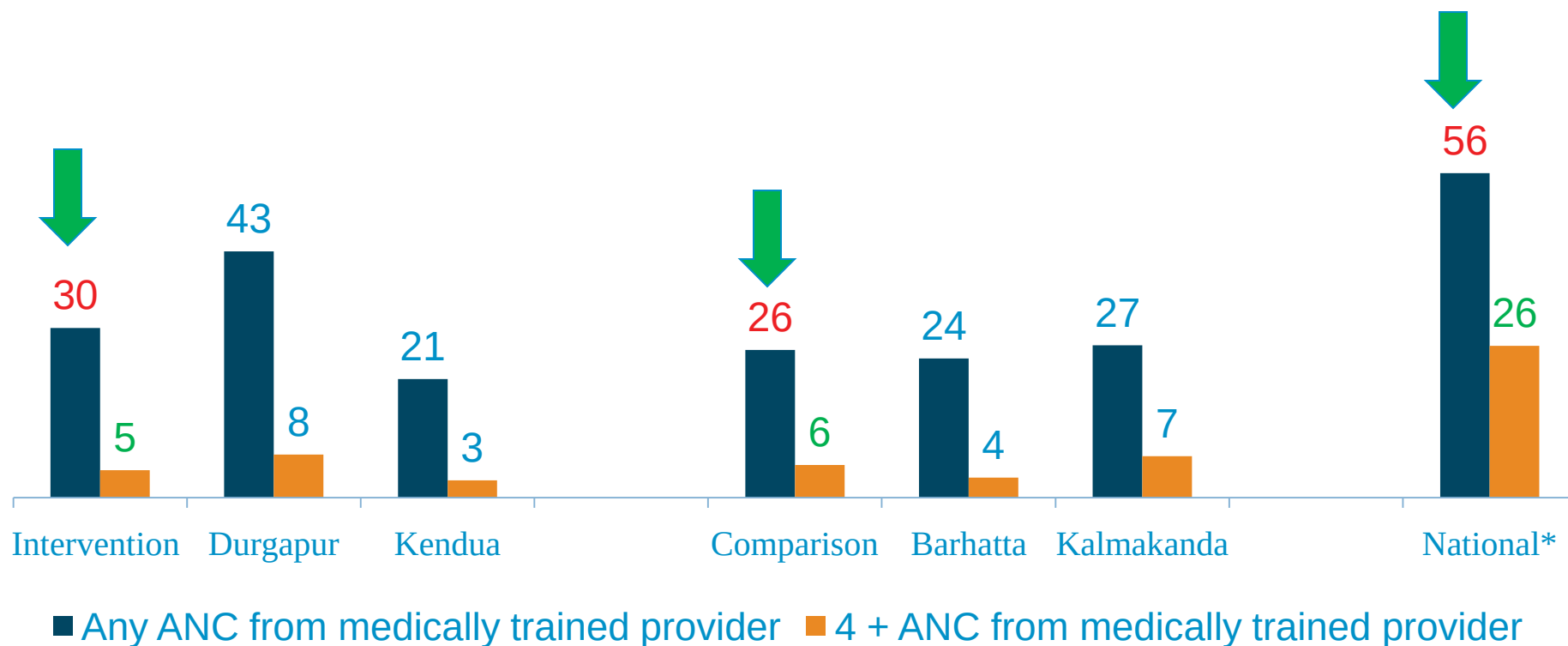
Household and respondent characteristics

	Intervention (n= 2,038) %	Comparison (n=2,041) %
Mean size of households	5.4	5.6
Electricity available	21	20
Improved source of drinking water	99	97
Improved toilet facility*	73	62
Wealth quintile		
Poorest*	17	24
Richest	22	18
Women with no education*	33	45

*p<0.000

Antenatal care

Percent distribution of women who had a live/still birth in 2 years preceding the survey by area and upazila and received **any and 4+ ANC** from **medically trained providers**^a

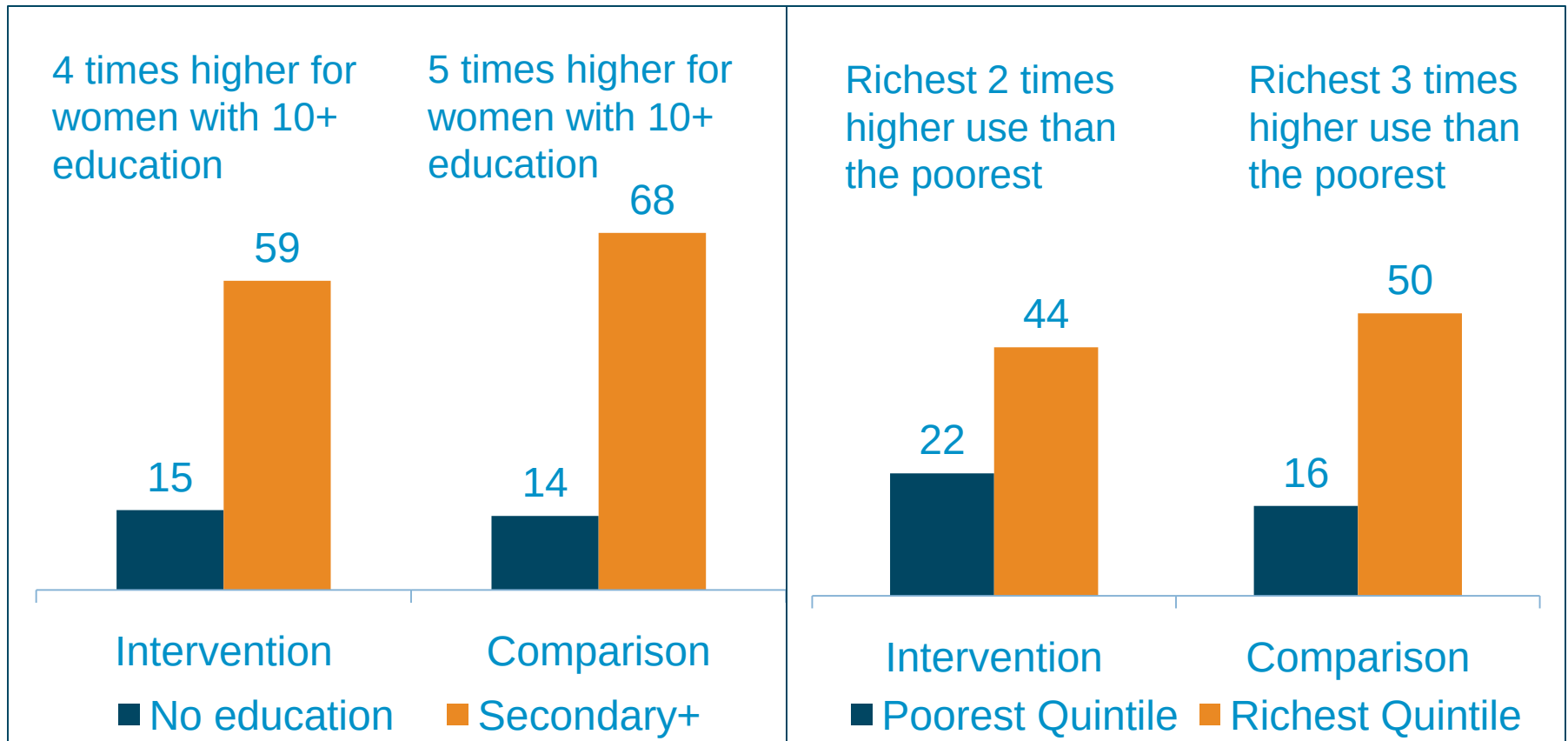


^a Qualified doctor, nurse/midwife, paramedic, family welfare visitor, community skilled birth attendant

*Source: Bangladesh maternal mortality and health care survey 2010

Antenatal care

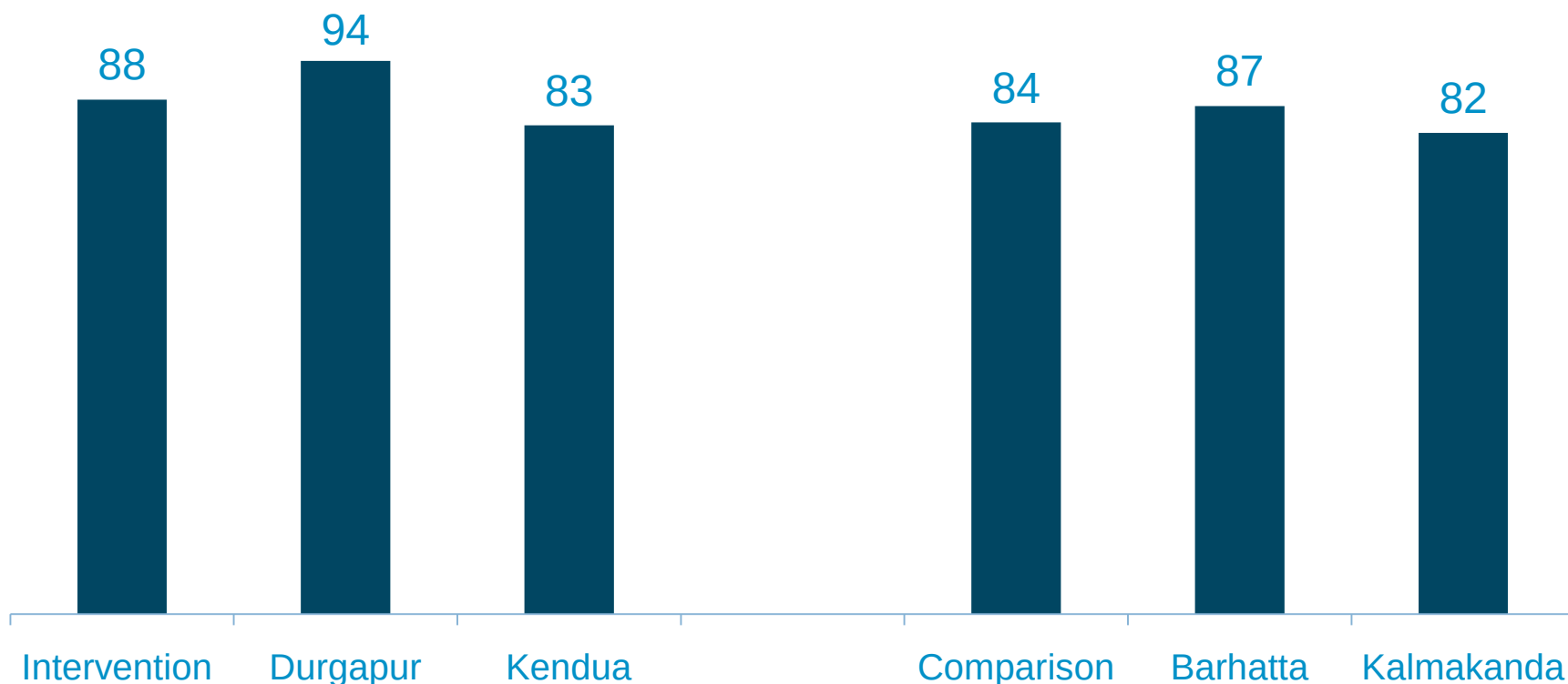
Percent distribution of any ANC from medically trained providers^a, by women education and wealth quintile



^a Qualified doctor, nurse/midwife, paramedic, family welfare visitor, community skilled birth attendant

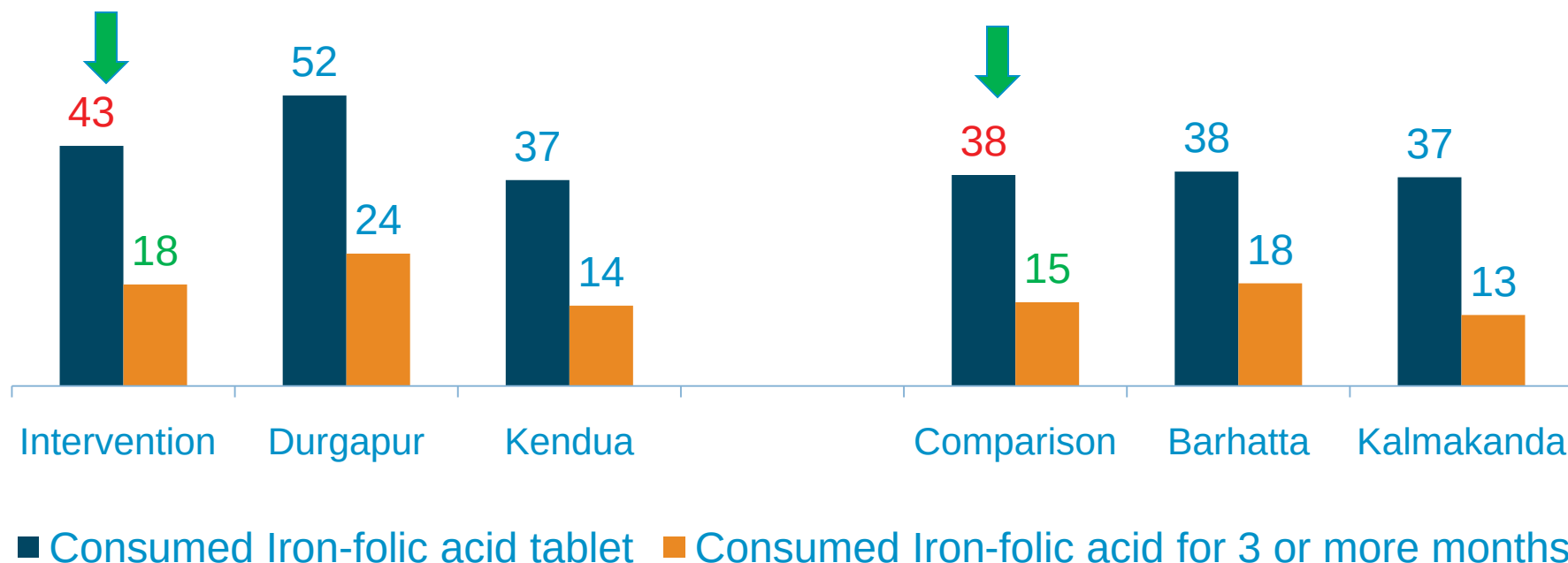
TT immunization

Percentage distribution of women aged 15-49 who had a live/still birth in 2 years preceding the survey received at least two Tetanus Toxoid (TT) injections in their life time.



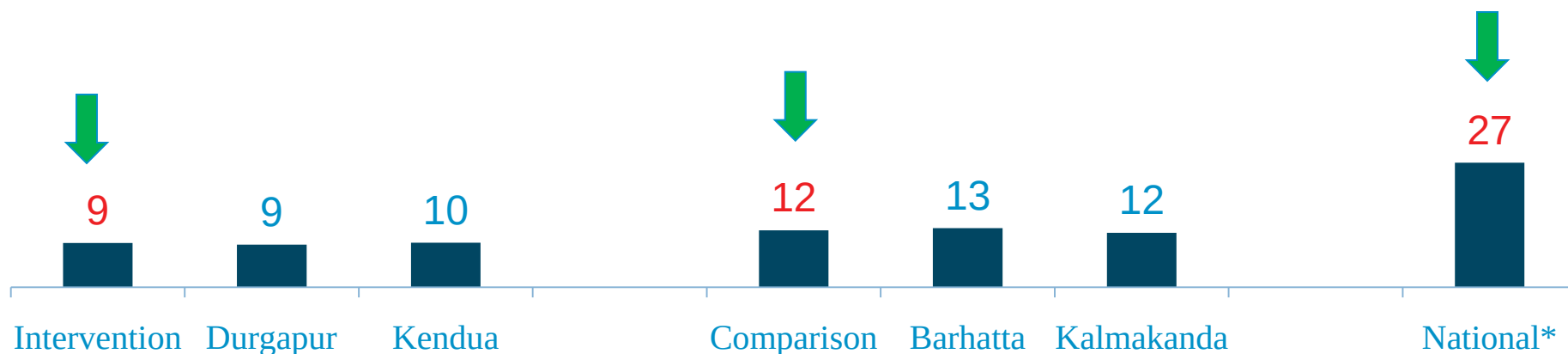
Iron folic acid

Percentage distribution of women aged 15-49 who had a live/still birth in 2 years preceding the survey who consumed Iron folic acid during last pregnancy by area and upazila



Delivery care

Percent distribution of deliveries conducted by skilled attendants^a for birth outcomes (live /still) among women aged 15-49 who had a live birth or still birth in 2 years preceding the survey by area and upazila

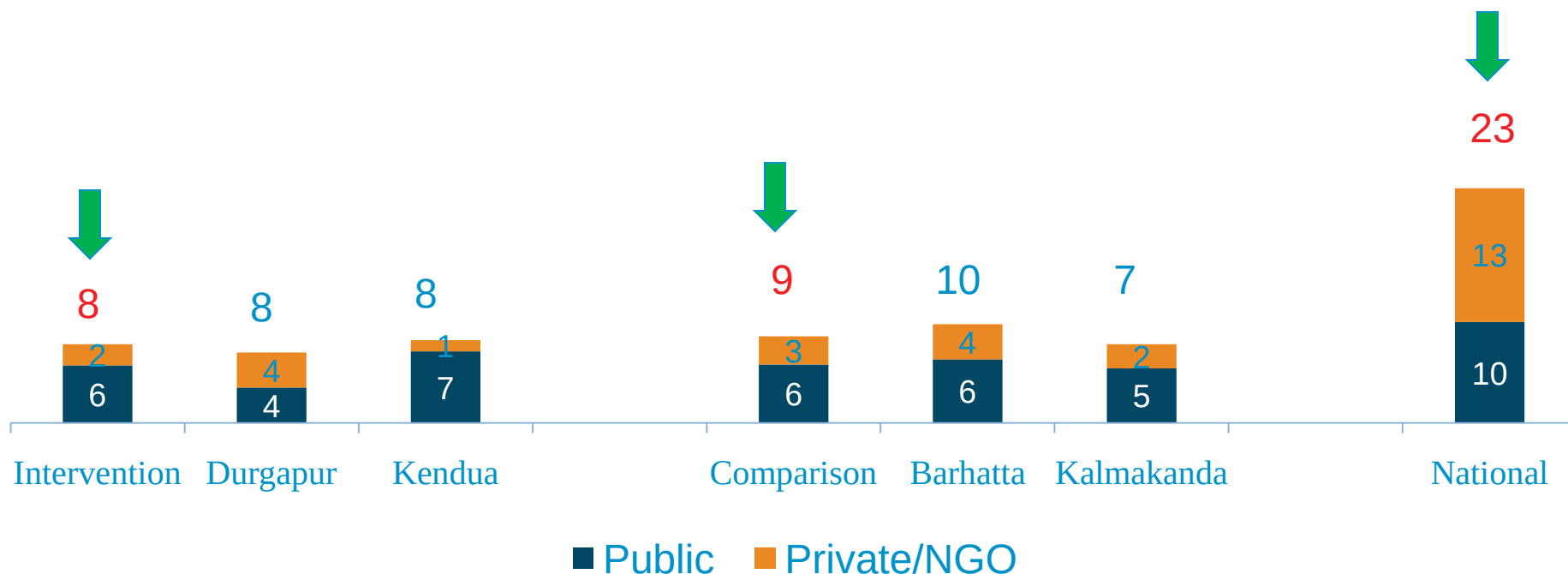


^a Qualified doctor, nurse/midwife, paramedic, family welfare visitor, community skilled birth attendant

*Source: Bangladesh maternal mortality and health care survey 2010

Delivery care

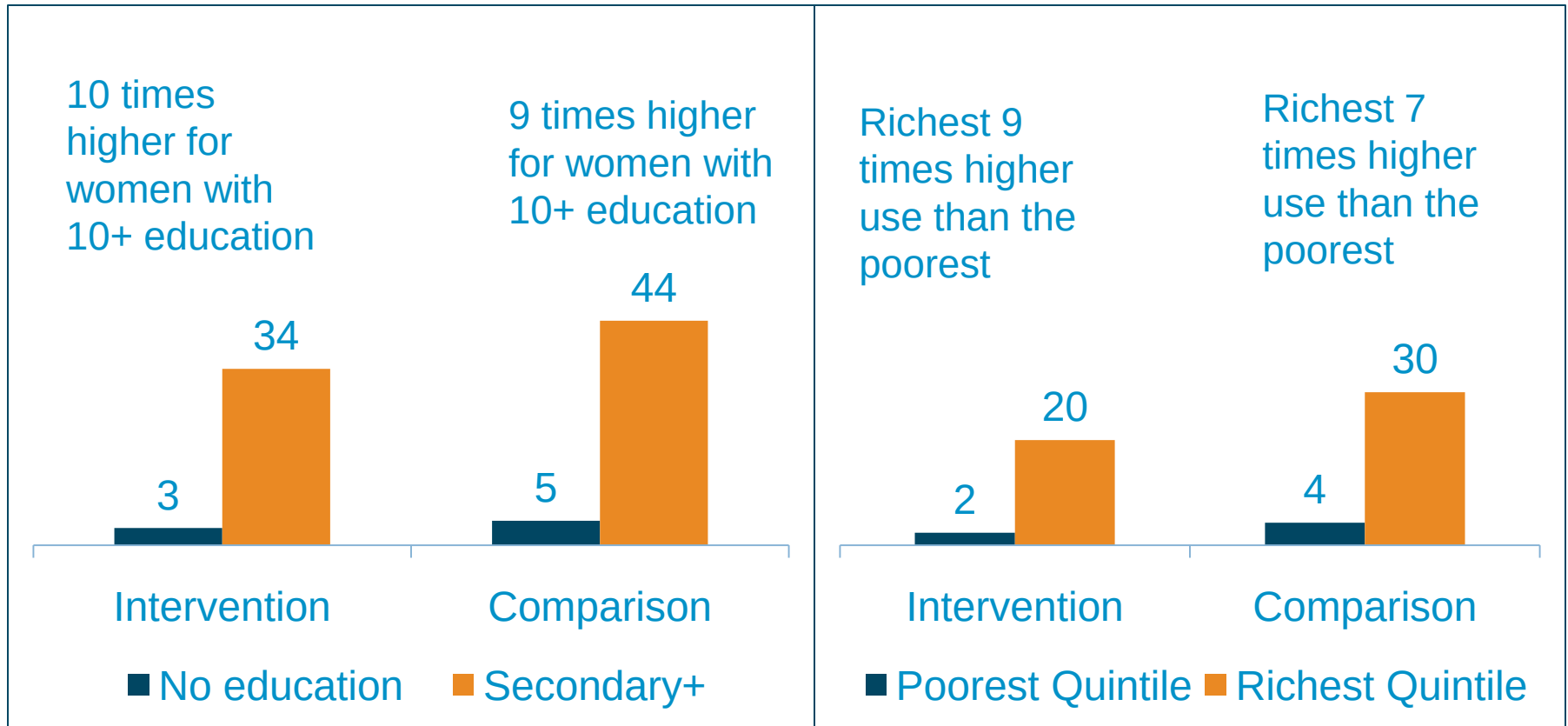
Among women aged 15-49 who had a live birth or still birth in 2 years preceding the survey, percent distribution of facility (public and private/NGO) based deliveries by area and upazila



*Source: Bangladesh maternal mortality and health care survey 2010

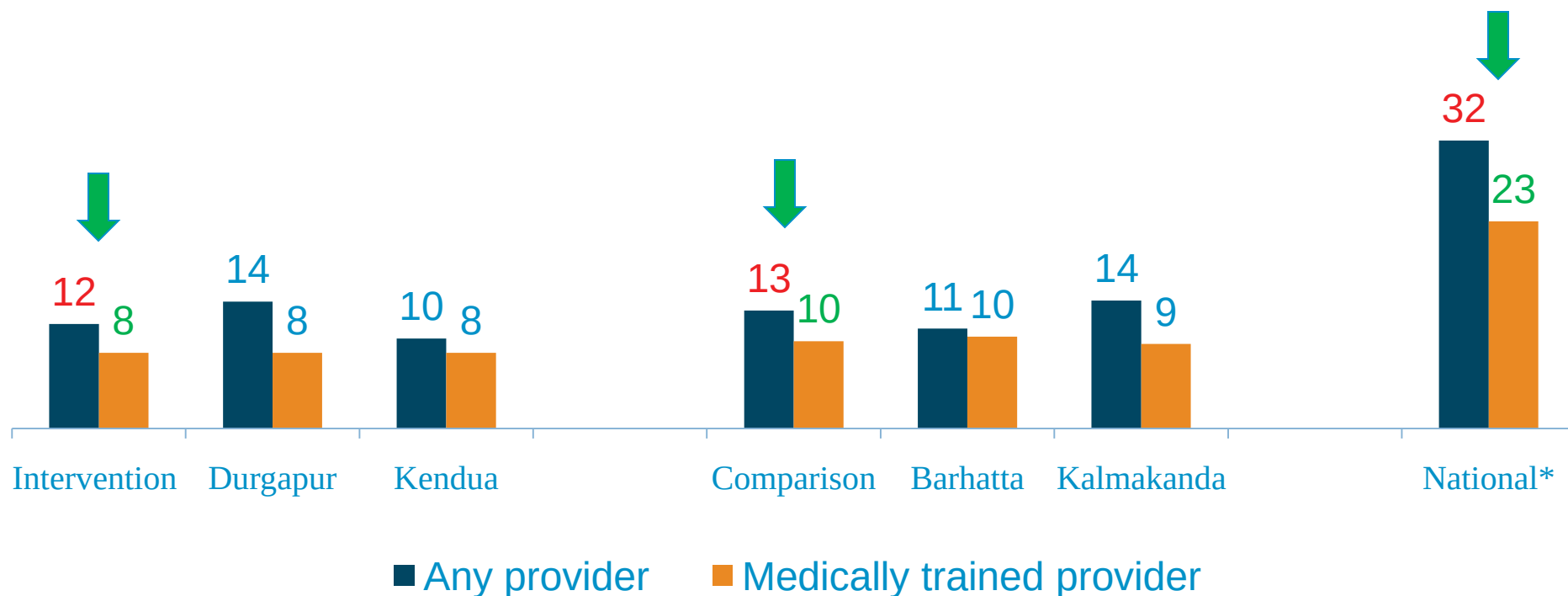
Delivery care

Percentage of women age 15-49 delivered by skilled attendants in the 2 years preceding the survey by women education and wealth quintile



Postnatal care for mother

Among women aged 15-49 who had a live/still birth in 2 years preceding the survey, percent distribution of women who received **PNC within 2 days of delivery** from **any provider** and **medically trained provider**^a, by area, upazila

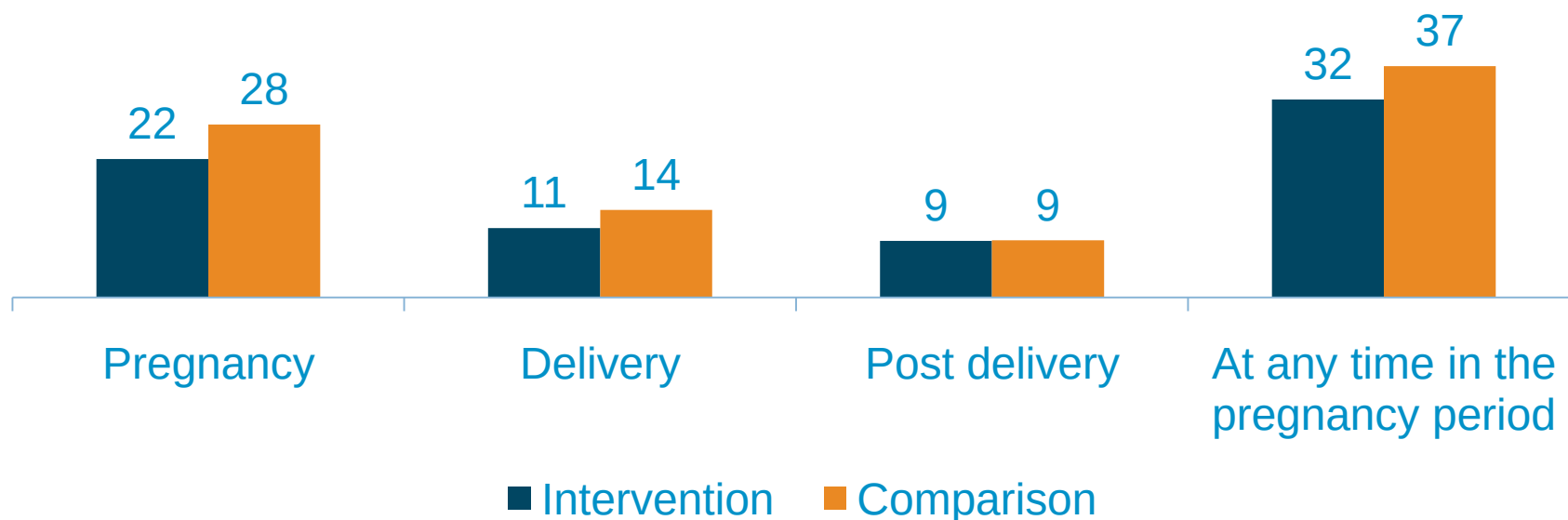


^a Qualified doctor, nurse/midwife, paramedic, family welfare visitor, community skilled birth attendant

*Source: Bangladesh maternal mortality and health care survey 2010

Maternal complications

Percentage of women age 15-49 who reported any complication during pregnancy, during delivery and after delivery for all live or still births in the two years preceding the survey



Maternal complications

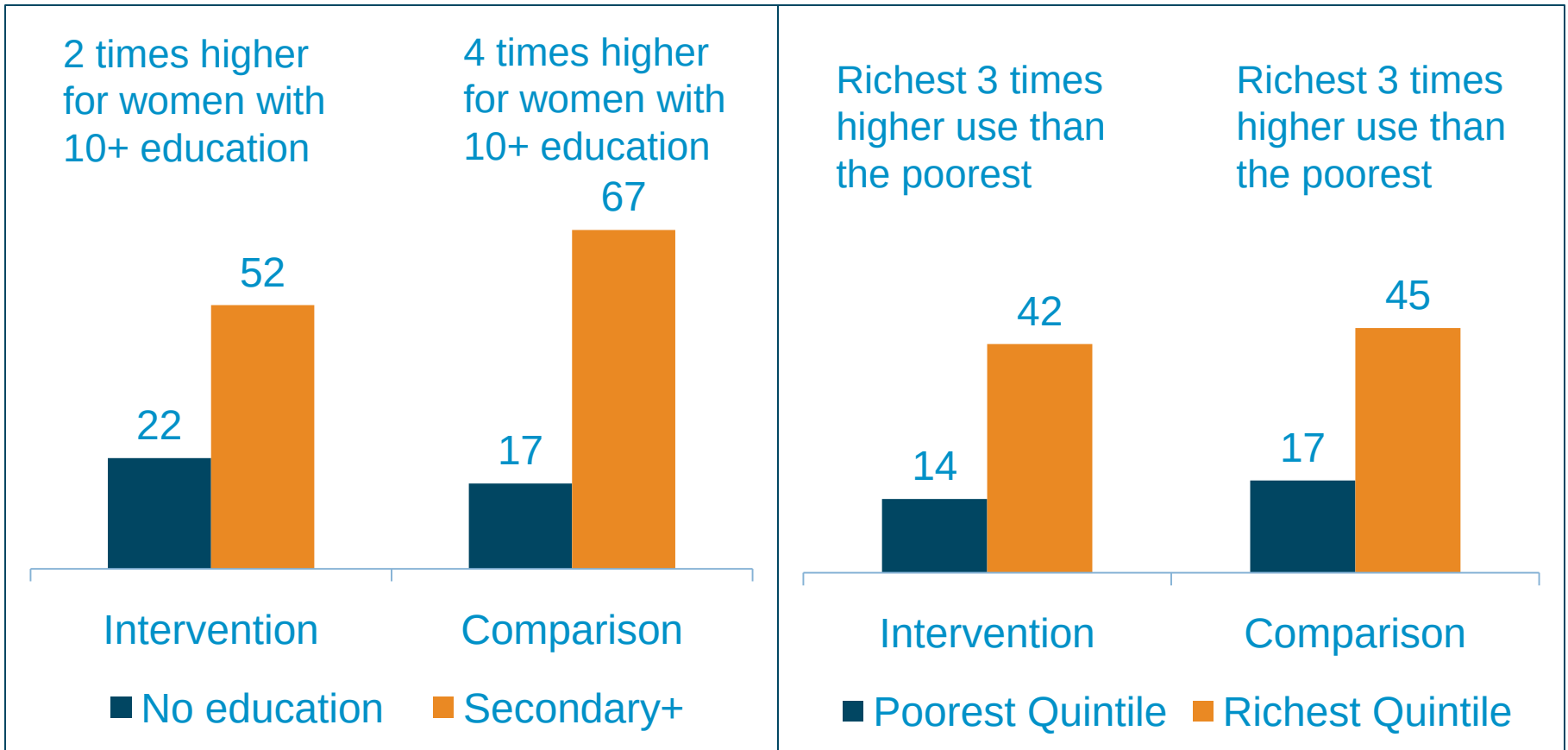
Care-seeking for reported complications among women who had a complication for all birth (live/still) in the 2 years preceding the survey

Care-seeking for maternal complications	Antenatal period (n=533) %	During delivery (n=269) %	After delivery (n=195) %
Did not seek care	47	39	31
Sought care from medically trained provider ^a	25	34	30
Sought care from other unqualified provider	26	26	36

^a Qualified doctor, nurse/midwife, paramedic, family welfare visitor, community skilled birth attendant, MA/SACMO

Maternal complications

Care-seeking from medically trained providers^a for reported complications by education and wealth quintile



^a Qualified doctor, nurse/midwife, paramedic, family welfare visitor, community skilled birth attendant, MA/SACMO

Essential newborn care

Percent distribution of essential newborn cares in children aged 0-23 months by study area

	Intervention % (n)	Comparison % (n)
Immediate drying* (home delivery)	10 (964)	21 (950)
Immediate wrapping * (home delivery)	10 (964)	20 (950)
Thermal care* (Immediate drying and wrapping) (home delivery)	9 (964)	19 (950)
Delayed bathing* (> 3 days)	9 (1,043)	18 (1,035)
Initiated breastfeeding within 1 hour of birth	53 (1,816)	53 (1,784)

*p<0.000

Nutrition

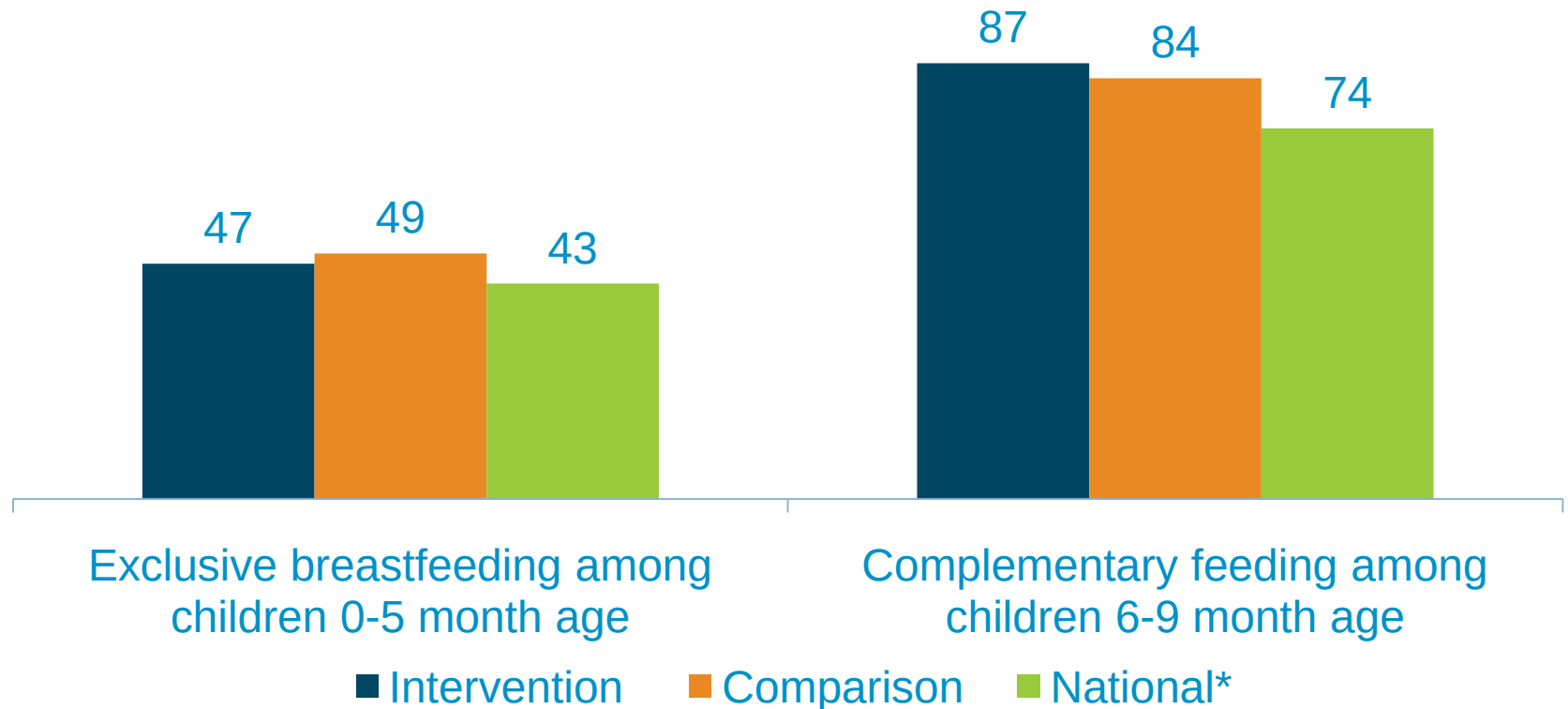
Nutritional status of children age 0-23 weight for age by study area

	Number of children	<-2z weight for age %	<-3z weight for age %	Mean Z-score (SD)
Intervention	1,816	33	11	-1.5
Comparison	1,779	36	12	-1.6
National*	5,312	41	12	-1.7

*Source: BDHS 2007

Nutrition

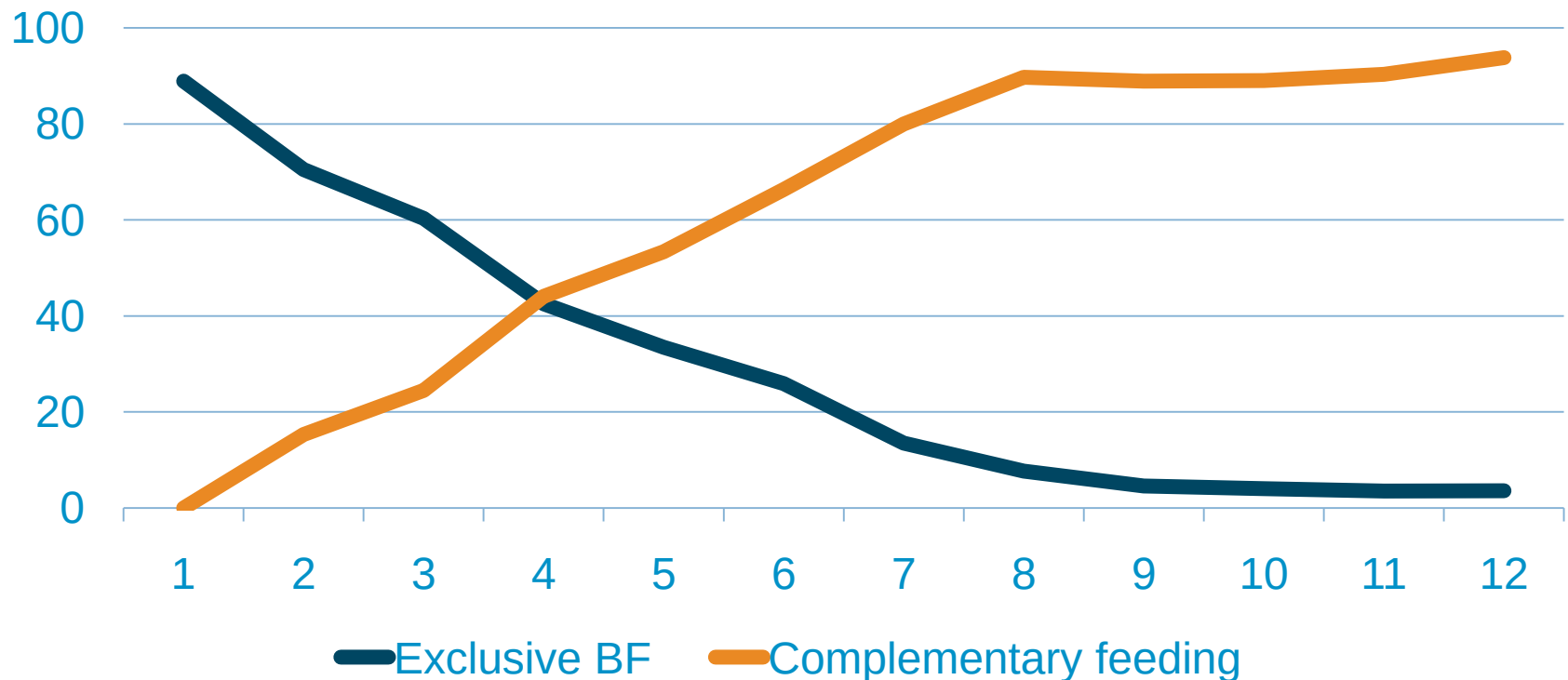
Levels of key feeding indicators among children in intervention and comparison areas



*Source: BDHS 2007

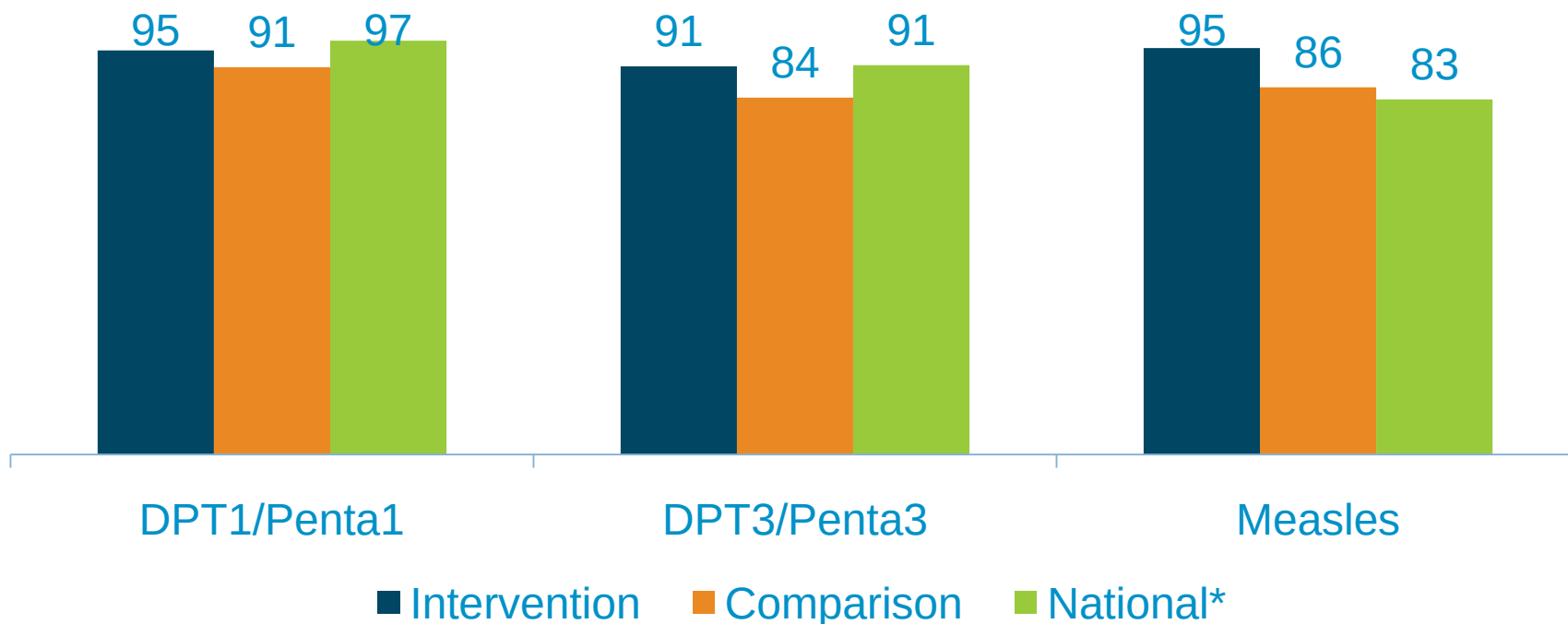
Nutrition

Percentage of infants **exclusively breastfed** and percentage receiving **complementary feeding** (based on last 24 hrs feeding) by age of the child



Child immunization

Percent distribution of children age 12-23 months who received specific vaccines at any time before the survey (according to vaccination card or mothers' report) by area



*Source: BDHS 2007

Child morbidity

Prevalence of two weeks morbidity of under 2 children and care -seeking by study area

	Intervention % (n)	Comparison % (n)	National* %
Suspected pneumonia in last 2 weeks*	7 (1,816)	10 (1,784)	5
Care sought from medically trained provider ^a for suspected pneumonia	22 (130)	19 (173)	37
Diarrhoea in last 2 weeks	6 (1,816)	8 (1,784)	10
Use of ORT for diarrhoea ^b	74 (114)	50 (135)	81

^a Qualified doctor, nurse/midwife, paramedic, family welfare visitor, MA/SACMO

*Source: BDHS 2007

^bP<0.005

Conclusion

- Higher than national coverage was found for exclusive breastfeeding, early initiation of breastfeeding, measles immunization
- Lower coverage was found for maternal indicators such as antenatal care, delivery, postnatal care and child health.
- We observed strong socio-economic inequities by education and wealth for most health interventions.

Recommendation

- Learning from the interventions that have reached a high coverage in such high mortality areas, e.g. immunization and childhood feeding, will be important to improve the coverage of other interventions.
- The programme should focus on ensuring availability of services at facilities and that referral links work.
- Focus is needed on increasing community awareness, and motivation for care-seeking
- The programme should invest in increasing the understanding and capacity of community leadership in leading the community to better health and holding the health workers and health system accountable.

Limitations

- Purposive selection of intervention and comparison areas
- Recall bias
- Information on contextual factors such as road network, functionality of health systems etc. that may have effect on the indicators have not been taken into account

Thank you

Addressing Health Inequity in Bangladesh through Community Mobilization and Governance: A Child Survival Program Operations Research (OR).

Alan Talens¹, Nancy TenBroek², and Florence Nyangara³

Background: Netrokona district is populated by marginalized tribal groups with unmet health needs. For greatest impact effective interventions has to reach the poor communities.

Methods: The project's⁴ delivery strategy is community mobilization and governance using the Peoples Institution (PI) model. The primary groups elect representatives to the PIs which become self-governing bodies and serve as linkage to government health system. The PIs create the community-based healthcare, providing services to the unreachable groups.

The OR will analyze the strategy's effectiveness in inequity-reduction and the factors influencing coverage. A quasi-experimental design is used to compare intervention and comparison groups, each stratified into 5 wealth quintiles. To show that interventions are reaching the poor, final evaluation should demonstrate health-outcome improvements in lowest quintile in intervention group.

Results: Antenatal visit coverage in the lowest quintile (LQ) is 1.9% and in the highest quintile (HQ) 13.3%. In the LQ only 4% of deliveries are by skilled birth-attendants and in the HQ, 25%; In LQ, only 8% of mothers received iron –folic acid for 3+ months and in the highest quintile 31.8%. In LQ immunizations are relatively lower: DPT1 -87.5%, DPT3-80.8%, measles-83.3% while in HQ it is 94.3% DPT1, 89.7% DPT2, and 93.7% measles. In LQ 7.7% of children 0-23 had diarrhea in the last 2 weeks while in HQ only 6.7 %, and in LQ 50% received ORS vs. in the HQ, 55%. Amongst those with pneumonia, in the LQ 10% sought care from medically trained providers compared to those in HQ, 23%.

Conclusion: There are inequities in coverage of most interventions by wealth ranking in Netrokona, Bangladesh. Baseline KPC showed that more has to be done to improve coverage levels of child health interventions among the poor. The PI using community participation, representation and governance to create community-based healthcare and universal coverage could be a feasible equalization model in reducing inequities and improving health in underserved communities.

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RESEARCH ARTICLE

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Husbands' involvement in delivery care utilization in rural Bangladesh: A qualitative study

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Abstract

Background: A primary cause of high maternal mortality in Bangladesh is lack of access to professional delivery care. Examining the role of the family, particularly the husband, during pregnancy and childbirth is important to understanding women's access to and utilization of professional maternal health services that can prevent maternal mortality. This qualitative study examines husbands' involvement during childbirth and professional delivery care utilization in a rural sub-district of Netrokona district, Bangladesh.

Methods: Using purposive sampling, ten households utilizing a skilled attendant during the birth of the youngest child were selected and matched with ten households utilizing an untrained traditional birth attendant, or *dhatrī*. Households were selected based on a set of inclusion criteria, such as approximate household income, ethnicity, and distance to the nearest hospital. Twenty semi-structured interviews were conducted in Bangla with husbands in these households in June 2010. Interviews were transcribed, translated into English, and analyzed using NVivo 9.0.

Results: By purposefully selecting households that differed on the type of provider utilized during delivery, common themes—high costs, poor transportation, and long distances to health facilities—were eliminated as sufficient barriers to the utilization of professional delivery care. Divergent themes, namely husbands' social support and perceived social norms, were identified as underlying factors associated with delivery care utilization. We found that husbands whose wives utilized professional delivery care provided emotional, instrumental and informational support to their wives during delivery and believed that medical intervention was necessary. By contrast, husbands whose wives utilized an untrained *dhatrī* at home were uninvolved during delivery and believed childbirth should take place at home according to local traditions.

Conclusions: This study provides novel evidence about male involvement during childbirth in rural Bangladesh. These findings have important implications for program planners, who should pursue culturally sensitive ways to involve husbands in maternal health interventions and assess the effectiveness of education strategies targeted at husbands.

Background

In Bangladesh, rates of maternal mortality—the death of women during pregnancy, childbirth, or in the 42 days after delivery—are on the decline, but remain very high (194 maternal deaths per 100,000 live births) [1]. The majority of maternal deaths and disabilities occur suddenly and unpredictably between the third trimester and the first week after the end of pregnancy due to hemorrhage,

sepsis, and obstructed or prolonged labor [2]. The fact that most deaths occur during childbirth or are the result of an event during childbirth emphasizes the need for every woman to have access to skilled health professionals—such as a doctor, a nurse or a midwife—and adequate health facilities [2]. However, only 27% of all births in Bangladesh are assisted by skilled professionals and only 23% of births take place in a health facility [1].

Women and their families face socioeconomic and cultural barriers to seeking professional delivery care, such as high costs, long distances to health facilities, lack of knowledge about danger signs during pregnancy, and a tradition of using untrained local practitioners during

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delivery [3]. Two important determinants of care-seeking behavior particularly important in rural Bangladesh are social norms and family dynamics. Cultural norms and beliefs have been shown to delay and sometimes stop women from seeking professional care during childbirth [4]. Some women in Bangladesh do not believe professional medical workers are the best option to manage delivery-related complications [5]. This may be related to the concepts of purity and shame, which keep them away from hospitals and male doctors. Notions of purity are often juxtaposed with pollution in South Asian societies. In the north Indian context, the afterbirth is perceived to be the most severe pollution of all, even worse than defecation or death. There is a similar understanding of childbirth in Bangladesh, such that the person attending the birth must undergo purification after delivering the baby [6]. The mother and newborn are perceived to be in a state of ritual impurity immediately after the birth. In order to prevent other household members from becoming polluted, the birthing woman is confined to a separate room designated for childbirth for seven to nine days following the delivery [7]. Because of the shame and impurity associated with childbirth, women prefer not to be in a public space during delivery. Another possible barrier to professional delivery care is the institution of *parda* (or *purdah*) in Muslim culture, which makes a strict separation between men and women and often limits female mobility. Since most doctors in Bangladesh are male, women do not want them to be present during delivery [6].

Family dynamics present another barrier to delivery care in rural Bangladesh. Many individuals in a woman's social network play a role in decisions about reproductive health care utilization, especially when acute problems arise [4,5,8]. Parkhurst and colleagues [5] describe decisions about professional delivery care being made at a crisis point, when a woman's home labor is perceived to be progressing poorly. Close family members in the household, including mothers-in-law and other female in-laws, often give opinions on how to proceed. The same pattern of behavior during pregnancy and childbirth is also found in Nepal, where older women have decision-making authority, especially the mother-in-law [9]. However, the husband is also a possible family member who may influence the decision to seek professional delivery care. It has been suggested that better spousal communication may improve women's maternal health care-seeking behaviors [9,10]. Therefore, husbands' attitudes and beliefs can play a key role in overcoming access barriers to maternal health care in Bangladesh, or conversely, act as barriers themselves [11].

The husband's role during pregnancy and childbirth

The influence of men in decision-making has been seen in studies of family planning, sexually transmitted

infections and HIV, abortion, and infertility. However, there is a relative scarcity of information on men's intentions and practices as they relate to pregnancy and childbirth, especially in South Asia [12]. Some have suggested that male partners act as obstacles when it comes to safe delivery care [13]. However, male involvement during pregnancy and childbirth can lead to positive birth outcomes for the mother and child as well as a healthier marital relationship. A husband's positive involvement can take many forms, including transporting his wife to a qualified provider, providing household money to make that visit, giving helpful informational support during pregnancy, and offering emotional support during labor and childbirth [14].

In South Asia, it has been suggested that women who receive their husbands' approval [15] and women whose husbands are concerned about pregnancy complications [8,16] are more likely to use reproductive health services. However, men are not always encouraged to be involved during pregnancy and childbirth in the South Asian context. For example, men in Nepal are typically discouraged from involvement with pregnancy and childbirth [17,18]. Mullany [18] found that some husbands were interested in supporting pregnancy health, but their lack of knowledge about maternal health posed a significant obstacle to becoming positively involved. Other barriers to the husband's involvement included embarrassment in learning about pregnancy health, work obligations, hospital's restrictions on the husband's entrance into most areas of the hospital, and communication barriers between husbands and wives [18]. It has also been reported that there is a significantly higher probability of male involvement in pregnancy health when men and women made household decisions together [19]. In India, men are traditionally the gatekeepers to health care; however, they know little about pregnancy and childbirth [20]. Chattopadhyay [20] found that men's knowledge about reproductive health and their presence during antenatal care visits were associated with the use of professional delivery care. The studies from Nepal and India suggest that male involvement during pregnancy and childbirth is an important aspect to maternal health care utilization.

In Bangladesh, men often make decisions about women's health care because women are structurally and culturally dependent on men due to their limited mobility and limited educational and economic opportunities [6,11]. This means that even though men may be discouraged from being involved in matters of pregnancy and childbirth, as is the case in the region, their beliefs and perceptions might influence where and how their wives give birth. This study was designed to provide novel evidence about male involvement during childbirth in rural Bangladesh.

Study aims

This study contributes to the literature on childbirth by examining the husband's role during childbirth from the male perspective. Specifically, this paper aims to (1) better understand the common barriers to delivery care, (2) explore the underlying social factors associated with delivery care utilization, and (3) examine how husbands' involvement during pregnancy and childbirth is associated with the use of professional delivery services.

Methods

Setting

A rural sub-district—Durgapur—in the Netrokona district of Bangladesh was selected for this study based on the population's vulnerability to poor health outcomes. Durgapur is a flood-prone area with a population of 198,326 [21]. Durgapur has high rates of poverty, low levels of literacy, poor infrastructure, and limited access to health facilities (approximately one first-level facility per 21,000 people). Durgapur is close to the border with India and has a large number of ethnic families—including Garo, Koch and Hajong—who are often overlooked when healthcare resources are distributed.

Sample selection

The sampling frame included 10 villages in Durgapur that were selected based on three criteria: (1) the village provided some ethnic diversity to the sample, (2) the village was outside of a five kilometer radius of the nearest health facility, and (3) the village was relatively easy to access given the weather and road conditions. Each village had an approximate population of 1,000. From these 10 villages, 24 households were selected for inclusion in the study using non-proportional quota sampling. First, a total of 12 households that utilized a skilled birth attendant during the birth of the youngest child were selected. This sample was further divided based on the type of skilled birth attendant utilized during childbirth. Skilled birth attendants are typically defined as an accredited health professional, such as a doctor, nurse, or midwife [22]; however, it is extremely difficult to travel to the hospital to find a skilled birth attendant in most rural areas in Bangladesh. Therefore, another type of skilled birth attendant, known as a community-based skilled birth attendant (CSBA), is often used for home deliveries. A CSBA is community-based female fieldworker who has received six months of training in midwifery skills and

the identification of maternal danger signs for referral [23].

Our sample included six households that used a doctor, nurse or midwife at a hospital and six households that used a CSBA at home. Each of these 12 households was matched with a household that utilized an untrained *dhatri* (a common term for a traditional birth attendant) during the birth of the youngest child. A *dhatri* is usually an older, non-literate woman who has learned her skills through more experienced *dhatri*s [24]. The *dhatri*s used by study subjects had received no formal training on childbirth practices. Households were selected based on a set of inclusion criteria, including age of the youngest child (less than one year), age of the mother (18 to 49 years), approximate household income (less than 3,200 Taka [39 USD] per month), and distance to the nearest health facility with at least one doctor, nurse, or midwife on staff (between five to ten kilometers).

The sample was selected by first identifying six women who delivered at one of three local health facilities in Durgapur—two private and one public—using a hospital registry. Next, six women who delivered at home with the help of a CSBA were identified by contacting the CSBAs who worked in the 10 villages in our sampling frame. The interview team visited the household of each woman to determine whether or not she and her husband met the inclusion criteria for the study before starting the interview. Once households utilizing a skilled birth attendant were identified, the interview team went house-to-house to select a household from the same village that met the inclusion criteria, but had used a *dhatri*. Due to misidentification of two birth attendants, two pairs of households were dropped from the final analysis. The final sample is depicted in Table 1.

Data collection

Semi-structured interviews were conducted with both husbands and wives over two weeks in June 2010. Four interviewers (two women and two men) with a background in anthropology and experience in qualitative interviewing were recruited for data collection. All interviewers received two days of training on all of the documents for the interviews (oral script, pre-screening questions, consent form, code sheet, and the questionnaires). All research materials were translated into Bangla. Upon arrival in the field, a pilot test was conducted with two couples (two husbands and two wives) and necessary changes were made.

Table 1 Matched Sample (n = 20)

	Skilled Birth Attendant (n)	Untrained <i>Dhatri</i> (n)
Location of delivery	Hospital (6)	Home (6)
	Home (4)	Home (4)

This paper focuses on the data collected from the interviews with the husbands. Each husband-interview consisted of a ten-question household demographic survey and a 14-question semi-structured interview. All interviews were conducted in Bangla and took place in the couple's home away from family members and other distractions. Interviewers were gender matched with respondents. The husband was interviewed at the same time as his wife, but they were interviewed separately and could not hear or see one another. Interviews with husbands lasted between 40 and 90 minutes (53 minutes on average). The interviewer received written consent to interview and tape record each respondent. The Principle Investigator (PI) was present during half of the interviews with the husbands and supplemented the interviews with field notes describing methodological, theoretical and personal observations during the data collection period. This study was approved by the University of Michigan Internal Review Board (HUM00038924) and the International Center for Diarrheal Disease Research, Bangladesh (ICDDR, B) Ethics Review Board.

Data analysis

Respondents were de-identified using a numerical code. Interviews were transcribed, translated into English, and analyzed using NVivo 9.0. A combination of open and axial coding was used to identify the properties and dimensions of each major category, or theme [25]. When possible, *in vivo* codes—words which were used by respondents—were used for coding purposes. *In vivo* codes are an important part of sociological research because they pinpoint the meaning of certain ideas or experiences from the respondent's perspective [26]. Intercoder reliability was used to evaluate the validity of the coding categories: two investigators (one Bangladeshi and one American) used the code categories developed by the PI to independently code sections from eight interviews. The average percent agreement among the three coders was 79%.

Results

The demographic, socioeconomic, and geographic characteristics of the ten husbands whose youngest child was delivered by a skilled birth attendant (doctor, nurse, midwife, or CSBA) were compared to the characteristics of the ten husbands whose youngest child was delivered by an untrained *dhatrī* (Table 2). Due to the small sample size, tests for statistical significance across the groups are not very informative, so they are not presented. We display the raw count data and make general observations about differences across the two groups. A larger proportion of households using a skilled birth attendant had only one child and these households

appeared to have a higher monthly income per family member compared to households that used an untrained *dhatrī*. The higher monthly income per family member may simply be a reflection of the smaller family size among households using a skilled birth attendant.

Each husband's interview was coded in two ways: (1) themes that were similar across all respondents, or *common themes*, and (2) themes that differed according to the type of provider utilized during childbirth, or *divergent themes*. We first present three common themes, or barriers, related to delivery care before presenting the underlying, divergent factors related to delivery care, including husbands' provision of social support and perception of social norms related to childbirth.

Common themes

The interviews with husbands revealed a number of common themes related to the decision about whether or not to seek professional delivery care. Each theme was found in each of the interviews, irrespective of the type of provider.

Poor transportation

Each household in the sample was at least five kilometers away from the nearest health facility equipped to perform deliveries. The condition of roads and availability and cost of local transportation were mentioned as barriers to hospital-based deliveries. There are only 18 kilometers of *pucca* roads (good quality, black-topped roads) in all of Durgapur. The remaining roads are dirt, which turn into mud during the rainy season. Nine husbands mentioned the condition of the roads as a major barrier to using health facilities.

Everything depends on transportation. People don't go [to the hospital] very often since they need to hire three to four boats [to cross the rivers]. Also, the condition of the road is very poor. If the pregnant woman travels by rickshaw or motorcycle or push car, then she may get hurt and face more problems. - 26-year old husband, CSBA home delivery

Local transportation is often perceived as too expensive and hard to find. Types of transportation available in Durgapur include (from most to least expensive) the *tempo* (a small three-wheeled motorized vehicle), motorcycle, boat, rickshaw, push cart, and walking. Many families need to use more than one form of transportation when traveling to the hospital, especially during the rainy season.

Lack of money

Another major barrier to utilizing professional health services are direct costs—such as the cost of

Table 2 Sociodemographic characteristics of men interviewed (n = 20)

Characteristic	Skilled Birth Attendant (n)	Untrained <i>Dhatri</i> (n)
Age of respondent (years)		
20-29	5	4
30-39	5	3
40 +	0	3
Age of youngest child (months)		
< 1	1	0
1-5	8	6
6 +	1	4
Number of children		
1	5	0
> 1	5	10
Child deaths		
None	7	6
1-2	3	4
Education		
None	2	5
Class 1-4	5	2
Class 5-9	3	3
Occupation		
Agricultural laborer	7	6
Other	3	4
Ethnicity		
Bengali	8	8
Garro	1	1
Hajong	1	1
Religion		
Muslim	7	7
Hindu	2	2
Christian	1	1
Approximate monthly income per household (Taka and USD)		
1,000-2,499 [12-31 USD]	4	4
2,500-3,200 [32-39 USD]	6	6
Approximate monthly income per family member (Taka and USD)		
250-649 [3-8 USD]	4	8
650-1,100 [9-13 USD]	6	2
Distance to closest health facility (km)		
5-6.9	7	6
7-10	3	4

transportation, medicine, and hospital fees—and indirect costs—such as opportunity costs related to leaving household responsibilities and taking time away from work. The costs associated with the utilization of professional delivery care are often equated to the cost of selling one's land or forfeiting one's livelihood.

It's a money matter. [People in our village] can't go [to the hospital] due to the scarcity of money. So if we can solve it in the village, if Allah wants it like this, we don't need to go. So we delay the matter and observe the [birthing] situation. Then, if the problem is serious, we go to the clinic. But it's almost like

solving the problem by selling your land. - 43-year old husband, *dhatr*i home delivery

The danger of childbirth

The perception that one is not susceptible to complications during childbirth could act as a barrier to the utilization of professional delivery care, but childbirth was perceived as risky by all of the husbands interviewed. Most agreed that complications could arise during delivery, but this belief did not always lead to the utilization of a skilled birth attendant during delivery.

Definitely [childbirth] is dangerous. After conceiving a baby it becomes dangerous. There is tension that anything can happen at any time. There is tension about whether the baby will be born healthy or not. - 25-year old husband, hospital delivery
To me, it is a risky thing.... Both mother and child can die. Sometimes it is seen that the baby dies and the mother is alive. Again, it is seen that the mother dies and the baby is alive. If it is normally done, then it is done. But, if not then there is a lot of suffering. - 28-year old husband, *dhatr*i home delivery

Divergent themes: social support and perceived social norms

There were many themes identified through the open coding process that provided insight into the unique role of husbands during childbirth, in addition to the themes above that showed similarity across respondents. However, our goal was to focus on themes that (1) differed between husbands whose wives utilized a skilled birth attendant and those whose wives utilized an untrained *dhatr*i, and (2) were grounded in sociological and psychosocial theories related to health care utilization. The two themes that met these two criteria were social support during labor and delivery and perceived social norms related to delivery.

Social support

Social support is the term used to describe the functional content of social relationships. Social support differs from other functions of social relationships because it is consciously provided by the sender and is intended to be helpful to the receiver. This distinguishes it from other forms of social influence that are intentionally negative or passively experienced by the receiver. Social support often attempts to influence the behaviors of the receiver in a caring, trusting, and respectful context [27]. Social support can be categorized into four broad types of supportive behaviors: emotional support, instrumental support, informational support, and appraisal support. We

draw upon the first three categories of social support—emotional, instrumental, and informational—to describe the type of support provided by husbands to their wives during childbirth. However, there were also situations where the husband did not provide any of these types of support to his wife during the labor and delivery period.

Emotional support/involvement

Emotional support involves the provision of empathy, love, trust and caring [27]. However, in order for emotional support to have a positive influence it must be perceived as helpful by the recipient [28]. The majority of husbands whose wives utilized professional delivery care exhibited some level of emotional involvement with their wives during pregnancy and childbirth. However, a husband's emotional involvement was not always perceived as supportive by his wife. Therefore, we will refer to this theme as emotional involvement. Emotional involvement was often found in the form of prayer, which is a way of expressing love or caring when the husband is not physically present. However, emotional stress, such as worry and tension, was also coded as emotional involvement. A husband's stress during labor and delivery showed a level of emotional investment that often led to other supportive behaviors. The tension and worry usually arose from the husband's perception that his wife was at risk for a complication during delivery or a previous experience with the death of a child or family member during delivery.

In my mind I felt there were some problems. I was worried. I thought I should go [to see her] earlier. I wanted to observe what happened. I could be present on the spot. I am her husband and she is my wife. That is why I was interested to come [home] early; otherwise I would come the next morning. - 26-year old husband, CSBA home delivery
How could I sleep! The light was on and I was awake for the whole night.... At first I was not thinking about the hospital, but later, when I was tense, I took her [to the hospital] the next day. - 35-year old husband, hospital delivery

Instrumental support

Instrumental support involves the provision of tangible assistance that directly helps a person in need [27]. Husbands whose wives utilized professional delivery care, and those that utilized an untrained *dhatr*i, each provided some level of instrumental support. However, the type of instrumental support differed depending on whether the delivery took place in a hospital or at home. In all cases the husband typically provided instrumental support to his wife once she started the first stage of labor. Husbands whose wives delivered at a hospital often

arranged transportation and collected money for the hospital fees. Husbands whose wives delivered at home provided support by calling the birth attendant or going to the birth attendant's home to inform her of the impending delivery. Husbands whose wives delivered at home often knew the birth attendant personally (i.e., she was a family member or an acquaintance from the village).

Yes, I called. I went there to call chachi (father's brother's wife) saying, 'Chachi, I have a problem. The placenta is not removed.' Then she asked, 'Why? What is the problem? Was there not any dhatri in your home? No dhatri?' I said that the dhatri was there and [she] asked [me] to bring you here. Then she said, 'You go, I am coming.' When I saw that she was late, then I went to her again. - 31-year old husband, CSBA home delivery

Some husbands were able to arrange resources to pay for the transportation and hospital fees. Although public hospitals are free of charge, the majority of the respondents preferred the private fee-for-service health facilities. There were two exceptional cases where a husband saved money to pay for an ambulance and where a husband used his land as collateral to repay a loan for hospital fees. Typically, the husband collected money from neighbors and relatives during the first stage of labor.

Husbands whose wives needed to travel to the hospital for delivery were also involved in coordinating or providing the transportation.

She has a younger brother. Though we rented a thelagari (push car), her brother and I pulled it to take her to the hospital. We admitted her in the hospital and I was there all the time. - 31-year old husband, hospital delivery

Additionally, husbands prepared food for their wives and other visitors as well as purchased medicine for their wives.

I explained the whole situation [to the village doctor] that my wife could not deliver the baby in spite of severe pain. Then he suggested some medicine and I brought the medicine for her. - 32-year old husband, dhatri home delivery

Informational support

Informational support involves the provision of advice and suggestions that a person can use to address a problem [27]. Informational support was typically provided by husbands whose wives utilized professional delivery care at

home or at the hospital. In our context, informational support refers to the active provision of information from the husband to his wife. The husband provided his opinion about the type of provider his wife should use during delivery and in some cases he made the final decision about the type of provider. Some husbands in our study planned in advance to go to the hospital or to call a CSBA when the labor pains started. However, most husbands asserted their opinion when they perceived the labor to be progressing poorly.

I said to my wife, 'If you have doubt in your mind and if you face trouble, then you can be admitted to the hospital...' She said, 'You pray for me and keep faith in Allah.' My intention was to take her to the hospital if she faced any trouble. - 26-year old husband, CSBA home delivery
... after [my wife was in labor] the whole night, in the morning at 8 am, I said [the delivery] will not work at home. We have to go to the doctor. Then, in a hurry, I called the [push car] and then took her to the hospital. By the blessing of Allah I found the doctor when we reached [the hospital]. - 35-year old husband, hospital delivery

Uninvolved during childbirth

Not all of the husbands were involved in providing social support during the delivery of their youngest child. Husbands whose wives utilized an untrained *dhatri* at home were typically not involved in any aspect of the labor and delivery process. Husbands who were uninvolved did not necessarily make a conscious decision to be absent during childbirth. Many factors could have contributed to a husband's absence, including his wife's lack of knowledge about the labor process or a general lack of communication between spouses. Lack of involvement appeared in three different forms: (1) the husband's passive agreement with his wife's decision with no input of his own; (2) the lack of communication between the husband and wife during pregnancy, such that the husband was unaware of the timing of the delivery; and (3) the husband's belief that his presence was not necessary once labor started and female family members took control.

When they tell me to bring [the dhatri], I have to bring her. I have to consider her a good nurse. - 43-year old husband, dhatri home delivery

I: Were you there when the pain started?

R: No, I went for work.... Later the news reached me that the baby [was born].

I: Why did you go away? Didn't you know that the baby would be born that day?

R: We don't know about this a lot. The woman knows about this matter. (Laugh)" - 48-year old husband, dhatri home delivery

R: I didn't have to do anything. I called my younger sister. Then my older sister came and after her arrival the delivery was over within half an hour.

I: Didn't you hear about when the labor started?

R: I didn't know that it was time to deliver. I went to the marketplace. - 28-year old husband, dhatri home delivery

Perceived social norms

The second divergent theme on which we focused was the husband's perception of social norms related to childbirth. Social norms can influence the type of support a husband provides his wife during delivery. According to Lewis and colleagues [29], social norms are "... expectations held by social groups that dictate appropriate behavior and are thought of as rules or standards that guide behavior" (p. 254). In Bangladesh, perceived social norms of the husband are important to his wife because of their close social relationship and because of his decision-making power within the household. There are many social norms related to childbirth in Bangladesh; however, this study focuses on one in particular—the medicalization of childbirth.

Medicalization of Childbirth

The medicalization of childbirth refers to the redefining of physiological reproductive processes as biomedical problems that can be treated by the medical profession [30]. This view differs from the traditional view in Bangladesh, in which childbirth is perceived as a natural process that should be experienced at home according to local customs [6]. In many Western countries the medicalization of childbirth is often associated with unnecessary biomedical interventions. However, the idealization of "natural childbirth" can often lead to major complications for women in developing countries who do not have access to emergency obstetric care. Therefore, in the context of this study, the medicalization of childbirth refers to a contemporary view, which holds that timely access to professional medical care is necessary to prevent the primary causes of maternal mortality in the event of problems during delivery.

The concept of medicalization is particularly relevant in Bangladesh, a country with a history of medical pluralism. In rural Bangladesh, indigenous medical traditions exist parallel to contemporary, allopathic medical systems. Deciding which type of provider to use during a medical emergency is a complex process, which requires the input of many influential individuals [31]. For the purpose of this study, the perception of medicalization

of childbirth among the husbands emerges in the contrast between *old day* and *modern age* thinking. These *in vivo* codes—terms taken from or derived directly from the language of the informant—came from an interview with a husband whose wife delivered at home with the assistance of a trained CSBA.

I: What if the delivery is done at home?

R: I suppose home is preferred by the elderly people of old day. In this consideration, it is better not to keep the expectant [mother] at home.

I: What are the problems that can be faced at home?

R: It is not possible to do everything at home. Women who are ignorant and not up-to-date think that the delivery is always done normally. It is foolish if we don't keep pace with the modern age. In present circumstances, it is better to contact the doctor. A nurse is needed to stay beside the patient all the time in order to look after her meals and medicine. - 26-year old husband, CSBA home delivery

Husbands who were coded as "old day" along the medicalization spectrum mentioned expectations of "normal" or "natural" deliveries at home. They also described traditional practices during childbirth and their reluctance to involve a doctor. Many of these husbands described the pressure from other family members, including their wives, for a home delivery. The majority of husbands whose wives utilized an untrained *dhatri* at home displayed old day thinking.

I: Which [place] do you prefer most [for delivery]; at home or at the hospital?

R: If [my wife] is comfortable at home, then at home. I don't find any logic in communicating with a doctor. If she is well at home, then home is better. - 43-year old husband, dhatri home delivery

I: Why did you apply telpora (sacred oil)?

R: Telpora was at home. After applying it, pain develops and [the delivery] won't be hard.

I: How did you come to know [that you should use telpora]?

R: Kabiraj (traditional practitioner) told me. He was my grandfather and he told me to [use telpora] like this, and then the baby will be born. - 32-year old husband, dhatri home delivery

Husbands who were coded as "modern age" mentioned the importance of going to the hospital for delivery, technology at the hospital, and consulting a doctor during pregnancy. One respondent was a migrant laborer who traveled to the capital city for work and brought modern ideologies back to his village. Others had close social connections to trained health providers

or to non-governmental organizations, which promoted a biomedical approach to delivery care. The majority of husbands whose wives utilized professional delivery care displayed modern age thinking.

I: Aren't nuns and dhatri doing [deliveries] as well?

R: No, they are from old time. Now time has changed. We are not in the old era now. Now the trained people are doing their jobs.... Suppose, if the patient's condition became complicated, [the family would] carry them to the hospital. And doing delivery by the nurse is better. - 35-year old husband, CSBA home delivery

Everything can be found [in the hospital]. Nothing can be found in the village. In the hospital, they gave medicine to the baby. Can they do that in the village? - 35-year old husband, hospital delivery

Discussion

The majority of the literature on the utilization of professional delivery care in low-income countries focuses on the barriers encountered by women [32]. However, the role of the family, in particular the husband, during pregnancy and childbirth is important to the understanding of women's utilization of professional maternal health services [8,14-20]. This study was designed to look beyond the common barriers to the use of professional delivery care in Bangladesh and examine the underlying factors related to husbands' involvement (or lack of involvement) in delivery care utilization.

In order to examine the underlying factors, we purposefully selected households that differed by the type of provider utilized during delivery. Therefore, the themes and characteristics that were common across all respondents, and did not vary with the type of provider utilized during delivery, were eliminated as sufficient barriers to the utilization of professional delivery care [33]. The findings revealed three such themes common across households: (1) poor transportation, (2) lack of money, and (3) the perceived danger of childbirth. Although these have been shown to be necessary barriers to the utilization of professional delivery care [32], we suggest that they are not sufficient. In addition, we designed the sample so that socioeconomic and geographic characteristics were common among households that utilized professional delivery care and those that did not. Although many of these characteristics (e.g., income, education, and distance to the health facility) have been shown to be correlated with the utilization of professional delivery services [2,3,32,34], they are not sufficient to explain the type of provider utilized during delivery among our respondents.

Our findings suggest that husbands' provision of social support to their wives and perceived social norms vary

systematically with the type of provider, which implies that these factors are important to understanding delivery care utilization in Bangladesh. In order to better understand husbands' social support and perceived social norms, these two factors were used as the axes of our analysis (Table 3). The two ends of the axis of social support were *involved* (which included emotional, instrumental, and informational support) and *uninvolved*. Perceived social norms were divided into two categories based on husbands' perceptions of the medicalization of childbirth: *old day* and *modern age* thinking. These two categories were not mutually exclusive; that is, some husbands displayed examples of old day and modern age thinking in the same interview. Based on the analysis, husbands whose wives utilized a skilled birth attendant were more involved and modern age thinkers. That is, these husbands provided emotional, instrumental and informational support to their wives during delivery and believed medical intervention was necessary during childbirth. On the other hand, husbands whose wives utilized an untrained *dhatri* at home were generally uninvolved and old day thinkers. That is, these husbands were uninvolved during delivery and believed childbirth should take place at home according to local traditions. There was no distinguishable pattern for husbands who were uninvolved and modern age thinkers or husbands who were involved and old age thinkers.

We identified two potential rival hypotheses that may explain the variation in the type of delivery care utilized: (1) women whose deliveries appear to be normal are more likely to stay home, while women whose deliveries appear to be progressing poorly are more likely to go to a hospital, and (2) women who only have one child are more likely to use professional delivery care, while women who have more than one child are more likely to stay home. In order to determine if the first rival hypothesis was true, we examined the differences between women who delivered at home with a CSBA to women who delivered at home with an untrained *dhatri*. This analysis allowed us to eliminate the potential effect of complications among women who delivered at a hospital. That is, women who delivered at home with a CSBA and women who delivered at home with an untrained *dhatri* encountered similar levels of perceived and actual complications. We found similar coding

Table 3 The axes of social support and perceived social norms

		Social Support	
		Involved	Uninvolved
Social Norms	Modern Age	Skilled Birth Attendant	Inconclusive
	Old Day	Inconclusive	<i>Dhatri</i>

patterns on the two axes of analysis (social support and perceived social norms) when husbands whose wives utilized professional delivery care at a hospital were excluded from the analysis.

The second potential rival hypothesis originated from the fact that parity differed substantially by the type of provider utilized during childbirth (Table 2). This association may be due to the fact that the first birth can be more difficult for a woman who has no previous delivery experience. It has been shown in South Asia that a high value is often placed on the first pregnancy and the woman's family helps her get the best care possible [35]. Although this is certainly a plausible explanation for some of the differences between the two groups, the same coding patterns existed when husbands of uniparous women were excluded from the analysis.

The results from this study provide a new way to conceptualize a husband's involvement in his wife's decision to seek professional delivery care in rural Bangladesh. Lewis and colleagues [29] explain how influence and communication between interacting partners can affect each other's motives, preferences, behaviors, and health outcomes. Specifically, our study suggests that a husband's social support and social norms are associated with his wife's use of delivery care. Rozario [6] explains how the husband is often responsible for making decisions about health care during childbirth in Bangladesh. Since social norms become more salient when the receiver of social influence is motivated to maintain a relationship with the sender of social influence [36], women are likely to be receptive to their husbands' beliefs and opinions about delivery care. These findings are supported by previous studies that suggest male involvement in pregnancy and childbirth and good spousal communication are associated with increased use of maternal health services [8-10,18-20].

This study was not designed to account for all of the factors involved in the decision-making process, nor was it designed to account for the perspective of everyone in a woman's social network. Moreover, our view of the social processes explored in this study was based solely on the husband's report. Future qualitative research should explore the role of broader social networks, including other key family members and other influential people, in the decision-making process during childbirth. It should also consider comparing husbands' and wives' perspectives when making decisions about the use of professional delivery care. Furthermore, while this study provides a comparative picture of husbands' involvement during childbirth, it was not designed to infer a causal association between husbands' involvement and the use of professional delivery care. Since we used retrospective accounts it is difficult to determine whether husbands'

beliefs and opinions about childbirth were formed prior to the delivery of their youngest child or afterward.

Limitations

While this study provides novel information and rich detail, an important limitation is the potential endogeneity of husbands' involvement in the decision to utilize professional delivery care. There could be a reverse causality problem, such that husbands were more likely to be involved because their wives utilized professional delivery care, rather than the reverse association that forms the focus of our analysis and interpretation. In order to address this potential endogeneity problem, future qualitative studies could use a prospective study design to follow husbands and wives during pregnancy and delivery to better understand the timing of events related to the husband's level of involvement. Additionally, the short fieldwork period did not allow for time to follow-up with the participants to clarify any misunderstandings. In particular, the sample size was reduced due to misunderstandings about who actually delivered the child. Furthermore, the qualitative methods that we used when talking to husbands did not allow us to capture details about personal, psychological, and temperamental differences that may have an impact on husbands' involvement during pregnancy and childbirth. Finally, we could not eliminate potential sources of measurement error, such as interviewer effects and retrieval failure. Possible interviewer effects include the respondent answering a question with information that he believes the interviewer desires to hear, or what he thinks is "correct." Retrieval failure occurs when the events were never coded in the respondent's memory due to the lack of significance of the event or because the respondent was not present during the events in question.

Conclusions

The findings presented in this paper suggest that the level of social support provided by the husband to his wife and the husband's perception of social norms related medical intervention during childbirth are both associated with the type of provider utilized during childbirth. The husband's perception of social norms related to professional care is important to the type of advice and support he will give his wife during pregnancy and childbirth, which has important implications for the development of future maternal health interventions.

Areas of fruitful future research include the further elucidation of the types of social support provided by the husband and the critical social norms related to childbirth in Bangladesh. This and future research could be used to create valid and reliable measures to assess the quantitative impact of social support and social

norms on the utilization of professional maternal health services using a more representative sample. These findings may also be useful to program planners, who should pursue culturally sensitive ways to involve the husband in maternal health interventions and assess the effectiveness of education strategies targeted at husbands.

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Authors' contributions

WTS designed the study, participated in data collection, and drafted the manuscript. SAB and JRL contributed to the study design and critically revised the manuscript. FT and NAA led the data collection process and made revisions to the manuscript. DMEH facilitated ethical approval, coordinated field visits, and made revisions to the manuscript. All authors read and approved the final manuscript.

Competing interests

The authors declare that they have no competing interests.

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Reducing Mortality among Mothers and Newborns through Building Public Private Partnership: the SUSOMA Project (Child Survival Project in Bangladesh)

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Presented at the Women Deliver Conference in Kuala Lumpur, Malaysia on May 30, 2013

SUSOMA stands for ***Shusto Sontan O Ma*** which means healthy mother and child in Bengali. It is a USAID-funded child survival project to reduce maternal and newborn mortality through partnership of communities (private) and the government and health facilities (public). The midterm evaluation of the project was done in August 2012.

Netrokona, Bangladesh has high maternal and child mortality, inadequate health facilities/services with low accessibility, and substantial geographical and cultural barriers to health. The goal of the project is to reduce mortality of mothers and newborns through improving community and household behaviors through partnership of community-based organizations and public health system.

There are 3 strategies used in the project's delivery platform for the intervention to reach the vulnerable mothers and newborns that need them most: social mobilization, C-IMCI (Community- integrated management of childhood illnesses) and Behavior Change Communication (BCC). Central to the delivery strategy is the Peoples Institution that provides governance to the community-based health care system. Its roles are: 1) to identify and address opportunities in the community 2) direct resources towards the poorest and most marginalized population and 3) advocate policy change to respond to the community needs and 4) to link their communities with the government and the health facilities. The PI is responsible for establishing the community based health care through selection and training of community health volunteers and TBAs; it is also in charge of CHV and TBA trainings, their incentives and looks after their welfare and well-being while carrying out their roles. The community-based approach extends the delivery of interventions to those areas where access to health services are difficult.

The summary of project accomplishment in the midterm evaluation included: 1) effective working relationship resulting in a smoothly implemented project (partnership) 2) the strategies and interventions (based on the national IMCI strategy) are technically sufficient to reach outcomes and solid basis for MOH collaboration and 3) the community mobilization strategy, the Peoples Institution and behavior change strategy by health workers created a strong demand for health services.

The midterm recommendations are:

- Sponsor a "Helping Health Workers Thrive" campaign
- Have Peoples Institution manage community clinics and or family welfare clinics
- Strengthen CHVs and TBA performance by LEARNING CIRCLES
- Continue building linkages at all levels of the health systems
- Create a mix-gender People Institution.

Closing the Gap by Design: Setting up a Maternal Newborn Program as if People Mattered.

Alan Talens¹, Nancy TenBroek², Will Story³, Emdad Hoque⁴

Presented at the CORE Group Spring Meeting in Baltimore MD on May 12, 2011

The pursuit of equity in CRWRC program stems out of the strategic theme of the organization: Relief and Development under the justice umbrella. Health, pregnancy and safe delivery are basic human rights akin to the right of life, security and equal opportunity. CRWRC has included equity in the design of its maternal and newborn program and used community mobilization with Community-IMCI (Integrated Management of Childhood Illness) as the equity strategy.

Netrokona district in Northern Bangladesh is populated by marginalized tribal groups with unmet health needs. There is high population of ethnic minorities (Garos, Hajongs) in the 2 sub districts covered by the project. The local partners (SATHI and PARI) helped in identifying the disadvantaged groups who are the poorest in the district. These places also have high burden of disease with social, cultural and linguistic differences affect their access to health services.

Qualitative methods were used to determine underlying conditions (barrier for ANC visits, socio-cultural beliefs and barriers etc.) Secondary data showed problems in maternal/newborn health in the district showing decline in under-5 mortality in the last 2 decades but neonatal mortality remained high.

The community mobilization strategy has narrowed the equity gap by empowering isolated groups who otherwise would not have coverage. For greatest impact effective interventions has to reach the poor communities. Community-based health program is a feasible way to provide health services “at the doorsteps” of people who does not normally have health care. Central to the mobilization strategy is the model for building community capacity and the venue for the community participation is the Peoples Institution. It is also the governance piece of the community mobilization. Primary groups (self-help groups) elect representatives to the PIs which become self-governing bodies and serve as linkage to government health system. The PIs also create the community- based healthcare, providing services to the unreachable groups.

For the quantitative equity analysis there are 2 study arms, the intervention and the control groups. To document equity the interventions had reached the poor, it must show significant change in the health outcomes among the poor compared to the well of in the intervention area and no significant change with the poor in the control arm.

There were inequities in the coverage of most interventions by wealth ranking in the district. Baseline KPC (Knowledge, Practice and Coverage) showed that more has to be done to improve coverage levels of child health interventions among the poor. The PI using community participation, representation and governance to create community-based healthcare and universal coverage could be a feasible equalization model in reducing inequities and improving health in underserved communities.

Alan Talens- Presenter at the Concurrent Session on Equity

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#6 The Capacity-Building of the Peoples Institutions to Close the Sustainability Gap in the Child Survival Project in Bangladesh

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Track: Global Health in Local Health

Category: Poster Presentation

Background: World Renew implemented a Child Survival Project (CSP) in the resource-poor district of Netrokona, Bangladesh with high maternal/child mortality, inadequate health facilities/services with low accessibility, and substantial geographical and cultural barriers to health. The goal was to develop sustainable, effective community ownership and governance of local health through establishment of a delivery platform for essential interventions to meet the coverage and equity needs of this hard-to-reach population of 20,000 people.

Methodology: Community-based capacity-building and appreciative inquiry strategies were used to establish and strengthen civil society organizations (CSOs) called People's Institutions: 1) To have the central role in selecting and providing supportive supervision to a corps of community health volunteers that provided health promotion and counseling to pregnant women in multiple settings. 2) To advocate with government and health facility personnel for policy change and health service improvements. 3) To self-measure and track progress in achieving sustainability using Child Survival Sustainability Assessment (CSSA) indicators plotted on a 'Road to Capacity' chart.

Results: Significant improvements occurred in health outcomes that reached/surpassed national averages: delivery by skilled birth attendants increased from 21% to 95% (DHS 29%); the proportion of mothers receiving four prenatal visits increased from 6% to 86% (DHS 21%) and two-doses of TT increased from 62% to 98% (DHS 90%); and mothers' knowledge of pregnancy danger signs rose from 31% to 100% (DHS 50%). Infant and young child feeding practices improved from 14% to 80% (DHS 81%) and complete immunization rates from 32% to 96% (DHS 82%). The CSSA-based sustainability indicators tracked by PIs showed marked improvement: health outcome increased 45%, health services 79%, community capacity 54%, enabling environment 85%, organizational capacity 78%, and organizational viability 60%.

Conclusion: The success of our community-based CSO capacity-building using appreciative inquiry demonstrates that community members have the capability to develop the capacity to identify, prioritize and solve their own health delivery problems. The developed capacity contributes to enhanced performance of the CSO and improved health outcomes that are expected to be sustained over time.

Presenter Information: Dr. Alan Talens (MD/MPH), Health Advisor of World Renew, provides technical support to MNCH programs that use equitable community-based approach. He is a board member of CORE Group in DC and a co-chair of Community Child Health Working Group.

SUSOMA Project Intervention Cost Analysis

What resources would be required to institutionalize or scale up key intervention components?

This project was completed at a cost of \$1,207, 572, after excluding costs for Operations Research and for travel to CORE Group meetings. The costs for the final quarter of the project were not included in the analysis, although an attempt was made to estimate the costs of the final evaluation and KPC survey.

The project area includes a total population of 485,000 people, including 124,000 women 15-49 years of age and 97,000 children 0-5 years of age. The average cost per woman of reproductive age was \$9.73 for this project.

The project involved organizing and building the capacity of four People's Institutions (community based organizations/federations of self help groups) and 22 Central Committees. 516 self help groups for men and women (known as primary groups) were formed at the village level: 302 in Kendua and 214 in Durgapur.

There were 584 CHVs (356 Kendua and 228 Durgapur) and 570 TTBA's (348 in Kendua and 222 in Durgapur) recruited and trained under this program for a total of 1,154 community volunteers.

The volunteers are supported by 40 Community Health Trainers, who are supervised by two Health Coordinators and two Assistant Coordinators. Each CHT is responsible for around 29 volunteers on average.

Project cost per community volunteer is: \$1,045. If you wanted to scale up the program you could estimate the cost based on this unit cost. For example, a program three times as large as this one would have:

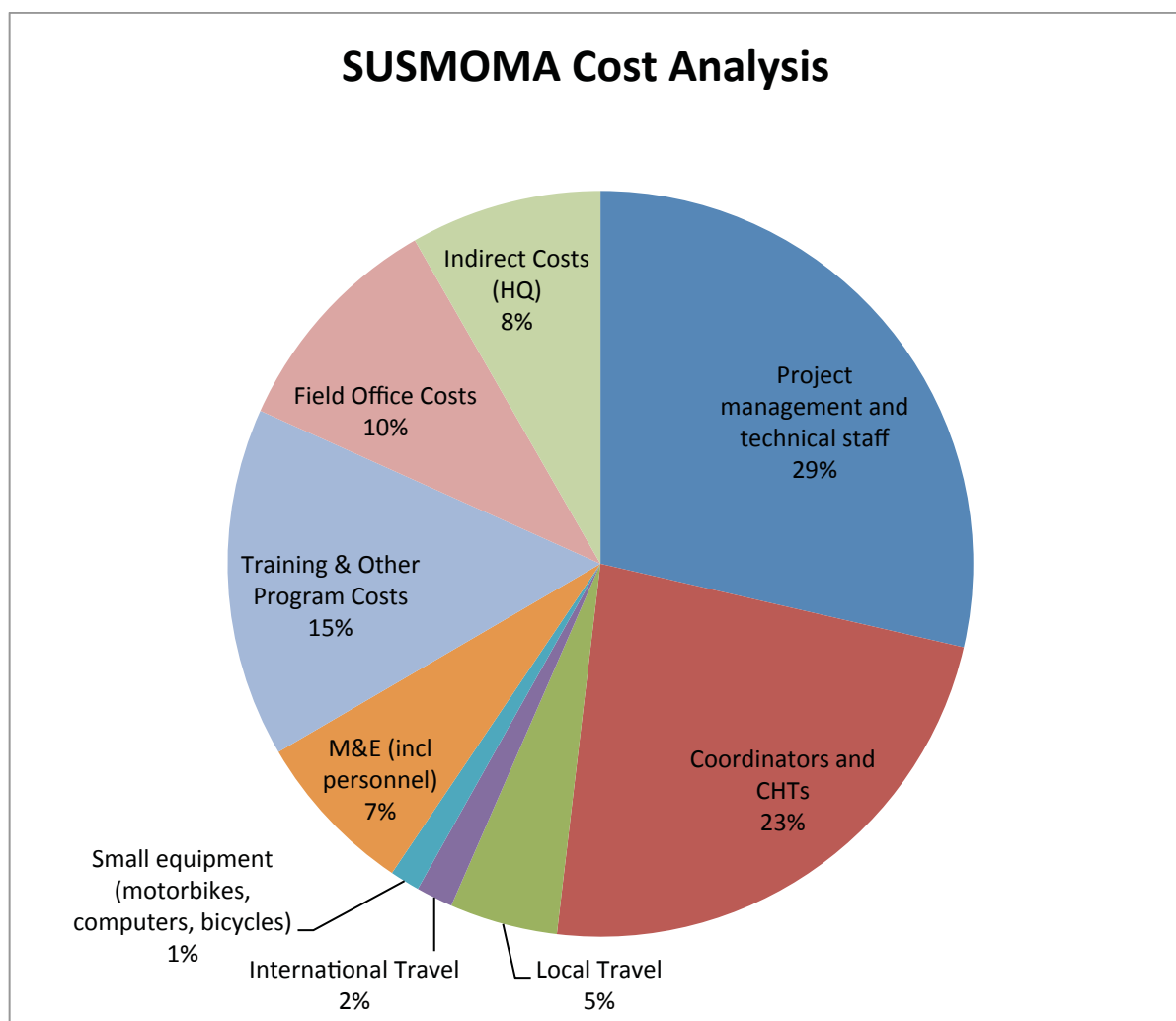
- 120 Community Health Trainers
- Supporting 3,460 volunteers
- At a cost of \$3.6 million over 4-5 years
- The population served would include at least 370,000 women of reproductive age... or a geographic area with a population of close to 1.5 million people.

It may be possible to do the project for a lower cost than this, since there would be some economies of scale achieved during project scale up. However, travel and monitoring costs would probably increase at a greater rate since the project area would be large and monitoring would be more complex. The cost of reaching a large number of people is lower per unit in Bangladesh than it is in other parts of the world because of population density.

See project cost break down and pie chart on next page and an excel spreadsheet with additional cost data details in the following pages.

The project costs broke down this way:

Project management and technical staff	345,026	28.6%
Coordinators and CHTs	280,781	23.3%
Local Travel	56,505	4.7%
International Travel	19,259	1.6%
Small equipment (motorbikes, computers, bicy	15,664	1.3%
M&E (incl personnel)	86,172	7.1%
Training & Other Program Costs	182,712	15.1%
Field Office Costs	120,399	10.0%
Indirect Costs (HQ)	100,054	8.3%
	1,206,572	



SUSOMA Project Intervention Cost Analysis, August 2014

		FY10	FY11	FY12	FY13	FY14	Total
	Program Personnel						
WR	Technical Backstop at HQ (Salary)	20,258	12,282	11,029	7,518	9,106	60,193
WR	Technical Backstop at HQ (Fringe)	5,545	1,725	4,343	2,628	3,197	17,438
WR	Regional Health Advisor (Salary)	21,615	24,985	25,357	20,167	15,139	107,263
WR	Capacity Dev. Specialist (Salary)	8,003	10,142	9,670	5,486	2,545	35,846
WR	Reg. Health Advisor & Cap Dev Spec. (Fringe)	4,498	7,141	9,144	7,247	4,995	33,025
WR	Maternal & Newborn Health Specialist (contract)	6,228	6,641	2,069	4,889		19,827
WR	Project Manager (Salary)	8,482	10,904	13,337	10,236	7,676	50,635
WR	Project Manager (Fringe)		1,092	(308)	851	951	2,586
WR	Private Provider Coordinator (Salary)		3,996	4,337	4,974	4,013	17,320
WR	Private Provider Coordinator (Fringe)		88	211	249	345	893
PARI	Health Coordinator (Salary)	3,673	4,858	4,828	5,302	4,209	22,870
PARI	Health Coordinator (Fringe)	432	242	243	690	200	1,807
SATHI	Health Coordinator (Salary)	3,667	2,478	3,150	3,675	3,140	16,110
SATHI	Health Coordinator (Fringe)			348	422	232	1,002
PARI	Assistant Coordinator (Salary)	1,420	3,040	2,815	2,122	1,772	11,169
PARI	Assistant Coordinator (Fringe)	116		273	221	113	723
SATHI	Assistant Coordinator (Salary)		3,041	2,911	3,051	2,498	11,501
SATHI	Assistant Coordinator (Fringe)		51	108	326	167	652
PARI	14 Community Health Trainers (Salaries)	11,095	16,776	14,979	19,027	14,179	76,056
PARI	14 Community Health Trainers (Fringe)	567	192	702	2,137	81	3,679
SATHI	26 Comm Health Trainers (Salaries)	11,194	26,510	27,408	36,263	26,621	127,996
SATHI	26 Community Health Trainers (Fringe)		790	2,178	3,236	1,012	7,216
	Subtotal Personnel	106,793	136,974	139,132	140,717	102,191	625,807
	Travel/Fuel						
WR	Per diem for project personnel	1,050	569	960	383		2,962
WR	Travel for Local Consultants	1,510				135	1,645
PARI	Supervisory visits to project sites	848	1,000	1,572	2,151	976	6,547
SATHI	Supervisory visits to project sites	719	1,390	2,587	2,698	1,435	8,829
PARI	Travel to trainings and meetings	605	1,164	3,045	5,771	3,710	14,295
SATHI	Travel to trainings and meetings	158	2,733	438	1,976	1,522	6,827
WR	Vehicle maintenance/repair	52	186	584	504	193	1,519
PARI	Vehicle maintenance/repair	121	279	283	299	177	1,159
SATHI	Vehicle maintenance/repair	430	250	241	495	228	1,644
WR	Vehicle fuel (mileage)	456	1,846	2,049	1,829	1,359	7,539
PARI	Vehicle fuel	405	571	456	456	295	2,183
SATHI	Vehicle fuel	117	297	374	305	263	1,356
WR	International Travel	11,566	352	2,020	5,043	278	19,259
	Subtotal Travel	18,037	10,637	14,609	21,910	10,571	75,764
	Equipment						
WR	Motorbikes (3 @ \$1,600)	3,381					3,381
PARI	Motorbike (2 @ \$1,600 ea.)	1,735					1,735
SATHI	Motorbikes (2 @ \$1,600 ea.)	1,705	1,846				3,551
PARI	Bicycles (15 @ \$ 110 ea.)	1,226					1,226
SATHI	Bicycles (26 @ \$ 110)	1,893	46				1,939
WR	Computers/Printers (2 @ (\$1,250)	803	111	823			1,737
PARI	Computers/Printers (1 comp. with printer)	647					647
SATHI	Computers/Printers (1 comp. with printer)	591	27				618
PARI	Mobile Phones (2 @ \$150 ea.)	166					166
SATHI	Mobile Phones (2 @ \$150 ea.)	184	96				280
PARI	Digital Camera (1 @ \$450 ea.)	207	177				384
	Subtotal Supplies	12,538	2,303	823	-	-	15,664
	Planning, Monitoring and Evaluation						
WR	M&E Officer (Salary)	986	3,999	4,125	6,709	238	16,057
WR	M&E Officer (Fringe)		88	423			511
WR	KPC (estimate)	5,000		5,000		5,000	15,000
WR	RHFA Consultant	2,100					2,100
WR	KPC Methods training for staff	3,769					3,769
WR	Baseline RHFA staff training	2,209					2,209
WR	Baseline Qual. Methods training	369					369
WR	DIP Workshop	1,856					1,856
WR	LQAS Trainer	215					215
WR	LQAS Training for project staff			1,219	258		1,477
WR	Annual surveillance of health outcomes				1,164		1,164
WR	Evaluation (est. for Y5)			4,167		10,000	14,167
PARI	Baseline Enumerators	6,829					6,829
SATHI	Baseline Enumerators	9,411	285				9,696
PARI	Dissemination	391	25	1,028	1,274	53	2,771
SATHI	Dissemination		638	647	931	260	2,476
PARI	Monitoring			1,245	429	855	2,529
SATHI	Monitoring			1,167	1,202	608	2,977
	Subtotal PME	33,135	5,035	19,021	11,967	17,014	86,172

SUSOMA Project Intervention Cost Analysis, August 2014

	Community Level Training and Meetings					
WR	Project Staff Orientation	970				970
WR	Lamb Hosp TOT on MNC	12,314	5,905	3,606		21,825
WR	Sustainability Framework training		808			808
WR	TOT on Mat/Newborn Care (staff)	4,067	2,729	966		7,762
WR	TOT on Mat/Newborn Care (govt)		1,207	616		1,823
WR	TOT on Mat/Newborn Care (training institutions)			1,325		1,325
WR	Curriculum Dev using Dialogue Ed	381				381
WR	Designing for Behavior Change		2,868			2,868
WR	Training for private health providers		3,419		1,441	4,860
WR	Behavior Change Comm materials		5,144	6,995	4,089	18,129
PARI	Behavior Change Comm materials			391		391
WR	TBA Kits & Scales		889			889
WR	Tech Advisory Grp meetings (2/yr)		397	399	388	1,184
WR	Advocacy	1,884	1,829	1,863	1,670	9,191
WR	Learning Circle		436		498	934
PARI	Training of TBAs		6,441	5,825	2,988	15,254
SATHI	Training of TBAs		7,709	4,623	4,340	16,672
PARI	Training of CHVs	20	7,138	1,460	4,167	12,785
SATHI	Training of CHVs		8,176	5,195	5,567	18,938
PARI	Monthly meetings with CHVs/TBAs	924	2,098	3,014	7,037	15,599
SATHI	Monthly meetings with CHVs/TBAs	34	945	6,111	7,338	17,029
PARI	Exposure Visit of Staff/Service Providers	3			1,069	1,072
SATHI	Exposure Visit of Staff/Service Providers	39	144		563	746
PARI	Capacity Building Dev. Training			1,114	586	1,700
SATHI	Capacity Building Dev. Training			3,483	1,450	5,764
SATHI	Group Formation Supplies		126		1,074	1,200
SATHI	Theatre for Development			1,454	159	1,613
SATHI	Husband, Father, MIL meetings			984	16	1,000
	Subtotal Trainings & Meetings	20,636	58,408	49,424	42,968	11,276
	Office Operating Costs					
WR	Office rent	3,183	1,790	4,715	3,034	14,452
PARI	Office rent	803	832	970	1,042	4,405
SATHI	Office rent	890	1,220	1,237	1,382	5,778
WR	Office utilities	451	565	265	406	2,017
PARI	Office utilities	182	316	338	430	1,473
SATHI	Office utilities	175	369	277	498	1,577
WR	Office telecommunications	518	623	581	507	2,566
PARI	Office telecommunications	267	409	524	572	2,163
SATHI	Office telecommunications	120	532	531	641	2,407
WR	Office Supplies	1,825	1,767	1,511	1,688	7,683
PARI	Office Supplies	2,169	3,954	871	1,065	8,715
SATHI	Office Supplies	1,256	6,447	1,071	1,162	10,528
WR	Office Furniture	1,887	(387)			1,500
SATHI	Office Furniture	1,397	260			1,657
WR	Finance Manager (Salary)	302	1,298	1,747	2,065	6,868
WR	Administrative Assistant (Salary)	769	7,738	6,335	7,299	27,944
WR	Administrative Assistant (Fringe)				335	594
WR	Accountant (Salary)	2,401	2,272	2,594	2,813	12,417
WR	Accountant (Fringe)		378	123	283	944
WR	Office Caretaker (Salary)	663	750	777	1,148	4,303
WR	Office Caretaker (Fringe)		99	36	110	307
PARI	Office Caretaker	10			37	47
SATHI	Office Caretaker	22			32	54
	Subtotal Office Costs	19,290	31,232	24,503	26,517	18,857
	NICRA					
	Indirect Costs	17,931	20,868	38,830	4,792	100,054
TOTAL COSTS		228,360	265,457	286,342	248,871	1,206,572

SUSOMA Project Intervention Cost Analysis, August 2014

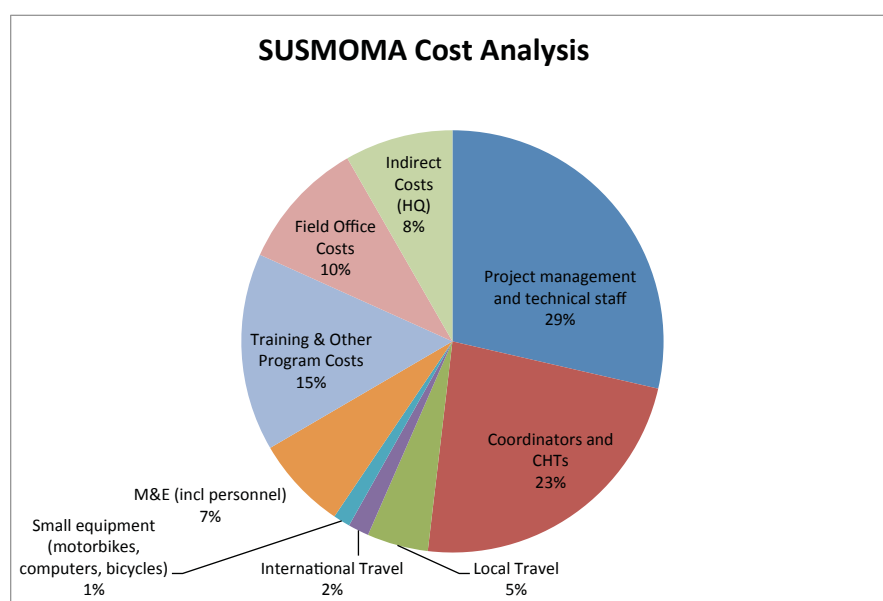
HQ	Field Office	Local Partners			
			Program Personnel		
60,193			HQ Technical Backstop (1)	77,631	6.4%
17,438			WR Field Staff (2)	176,134	14.6%
	107,263		Locally hired project staff for WR	91,261	7.6%
	35,846		Coord & Asst Coord for Partners (4)	65,834	5.5%
	33,025		Community Health Trainers (40)	214,947	17.8%
	19,827				51.9%
	50,635				
	2,586				
	17,320				
	893				
		22,870			
		1,807			
		16,110			
		1,002			
		11,169			
		723			
		11,501			
		652			
		76,056			
		3,679			
		127,996			
		7,216			
77,631	267,395	280,781			
			Travel/Fuel		
	2,962		Vehicle Fuel + Local Travel Costs	52,183	4.3%
	1,645		Vehicle Maintenance/Repair	4,322	0.4%
		6,547	HQ Backstop Travel to Field	19,259	1.6%
		8,829			6.3%
		14,295			
		6,827			
	1,519		<i>Travel to DC/CORE Group meetings and exchange visits were excluded from this analysis.</i>		
		1,159			
		1,644			
	7,539				
		2,183			
		1,356			
19,259					
19,259	13,665	42,840			
			Equipment		
	3,381		Motorbikes	8,667	0.7%
		1,735	Bicycles	3,165	0.3%
		3,551	Computers & Printers	3,002	0.2%
		1,226	Mobile Phones	446	0.0%
		1,939	Cameras	384	0.0%
	1,737				1.3%
		647			
		618			
		166			
		280			
		384			
-	5,118	10,546			
			PME Costs		
	16,057		Personnel & Consultants	35,193	2.9%
	511		Training on M&E for staff	8,039	0.7%
	15,000		KPC Survey & Evaluation	29,167	2.4%
	2,100		Annual surveillance & Monitoring	6,670	0.6%
	3,769		Dissemination	5,247	0.4%
	2,209		DIP Workshop	1,856	0.2%
	369				7.1%
	1,856				
	215				
	1,477				
	1,164				
	14,167				
		6,829			
		9,696			
		2,771			
		2,476			
		2,529			
		2,977			
-	58,894	27,278			

SUSOMA Project Intervention Cost Analysis, August 2014

			Comm Trainings & Meetings		
970			MNC Training	101,625	8.4%
21,825			BCC Training	21,388	1.8%
808			Cap Bldg of Pis/Sustainability	9,472	0.8%
7,762			Meeting with CHVs and TTBA's	32,628	2.7%
1,823			Other	17,599	1.5%
1,325					15.1%
381					
2,868					
4,860					
18,129					
		391			
889					
1,184					
9,191					
934					
		15,254			
		16,672			
		12,785			
		18,938			
		15,599			
		17,029			
		1,072			
		746			
		1,700			
		5,764			
		1,200			
		1,613			
		1,000			
-	72,949	109,763			
			Office/Admin Costs		
14,452			Rent/Utilities/Telecom	41,549	3.4%
		4,405	Office Supplies	26,926	2.2%
		5,778	Office Furniture	3,157	0.3%
2,017			Finance Personnel	20,229	1.7%
		1,473	Admin Assistant	28,538	2.4%
		1,577	HQ Indirect Costs	100,054	8.3%
2,566					18.3%
		2,163			
		2,407	<i>Indirect costs average a little over 7%, but it looks higher in this analysis because these actual costs are based on total spending that includes the OR, which was excluded from this costs analysis.</i>		
7,683					
		8,715			
		10,528			
1,500					
		1,657			
6,868					
27,944					
594					
12,417					
944					
4,303					
307					
		47			
		54			
-	81,595	38,804			
100,054					
196,944	499,616	510,012			
16%	41%	42%			
HQ	Field	Partners			

SUSOMA Project Intervention Cost Analysis, August 2014

Project management and technical staff	345,026	28.6%
Coordinators and CHTs	280,781	23.3%
Local Travel	56,505	4.7%
International Travel	19,259	1.6%
Small equipment (motorbikes, computers, bicycles)	15,664	1.3%
M&E (incl personnel)	86,172	7.1%
Training & Other Program Costs	182,712	15.1%
Field Office Costs	120,399	10.0%
Indirect Costs (HQ)	100,054	8.3%
	<u>1,206,572</u>	



OPERATIONS RESEARCH ON IMPROVING MATERNAL, NEWBORN, AND CHILD HEALTH THROUGH BUILDING PUBLIC- PRIVATE PARTNERSHIPS

REPORTING ON SOCIAL CAPITAL MEASUREMENT AND PROCESS
EVALUATION AND LEARNING

Study conducted by:

International Centre for Diarrhoeal Diseases Research, Bangladesh

Funded by:

United States Agency for International Development

Operations research on improving maternal, newborn, and child health through building public-private partnerships

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Acronyms

BDHS	Bangladesh Demographic and Health Survey
BDT	Bangladeshi Taka
CBO	Community-Based Organizations
CCC	Community Central Committee
CCAH	Center for Child and Adolescent Health
CHT	Community Health Trainer
CHV	Community Health Volunteer
GoB	Government of Bangladesh
IR	Immediate Results
KPC	Knowledge, Practice and Coverage
MNCH	Maternal, Neonatal and Child Health
MNCS	Maternal, Neonatal and Child Survival
MMR	Maternal Mortality Rates
NGO	Non Government Organization
NHP	National Health Policy
NNHS	National Neonatal Health Strategy
PG	Primary group
PI	People's Institution
TTBA	Trained traditional birth attendant
SC	Social Capital
SUSOMA	Shustho Shishu o Shustho Ma
UC	Union committee
U>5MR	U>5 Mortality Rate
VD	Village doctors

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¹ World Renew, formerly known as CRWRC, is an international NGO

Executive Summary

Social capital (SC) refers significantly to networks of social relationships which contribute in sustainable development. It is apparent from many studies that social capital act to stick the community members together and to fulfill societal needs. Social capital study helps to see the benefits from trust, mutuality, increase in knowledge, and assistance to each other that eventually increase rate of success in achieving individual and shared goals in terms of education, health, communication and so on through effective function of social institutions. On the other hand, society that lacks social capital may collapse in the long run. The World Renew, an international NGO, has implemented SUSOMA project in two upazilas in Netrokona district. This organization, with the help of two renowned local NGOs- PARI Development Trust and SATHI, has worked to improve social capital index of the very poor and marginalized population of these areas with an intervention of People's Institution (PI) model and intended to reduce maternal and child death with alignment with GoB's attempt to achieve MDG- 4 and 5. It is noteworthy that though Bangladesh has been able to achieve significant progress in reduction of under-five (U5MR) and maternal mortality rates (MMR), this country has yet to achieve greater success with its current rate of MMR (194 per hundred thousand live births) and NMR of (32 per thousand live births) (BMMS 2010; BDHS 2011). Antenatal care, skilled attendance at birth, and postnatal care service coverage for different economic quintiles indicate gross disparity in Bangladesh (BDHS 2011). PI model of SUSOMA is especially aimed to see five intermediate results (IRs) in improvement of public-private partnership in support of Maternal, Neonatal and Child Health (MNCH) strategy of GoB, improve related knowledge and practices of pregnant women and family, increased quality of MNCH services, increased capacity of local NGOs for implementing People's Institution and enhanced enabling environment for MNCH (Policy Environment) which are most appropriate for the context of Bangladesh.

This report aims to reveal impact of Peoples Institutions (PI) model that is targeted to increase social capital, on achieving success in ensuring maternal and child health in two upazila in Netrokona District in Bangladesh. Researchers from Centre for Child and Adolescent Health from icddr,b, Bangladesh has conducted the baseline and endline of KPC survey and formative research in two intervention areas of SUSOMA project in Netrokona in 2010 and 2014 respectively. As a part of the formative research, the aim of operation research was identified in meetings with stakeholders. A team of researchers visited these two areas for several times during the implementation period and collected data using qualitative methods of in-depth interview (IDI), focus group discussion (FGD) and observation. For the social capital measurement survey, tools were adapted from World Health Organization's (WHO) tools to measure social capital and same set of questionnaires were administered in both baseline (2010) and endline survey (2014) among the members and non-members of groups following PI model using a cluster random sampling method. This report has two major segments of findings. The first segment has focused on findings from qualitative research and the second segment presents on results from social capital measurement survey.

This study finds changes that occur in the intervention areas as a result of implementing Peoples Institutions (PI) models of SUSOMA project. All the members and almost all the non-members are well aware of the idea of forming social group to save money and use that for communal benefit, such as, spending for maternal and neonatal patients, building roads or buying vans to transport patients to the hospital. Leadership qualities were building up in the intervention areas. Some of the groups were disbanding; however, many of them got reformed again after solving their problem. Many of the groups had problem in investing their savings as they were not interested to do anything that would go against

their religious beliefs. Members of the groups were ready to help any mother and child in need of health care despite of their religion, identity or membership to groups and they seemed to understand the importance of timely treatment from the facility. TTBAAs are working within their best for creating awareness to the mothers, family members and the decision makers on significance of referral to facilities than treatment by informal providers after observing any danger signs. The level of confidence of the PI members has increased up to such a level that they are now able to solve their own problems, can communicate with social elites as well as the people from formal institutes and are achieving trust from them as a result of their improving performance in managing groups, money, health care and non-health related tasks and so on. Another most significant feature of PI model is that it has been able to create effective linkage among community people, local elites, formal health system as well as informal health care providers.

The social capital measurement survey found that PI members are significant from the non-members in terms of decision making processes, their networks and mutual support, their ideas about the sources and areas of conflicts, their understanding of access to services, levels of solidarity, trust, and cooperation. They are more confident in conflict resolution, on understanding intensity of problems that can occur in their community and individual level.

As, it has been stated earlier, social capital ensures social sustainability and development for generations, the PI model should be a continuous process in achieving maternal and neonatal health success. We recommend that this kind of program should be scaled up in more areas with lower status in social capital index in Bangladesh, especially among the marginalized population that lacks trust, solidarity and access to information. It is evident from this study that increase in social capital by expanding monetary capacity can bring change in people's behavior and practices. Therefore, this research report recommend that learning from PI model can be applied to Community Clinic Support Groups (CSG) that are actively working in the whole country on the same field of improving child and maternal health activities as World Renew does.

Introduction

Bangladesh has experienced significant progress in reducing under-five and maternal mortality rates but maternal (194 per hundred thousand live births) and neonatal (32 per thousand live births) mortality still remains high. (BMMS 2010; BDHS 2011) The Demographic and Health Survey (BDHS) data on antenatal care, skilled attendance at birth, and postnatal care strongly indicate gross disparity in service coverage for different economic quintiles. (NIPORT 2009) Reduction of neonatal deaths requires continuum of care addressing pregnant women and newborns as well as reaching the poor and marginalized population. Community based interventions, specially targeting the poor and disadvantaged population has the potential to have substantial impact on maternal and newborn health. World Renew, an international NGO, has developed an innovative approach called the People's Institution (PI) model, and plans to use this model to implement a package of evidence based interventions in partnership with NGOs in Netrokona, a district in Northern Bangladesh.

This document elaborates a quasi-experimental operations research design composed of Knowledge, Practice and Coverage (KPC) surveys, formative research, and process documentation to evaluate the effectiveness of the PI model on caretaker knowledge, home care, and care seeking behavior. The proposed research is not a straightforward evaluation of the program, but an operations research geared toward providing evidenced-based support for what works and what may need improvements. In this document we also describe measures of social constructs, such as Social Capital (SC), since the People's Institution is designed to raise SC among the marginalized populations that would contribute in significant improvements in desired areas of maternal and newborn health, i.e. ability of PI model in engaging poor and disadvantaged populations through empowering them to get quality health care services. In addition the research also explored attitude and accountability of community people, and cost-efficiency of the innovation (PI model). Process of project implementation has been documented through in-depth qualitative exploration with all the relevant stakeholders.

Addressing maternal, neonatal and child health concerns through community-based strategies have been tried at various levels and have shown to be successful in achieving their objectives. However, most of the interventions have been input-intensive, hence less sustainable in the long run, though it may be necessary and required in certain contexts. The PI model is clearly a much needed innovation in this regard, given the fact that it relies on community participation, planning, and action, which in turn attempts to utilize community resources. World Renew has 18 years of experience in implementing this model successfully in Bangladesh to help the poor communities form independent, self-sustaining community-based organizations (CBOs). The formed CBOs are well positioned to interact and collaborate with the informal health care system (village doctors) and the public health sector (clinics) in ways that may lead to stronger, more sustainable health systems, and communities with greater social cohesion and sense of empowerment. However, the success and its potential to be taken to scale are yet to be measured.

The government of Bangladesh (GoB) has prioritized maternal and neonatal health, which is reflected in its national health policies and guidelines. World Renew's project is designed in line with what GoBs prioritized so that it can directly support the objectives and strategies of the government as articulated in the National Health Policy (NHP), the National Neonatal Health Strategy (NNHS), and the Maternal, Neonatal and Child Survival (MNCS) Programme.

The selection of a poor, remote, and rural area like Durgapur and Kendua upazila of Netrokona district with high levels of poverty and maternal and neonatal mortality was done with consultation with GoB so that it would serve as a representative area to test an innovative approach that could be implemented at scale if shown to be successful and effective. This model can then be recommended for other countries with similar contexts.

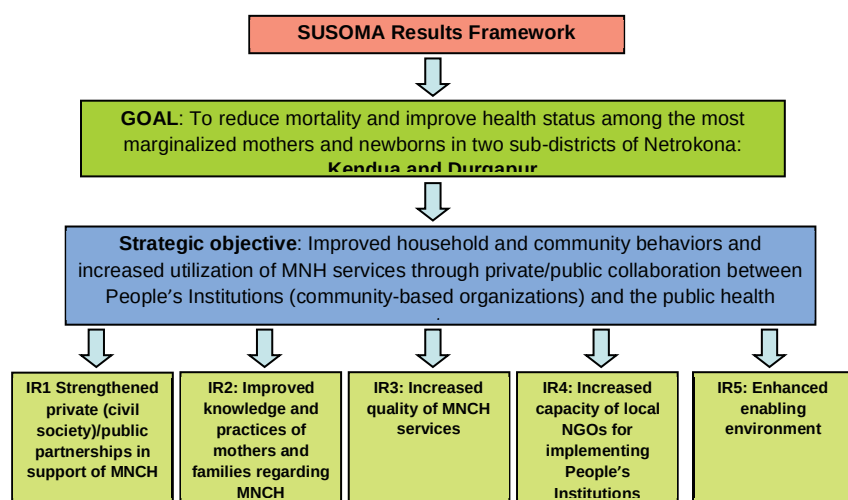
The project by World Renew seeks to contribute in community capacity development, involve the local government, and strengthen the health system through establishing linkages between the community and the government sector. The PI model will work as the bridging agent in achieving this end. This innovative approach to public-private partnership to achieve greater health outcomes will also address gender disparities and inequities by ensuring women-friendly services and identification and targeting of poor households with the help of local NGOs.

Intervention Design

Netrokona has been identified as one of the low performing areas in terms of health status by GoB. Within this context, World Renew will focus on a package of MNCH interventions, which will be integrated into the GoB strategy (expanded to include newborns) and delivered at the household level by trained traditional birth attendants (TTBAs) and unpaid Community Health Volunteers (CHVs). The project will prioritize high poverty areas and marginalized population and will involve and empower them in meeting their health needs.

In the following diagram the results framework for the scope of World Renew interventions are presented in the light of intermediate results (IRs). We provide a brief description of activities addressing each one of these IRs below the diagram.

Under the SUSOMA² results framework as shown below, the stated goal and strategic objective are addressed through five intermediate results. These are then collaborated through the planned activities addressing each one of the IRs separately. Briefly, the planned activities, in conjunction with specific IRs, are as follows:



² SUSOMA is the name World Renew adopted for their program on maternal, newborn, and child health that incorporates the PI model.

IR 1. Strengthen public-private partnership in support of MNCH

All of the activities taken under the IRs as described below will inform IR 1. This specifically refers to increased linkages between the public health system and the community; Established mechanism for community feedback on health facilities through the community-based organizations (PIs); Increased community access to health services through community based financing scheme – the Emergency Health Fund.

IR 2. Improved Knowledge and practice of pregnant women and families regarding MNCH

Improved knowledge of danger signs in pregnancy, childbirth and postpartum periods.; Increased coverage and utilization of quality ANC services ; Increased access to delivery by skilled personnel., Increased coverage of home-based post-partum care for mothers and newborns ; Increased essential newborn care actions; Increased promotion of key behaviors related to MNCH

IR 3. Increased quality of MNCH services

Enhanced community-based provision of care; Improved referral of mothers and sick newborns by community- based (TTBAs and CHVs) and informal health providers.; Decreased harmful practices of community based and informal health providers; Established Quality Improvement System between public health facilities and community-based and informal health sector; Improved capacity of MOHFW to provide MNCH service at the union, sub-district and district levels;

IR 4. Increased capacity of local NGOs for implementing People's Institution

Increased capacity of NGOs to assist PIs in implementing and monitoring their own activities; Strengthened capacity of local NGO to work with MOHFW at district and national level; Developed capabilities of local NGO partners to train community-based providers in advocacy and networking with local government within the PI model

IR 5. Enhanced enabling environment for MNCH (Policy Environment)

Strengthened and sustained local government capacity in MNCH; Improved ability of People's Institutions to advocate for local level policies that benefit the health status of the poor ; Formed partnership with other services and programs (e.g. White Ribbon Alliance etc) to advance awareness of MNCH to improve social and policy environment

World Renew seeks to achieve all of the above through their “innovation” *The People's Institution Model* (PI), which is a community-based organization, composed of several smaller women's and men's groups called **Primary Groups**. The PI model organizes and mobilizes communities for health and social change and the goal is to become an independent, self-sustaining organization to have a lasting impact on the health of their members and the broader community through:

- Building **local capacity** to identify and address community needs
- Helping the **poorest and marginalized populations** have power to make decisions
- Mobilizing **local resources** for health and establishing resource management systems
- Motivating communities to **advocate for policy changes** to respond to their needs; and
- Establishing and strengthening **linkages between communities and health facilities** to improve quality, availability, and access to health services.

Study design AND methods

Objectives

Overall study objectives of the operations research are:

- 1) To evaluate the performance of the Primary Groups of the People's Institution model in reaching marginalized and poor populations and effects on maternal, newborn and child health
- 2) To assess programme (PI model) effects on care-seeking for maternal, neonatal and childhood illness, and compliance with referral
- 3) To assess programme (PI model) effects on quality of care and utilization of maternal, neonatal and childhood services by health workers
- 4) To measure incremental intervention costs, cost-efficiency and equity aspects of the People's Institution model, its ability in reaching marginalized population
- 5) To undertake process evaluation of the implementation of the model
- 6) To measure Social Capital

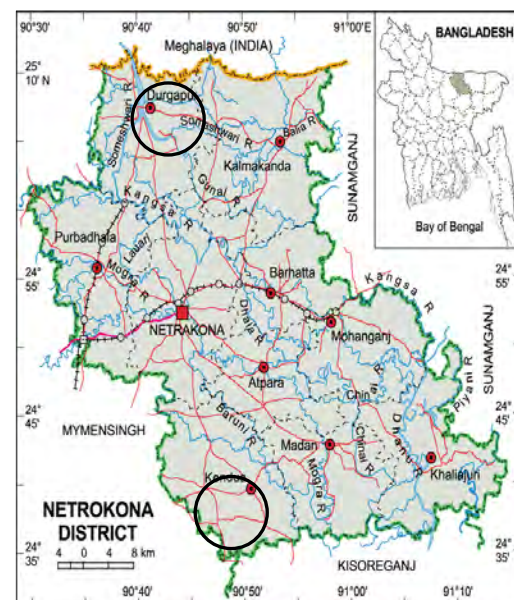
Scope of this report

Objectives 1-4 are described and documented in the Knowledge, Attitude, and Practice Survey report, which is provided separately, while the current report focuses on the fifth and sixth objectives, which is, to measure social capital in Kendua and Durgapur and to qualitatively understand the process of implementation of various components of the interventions. In order to do that, we are present findings from both the process learning/evaluation and measurement of social capital that were conducted at various points in time and provide a combined discussion to inform the objectives as stated.

Study sites

Study sites are Durgapur and Kendua, two sub-districts (upazilas) in the district of Netrokona in Northern Bangladesh. World Renew has extensive presence in the communities of these two *upazilas* and currently implementing a community-based participatory intervention program called SUSOMA. The total population in these two *upazilas* is 445,310 according to the census conducted in 2001.

Netrokona has been identified by the Government of Bangladesh as one of 14 low performing districts with high child mortality (UNICEF, 2007). Kendua and Durgapur are two *upazilas* where the project was implemented in 13 and 7 unions respectively. According to the census carried out in 1991, Kendua has a population of 265,628 and Durgapur has a population of 169,135. To account for secular trends and effects of other existing programs and factors, all vital indicators from World Renew programme compared with concurrent measures from an appropriate comparison area from Netrokona district. Netrokona has a total of 10 upazilas and a similar maternal, neonatal and child survival (MNCS) programme is being implemented by GoB and UNICEF in 6 other upazilas of Netrokona, leaving only two



other upazilas without such programmes. Therefore, the required population for comparison is selected from these two upazilas.

Durgapur is remote with limited roads and electricity. It is close to the border with India, and has a large ethnic population including 850 ethnic families from the Garo, Koch and Hajong communities. In Kendua, there is also very limited access to health services. The Bangladesh Demographic and Health Survey (BDHS) 2007 data on antenatal care, skilled attendance at birth, and postnatal care strongly indicate gross disparity in service coverage for different economic quintiles.

Operations research

The operations research has been divided into three separate parts as follows:

Part 1: “Formative and qualitative process evaluation and learning,” tries to understand qualitatively the various dimensions of the program as it gets implemented.

Part 2: “Investigation of social capital,” where we tried to measure a social construct, namely Social Capital, as it relates to the People’s Institution model.

Part 3: “Quantitative program evaluation” where we addressed to measure program-level indicators at the baseline and end-line and compared the two to see if there has been an increase (or decrease) as a result of the program.

The current report however, reports on parts one and two. Part three, which is basically the KPC survey, forms the rest of the total package of report from icddr,b, and to be submitted along with this report.

Part 1: Qualitative process evaluation and learning

Specific objectives of this report are as follows:

- To explore perception, knowledge and practice around PI model
- To reveal impact of PI intervention on achieving health equity
- To explore the changed pattern of referral of maternal and neonatal cases to the formal health care facilities
- To present changes in social capital among PG members and non-members

This report is generated from our formative research and process evaluation activities that include compilation and review of implementation documents, compilation and analysis of regular program monitoring data, in-depth interviews, and focus group discussions or group meetings. Participants of the in-depth and focus group discussions include: mothers and fathers of children under two years of age; senior females (female decision makers with regard to maternal and neonatal health care) from households of the same mothers; and health care providers (i.e. government facility based providers, TBAs, CHVs, village doctors). We also conducted interviews of senior managers of NGOs involved in implementing the interventions in the field in order to understand the programmatic perspectives.

Along with assessing the baseline situation with regard to maternal and neonatal care practices and behaviors in the community, the work looks into the processes involved in implementing the interventions, including the process of forming the PGs (primary groups), UCs (union committees), and the PIs (people’s institutions).

Sampling for qualitative exploration

Procedure for qualitative sampling for formative research, process learning, and measurement of social capital followed the standard purposive approach.

Table: Informants for qualitative process learning

Tool	Type	Kendua	Durgapur
IDI	Member	10	12
	Non-member	10	12
	TTBA	2	2
	CHV	4	4
Social mapping		6	5
Organizational profiling		4	4
Focus Group	Member	4	5
Discussion	Non-member	4	4
Observation	CHV training, PG and CC	2	2
	formation		
Managers	Sathi and Pari	4	4

Methods and Guidelines

Separate guidelines for each type of informants were developed and employed. We used same guideline in the baseline and endline. Samples of these guidelines for each of the informants have been provided in the annex section of this report.

In-depth interviews:

Informants were Female and male members of PGs, UCs, and PIs, health care providers (CHVs and TTBA).

Primary objectives of the in-depth interviews were to address the functioning and performance of the PCs, UCs, and PIs. These interviews also addressed members' concerns and the challenges they faced during the implementation of the programme. Health providers were also interviewed to understand their perception of the groups, their case management, and their relationship with their clients. In addition to the above, we interviewed managers of the implementing NGOs in order to learn of their programmatic experiences of implementing the program in the communities.

In order to address objectives 5 and 6 above, we selected women of lower socioeconomic status. We used no proportional quota sampling. We visited the household of each woman to determine whether or not she met the inclusion criteria, sought permission to interview, and then interviewed her. In cases where we didn't find a woman through our preferred method, we resorted to snowballing. In terms of selecting our informants, we tried to make it heterogeneous in terms of age, ethnicity, number of children, and education. On average, interviews lasted around 90 minutes each.

Focus group discussions:

Participants of FGDs were both members and non-members of groups. The primary objectives of these FGDs were similar to that of individual interviews, but the focus was more on the societal-level opinions and perceptions.

Observation:

Events to observe include the formation of groups; client-provider relationship; and CHV training session/s. The primary objectives were to observe how groups are formed, how providers interact with their clients, and participants' learning dynamics during training sessions. In case when we failed to observe, we tried to gather the information through "retrospective" interviews with the concerned families and providers.

Participatory exercise/s (social mapping and Venn diagram):

Participants for the participatory exercises were the people in the community. Primary objectives of these exercises were to identify local resources; to identify poor and disenfranchised people; health care facilities visited and preferences. Part 2: Investigation of social capital

There were two different approaches to investigate Social Capital for this program:

- #1: Measurement of the degree of implementation of an approach intended to increase social capital: People's Institution Model. If there is a high score, social capital should be high, but this needs to be confirmed.
- #2: Measurement of social capital – two types: structural and cognitive social capital

We have prepared the questionnaires needed to measure social capital in the community, which was primarily an adaptation of the World Bank tool for the task. However, that document/s was revised in the light of the formative research, which also included site visits to observe people's institutions around the country that are not part of the formal evaluation but are instructive as far as learning goes. We also conducted in-depth interviews of various managers of the NGOs related to mature PIs that we visited in order to contextualize the questionnaire.

Sampling for quantitative measurement of social capital

The sampling techniques were the same for both baseline and endline social capital measurement.

Inclusion criteria

- Married women of reproductive age
- Reproductive age set in between 15-45
- Non-elite (belongs to lower socio-economic strata)

Sample/informants

- 300 to 360 from TWO sub-districts (i.e. Kendua and Durgapur)
- Kendua 150-180

- o 75 members (40 to 45 villages randomly selected from a complete list of villages in the sub-districts; 2 members randomly selected from each village; randomness decided through spinning bottles)
 - o 75 non-members (40 to 45 villages randomly selected from a complete list of villages in the sub-districts; 2 non-members selected through snow-balling from each village)
 - o All (member and non-members) to be females
 - o All informants should belong to a lower socio-economic strata of the neighborhood
- Durgapur 150-180
 - o Informants were selected in exactly the same way as described above for Kendua sub-districts above.

Tools

The following tools were employed for the exercise of measuring social capital, once during the baseline and then at the endline:

- Household questionnaire (survey)
- Community questionnaire (administered to key-informants)
- Social mapping (conducted in selected sites)
- IDI and FGD (conducted with selected individuals and in selected sites)
- Organization profiling (administered to key-informants)

Field trips

In this section we provide an update on all of our field-trips related to data collection. The trips noted here refer to all the three parts of the operations research (i.e. formative, investigation of social capital, and quantitative program evaluation).

1. KPC (baseline): Data collection between 17 February and 06 May 2010
2. KPC (MT-Rapid catch): Data collection between 01 May and 05 May 2012
3. KPC (Endline): 5th March to 25th June 2014 (training and data collection)

The KPC surveys were conducted as a part of the third component of the study. The baseline and endline surveys were conducted for evaluation purposes, while the rapid-catch survey was conducted as a rapid assessment to see if the interventions were being implemented as planned.

4. 1st visit: Durgapur, June 2011 and November 2011; Kendua, August 2011 and November 2011
5. 2nd visit: Durgapur and Kendua, January 2012; Kendua, June 2012; Jamalpur, April 2012
6. 3rd visit: Durgapur and Kendua March-April 2014; Netrokona and Dhaka: 30th June to 3rd July 2014
7. Social capital measurement (baseline): 23rd October to 12th November 2012
8. Social capital measurement (endline): 28th March to 15th April, 2014

For formative research component of the OR, we made several trips to the field. In addition to the formative research, we also collected data for process documentation and collected relevant information for the measurement of social capital.

Dissemination of study findings

So far, results of the study have been presented in two separate dissemination seminars to make the results more widely available. The first dissemination seminar was held in February 2012, where all the relevant stakeholders were invited. A detailed presentation was made on behalf of the study team. The presentation was primarily on the baseline KPC survey results, which generated a lot of fruitful discussions.

The second seminar was arranged upon completion of formative research and the first phase of process documentation. It was conducted within the organizational framework with only the relevant NGO managers and other field-level staff. The objective of this dissemination was to inform the implementing organizations of the early findings so that relevant changes can be made if found to be necessary. This seminar took place in July 2012.

Findings: from qualitative research

Section 1: Major findings at a glance

In this section, we tried to present the major findings of the operational research on the basis of changes occurred in 5 years of programme implementation by PARI Development trust and SATHI among the study participants from Kendua and Durgapur.

Table: Major findings from qualitative research

Themes	Subthemes	Changes
Perception, Knowledge and practice regarding Programme	Perception of PGs	Knowledge levels regarding goals and aims of PG differed at the beginning which leveled out in endline in both the sub-districts.
	Selection of PG members	Criteria to select the members of a PG, though were set by the programme, not always followed and the group members included those whom they found to serve group's purposes better.
	Capacity of leaders of PGs	Leadership rests on the more educated as it did in the beginning. They took careful decisions in terms of electing their leaders. Also, it was clear that they wanted someone who is presentable and articulate, more importantly – they wanted to ensure that the person will be able to provide the time that was essential to lead an organization.
	Trust among the PG members	Most of the PG members have learned to trust themselves or at least know how to resolve if problems related to trusting arises.
	Management of groups	Group management has become more diversified over the years. Initially it was limited to saving money, while now it includes providing loans, taking on small income generating projects, and

		ensuring health benefits to members and non-members.
	Management of financial activities	Banking was a problematic issue in the beginning. Over the years, people have started to reap the benefits of the system and have started to have faith banks.
	Engagement with UCs	UCs are formed out of representatives from the PGs, but not all PGs are equally aware of it. The awareness has increased over time, but still is lacking in some places.
	Engagement of village doctors	Orientation of the village doctors seemed slow to pick up. Most of our informants were among those who didn't receive the orientation. However, we did find out many of them were oriented on SUSOMA activities and things that were expected of them.
	Problems in forming PGs	Formations of groups have become stable over time and the questions and doubts about the groups have lessened.
Impact of PI on health equity	Utilization of Savings	Focus on ensuring money for the emergency funds seem to have increased over the years. People are involved in various income generating activities in order to pay their dues, which they take almost religiously.
	Planning	Planning is being diversifies. Every passing year people are gaining more confidence in their abilities and now thinking about innovative ways to earn and save more money for both emergency health needs and also their own sustainability.
	Linkage with social elites	Supports of the social elites have been noteworthy in these communities throughout the years. The elites are properly motivated in helping in people with health needs.
	Engagement of NGOs	Over the years, PGs have become confident in engaging with other groups and the parent NGO, but not with NGOs or any other organizations beyond the reach of the program yet.
	Engagement of GO	There has been active collaboration between the government health system and PGs – especially the TTBAAs who are also a part of various PGs in their respective areas. The extent of collaboration has only gotten better over time and the PGs have also received both moral and monetary assistance from the government.

	TTBA's linkages	A linkage between the TTBA's and health system is encouraging. Pregnant and mothers in need are being referred and attempts at better care is ensured.
	Building capacity: CHV	Training of CHVs is crucial to their activities and also for their confidence to work in the community. This has been provided to the CHVs adequately, though refreshers may more frequently be required.
	Capacity building: individual	Group members are becoming confident and claim that they might be able to continue without the assistance of the NGOs who helped them form the groups initially and have been guiding them ever since. They mentioned about their increased capacity in terms of management of the finances and also in terms of planning what to do in the future. They were also sure to mention their increased knowledge in terms of health concerns and what to do during times of need.
	Capacity building: group	At the group level, the unanimous opinion was that of being able to help the community, especially with regard to emergency medical needs, i.e. pregnant women needing assistance during delivery. They were also sure to mention the sharing of ideas that place during the group meetings that helps the community at large, and the group members in specific.
	People's institutions-improvement in SES	The confusion over the selection and election aspects of PI formation remains, though it seems people are inclined toward election rather than selection, which is more empowering. The progresses made within the PIs have been encouraging in terms of improving the SES of the members and diversifying the savings mechanism and income generating activities.
Impact of PI on Health care seeking	Health care seeking	Initially, the activities of the groups were limited to savings and then it expanded to certain other activities, like some income generating activities and helping group members in emergencies. However, with the SUSOMA activities taking ground, people have started to know about their health related activities where even the non-group members are also becoming aware.
	PI's linkage with the health system	PIs are increasingly becoming linked with the health system and are successfully referring patients to the

hospitals. They are also taking active part in non-health development work, which is also helping the community at large.

Section 2: Perception, Knowledge and practice regarding Programme

Findings presented in this section are the results of in-depth interviews, focus group discussions, and observations that we have conducted with the relevant stakeholders in Durgapur and Kendua from Netrokona district in 2010-12 and 2014. From our several field trips to both of the areas we have seen improved access to natural resources, capacity building at individual and group level, improved communication and support skills, and level of trust.

Populations of Netrokona, as many other districts of Bangladesh, have less access to transport, roads and electricity. The condition of sanitation has been improved after GOB interventions in Netrokona. Drinking water situation is not even good in Netrokona as the water has iron component more than other areas. People have to collect drinking water from tubewells far away.

In 2012, we found that recreational activities are present in Netrokona, However, people from upper SES go there till midnight and this is open after that for the poor people to play *Hauji*.

In both baseline and endline we found that Netrokona is not quite suitable for agriculture. The soil of Netrokona is not as fertile and arable. Education and health are accessible to all in both of the districts. This present study says that most of the community members' access to most of the natural resources is limited which is due to political leaders' acquisition over lands, fields, river or ponds or other water bodies, as one of the implementing agency staff stated. Though group members got advocacy to reduce this problem, due to risk associated with life, they are not that much interested to act against this.

A payment of 20 taka need to be made to access health services from any public hospital. However, almost all of the public health service providers and family planning personals stayed in Netrokona sadar, so, they are not accessible in time of need which influences the health care seeking of mothers in the starting of program intervention which changed over time. Again, remoteness of some of the areas and poor transport system can create difficulty for pregnant mothers. There is an NGO managed hospital named GBC which provides reproductive health care and delivery facilities with charge for services. In the baseline, in some areas of Netrokona, social security status and community support system were not satisfactory. Ethnic minorities and women were the most vulnerable to this kind of events, such as, rape, hijack. However, these problems are not present in areas with good roads and transportation system. The local leaders took bribe for mediating any disputes. In the endline, we found the situation improved in the intervention areas.

In the endline, we found that after the formation of PI and their success, there has been good relationship established between the group members and local GOB officials. PIs have got good amount of donations from them several times. The ministry of Child and Women's affairs have donated a total of 350000BDT to the PI in Kendua and they would further receive 550000 from them. However, the members would be able to take a loan upto 10000 BDT from this donation. The implementing agency from the same upazila also provided them with decoration sets for event management (plates, glass, spoon, mike and so on) worth 287000 BDT which they can use for earning money. In Durgapur, all the three PIs got donation from PARI in the form of decoration sets for event management worth 125000 BDT. We also found that members of PIs have good connections with local elites, local health care providers (TTBAs, CHVs). A good level of confidence is also observed among the members of PG, UC and PI in both of the upazila in Netrokona.

Perceptions of PRIMARY GROUP (pg) at Village Level:

In what follows, we provide a description of what we observed and discovered with regard to primary groups over the years of our explorations in Durgapur and Kendua. This includes findings from initial stages of PG development to their current form.

In the baseline we found that PG formation is relatively a newer phenomenon for the people in Kendua than the people in Durgapur, since People's Institution has been formed in Durgapur even before SUSOMA began its activities in the vicinity. Therefore, it was expected that people in Durgapur would know more about the PGs and are able to relay their understanding to us better. On the other hand, though people from Kendua are new to this, they are eager in terms of taking up group activities and have been relentlessly working toward achieving all that can be achieved via group formation and related activities.

This is how participants from Kendua stated their perceptions regarding PGs during our initial exploration:

- A local village doctor stated that these groups are teams of females. He was not able to detail out the activities and purposes of the groups, but the fact that it was women's group struck him as most noticeable.
- According to husbands interviewed, these groups were a "collective" or a "cooperative" as they have observed other NGOs form in other places.
- Members of the PGs, TTBAAs, and the CHVs who were associated with the groups were better able to articulate their ideas. According to them, it was a place to deposit money and use that for the development of their families. They also stated that the deposited money was to help the pregnant mother (referring to SUSOMA)
- The TTBAAs mentioned that they have good connection with the PGs since they join their weekly meetings. In some of the cases, they are the members of PGs. Some of the TTBAAs said that they have been given training on maternal health and delivery care. In one instance, the TTBA said that this group helped her to establish good connection with the community, which helped her get in touch with pregnant women. This is how she was able to perform 17 deliveries over a period of only one month.
- A person, who is not a member of any group, mentioned that these groups were different from other NGOs in terms of spending money. According to her, other NGOs spend their time and money on microcredit, while these groups save money to improve the health condition of mothers and their children. She said, *"They took me to the UHC. They gave me money too... SATHI groups work with us wholeheartedly..."*

There were negative perceptions about the PGs as well from both Durgapur and Kendua,

- A non-member suggested that the NGO (SATHI in Kendua) would take the money with them. According to her, there are evidences that some other NGOs took money from the people in their villages and ran away with them.
- There were standard criticisms of PG activities and their related NGO – something that just about all the NGOs face here in Bangladesh from a number of conservative Muslim groups. For

instance – one person suggested that the *Shomiti* lends money on interest which is contrary to their religious beliefs (Durgapur).

- A lot of our informants from both Durgapur and Kendua mentioned that they do not know what the futures of these groups are. Being uncertain of their future makes them uncomfortable to join.
- During the initial stages, almost all of the participants in Kendua, including the husbands of the female members, members of SUSOMA, TTBAAs, and the village doctors were unacquainted with the activities, roles and responsibilities, UC/CCC and their future plan with the savings.
- Though the CHTs are in charge of forming the PGs, they are not well aware of the UCs or PIs. Their knowledge is often limited to the role and activities of the PGs.

Most of the members in Kendua in the initial stages did not know much about the election process of PG. Many of them did not have any idea about the activities of PG, other members of PG, CHT's contribution, NGOs involvement and purpose, positions held by members, UC/CCC. In addition, many of the PGs in Durgapur do not have a bank account to deposit their money. However, since our initial exploration, a lot of changes occurred in the field. Data from endline survey found that members of PGs in Kendua are comparable to the PG members in Durgapur and are well aware of their groups' activities, purposes, and vision. A lot of this has been captured in the endline survey intended to measure the Social Capital.

In 2014, our findings present that three People's Institutions (PIs) are formed in Durgapur and one in Kendua. Two of the PIs in Durgapur were formed as a part of general PIs of PARI who joined SUSOMA later on and started working on maternal and child health issues, especially on reducing child and maternal mortality. In Kendua, their only PI was formed as a part of SUSOMA from two representatives from each of 45 PGs and have a steering committee of 13 members.

Process of Formation of groups

According to the participants of this study, Community Health Trainer (CHT) was the primary "external" element in the basic scheme of building a People's Institution and especially so as it relates to the formation of primary groups (PGs) in the community. A CHT has to spend months in a community talking to people, expressing the need and utility of forming a group, and explaining the vision of such groups to women and men in the community. The process seemed arduous and required a lot of patience. One of the CHTs in Kendua who formed the group we observed reported that she worked for three whole months and was able to identify 13 potential members. The initial activity of group formation was thus finding the right persons who would be motivated enough to deposit a nominal amount on a regular interval (usually per week) and who would have a vision of doing well for themselves as well as the community.

NGO staff working on the matter was instrumental in this regard. They provide the organizational know-how and orient the potential group members on the activities, goals, and objectives of forming the group. During initial meetings when the would-be group members were not so certain about entire ordeal, this can and did have a negative impact. People started to question their motives and were hard-pressed to keep their enthusiasm intact.

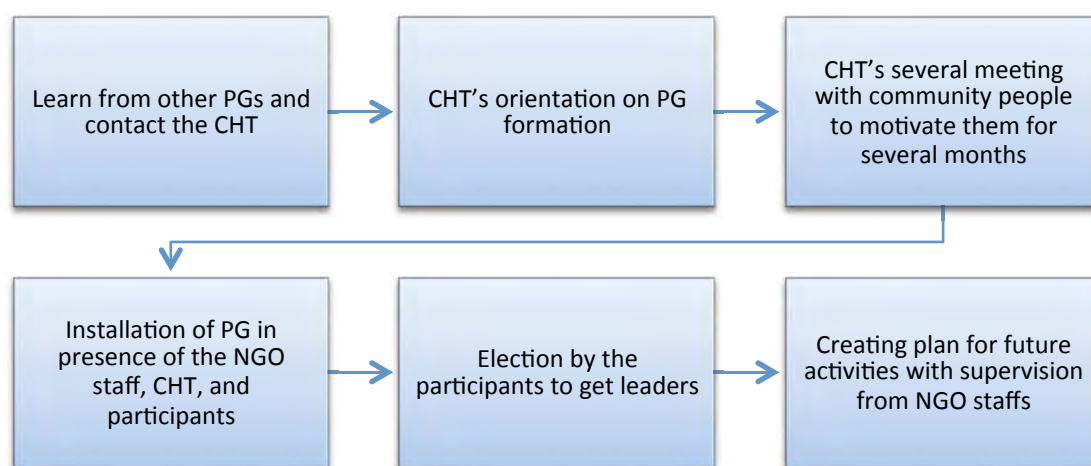
It is the basic principle of forming these groups that the leaders would be elected and the groups would pick their own. It was this principle that guided the meeting that we observed. Names of people were

called out while the participants voiced their opinion on each. Despite this democratic process, often groups cannot form the first time they meet. There is always that chance incident where people do not see eye to eye and end up having a brawl instead. The meeting that we observed ended up on such a negative note. In this case it was two of the members who happened to be the wives of the same person started to fight with each other. The CHT had to exclude them and fix another date for a follow up session. The meeting concluded with money being returned to each member and with a conciliatory note from the CHT that these types of events were common.

One of the group members in Kendua shared her experience of group formation as she recalled:

“Four years ago, one day the CHT di came to our village and was looking for a local TBA. The CHT di came from Shathi office. She organized the first meeting with us. She gathered several local married women and discussed about women’s health group activities. Few local women also helped her to call other women. She introduced us to the idea of a group. Our (current) cashier and president also helped her to conduct and arrange the meeting. The first day was introductory, while it was fixed that we will have weekly meetings. The following week we discussed the possible benefits of the group and other activities of the organization. It was during the third week when it was formally formed, leaders selected, and a name for the group given.

In broad strokes, the process of forming a PG can be expressed as follows:



Flow chart: Process of PG formation in Kendua and Durgapur according to informants

In Durgapur, one of the group members stated that they heard from others about PG and called the CHT to help them form one. The CHT came to them and gave a demonstration on how and why to form a group. All of the interested members agreed and finally they could form it. This was a retrospective interview, thus lacked the immediacy of the findings from Kendua. Nevertheless, the process seemed smoother, though they also informed us about brawls that have taken place there as well.

The process of PG formation remains more or less the same over the years in both of the upazila as the study reveals.

Selection criteria of PG members

According to the participants in Kendua, the following were the specific requirements of being a member. All the members that we talked to in this particular FGD in baseline, were of the same opinion, indicating that they were informed about the matter in a uniform manner (relating to a female group):

- Married female
- Reproductive age which ranges from 15-49.
- Local girls were excluded from the selection criteria (this was reported, but later we found out that this specific criterion related to unmarried women, since once they get married they might leave the community and not remain a member of the group any longer)
- Income was not stated as a criterion
- Education was not mentioned as a point

In Durgapur, the PG members stated the following criteria for suitable members:

- Women who are potential mothers (married and within the reproductive age). Therefore, doors were closed for widows and/or divorcees and unmarried women.
- No limit on income, such as less or more than 3000 taka. They explained that a rickshaw puller may earn up to 6000 taka, but, he and his family may still be poor since he has to feed a lot of family members with that income. Therefore, the community would decide who is poor and who can join the group.

On the other hand, there are people who have no source of income and have a family to feed. Like a woman mentioned,

“Suppose, a woman’s husband does not earn anything and he is physically disable. She may have children or get pregnant again... this male cannot even earn for himself... how can he arrange food for that pregnant mother? These people can be called absolute poor, since the pregnant mother cannot even work as a maid in someone else’s home...”

Though education was not mentioned as a criterion, they felt it was better if members had some education. However, the reality is, most of the members do not even know how to write their names.

General members of a PG decide/choose their leaders. They decide as to what qualities they would like in their leaders. For instance, if it is a cashier they are trying to decide on, then they might look for someone who knows how to count and do some calculations at the least.

In another instance, the president of the PG was selected on the basis of education and capacity to create linkage with others in the society. One of the CHVs from Kendua shared,

“(she can make us) understand something after she would learn them... she can read and write and understand which is better or not... she can understand all those... she has the capacity to keep linkage with everyone in our society... she has the capacity.”

In Durgapur, one of the cashiers of a PG was removed from her position as she could not calculate the money deposited to her properly. Therefore, she proposed to other members to select another cashier instead of her. The PG members sat together and selected another. The previous cashier was selected on the basis of her promptness in other activities and was given 6 months to make up her problem.

In addition to the points mentioned above, we also noticed there were several members who clearly were far older than being within the bounds of reproductive age.

In Durgapur, members stated that there are some women who would like to be members now – women those who were not interest in the initial stages of group formation activity. However, *“it is not possible to take new members now. They weren’t members before as they didn’t understand the benefit before.”*

The selection criteria of the PG members remain more or less the same during the end line as it did during the initial stages. In other words, PGs often “bend” the rules in order to best serve the interests of their respective PGs.

Leaders Capacity

The leaders are elected by general members of the PG. The general members decide the quality they want to see in their leaders. The female leaders in the team are the *matobors* from the area or from influential families and educated enough to calculate. As for example, they think that, a cashier should be educated enough to calculate the monetary estimations.

“We are not educated, but, she is. Therefore, we made her cashier in our team.”

As mentioned in the earlier section, education becomes a criterion for the selection of a leader since people believe she would know things better and then would be able to make the rest of the members understand accordingly.

A PG member from Kendua shared her experience about changes, or lack of it, in leadership and qualities a leader should have,

“The group was leading by the community women who are attached to the group since last 4 years, still now there is no change in leadership. We have a president, vice president, cashier, assistant cashier, secretary, assistant secretary, another post that we call office secretary and an assistant secretary. At the very beginning, the members selected the leaders in front of the SATHI staff when the group was formed. All the members think that their leaders are capable, intelligent, educated, they also understand the financial transaction for that they select them as their leaders and still now they are doing well for that we did not need to change leadership.”

A PG member from Durgapur also said the same,

“It is running quite well for the last 3 years. There was no need to make any changes in leadership. But, we have it in our mind that we will change this in the near future. ”

The participatory approach is what makes these PGs unique and different from other groups formed by other NGOs. Often people selected as leaders themselves talk about their inability to perform their tasks as expected and request to resign and have someone else replace her. They seem to understand well that it is not about holding a position, rather it is about being able to run the activities of the group properly that matters. The incident of the cashier mentioned above is one such example.

Similarly as we saw in case of criteria of PG members, not much variation was observed over the years with regard to leadership qualities that the members deemed important in their leaders.

Interviews to inform the leadership qualities as understood within the PIs were all conducted during the end line exploration. For obvious reasons, there were no such leaders made or produced in the initial stages.

In 2014, participants from both Durgapur and Kendua said that they prefer someone who can talk and give time to activities. One of the members from Durgapur said,

“Though many of our members have good leadership qualities, such as, skills of writing, reading and calculating our money, but they failed to provide time to our activities. Therefore, we want someone who is able to give us time. ”

According to almost all managers, it takes at least 5 years to make an effective leader from a general community member.

“To be a leader, one must have willingness to do so. She must be able to talk and must have family support... they should be able to comply with rules and regulations, with other people in the community and they should be capable of managing members of their groups.

One of the managers from Kendua said,

“Good thing is that, anyone can challenge leaders if they don’t perform well. Many of the leaders were changed in last 3 years whenever they failed or low-performed.”

“Commitment is the most precious to be a leader.”

“We have wide range of leaders here in kendua.”

One of the representatives from implementation agency stated how the program is designed to develop leadership,

“There is executive committee in each PG, which is 3-members, or 5-members or 7 –members committee. We have president, secretary and cashier in each of the committee. They are trained on what they do, how to and work on as their position demands so that they can lead 15-20 members group. In all of the three structures (PG, CC and PI), we provide them help to develop capacities of leaders.”

Other qualities that are must for leadership or selection of leaders are:

- “Must know how to manage team member and their problems”.
- “Must have the characters that one can respect”
- “Trustworthy”
- “Can explain issues and come to a possible solution”
- “Can talk, not someone who has qualities, but utter a few words in a day”

In 2014, in both Durgapur and Kendua, PIs have members who passed SSC and are family members of social elites, such as, wife of Homeopath doctors. However, one of the PI leader said,

“At first, I was not willing to be a member of the group. But, if I would not join, none would! None trusted them (implementing agency) at that time”

Presence of Trust

Data from 2011 and 2012, our early explorations into the communities and the activities of the PGs, show that some of the participants, such as the TTBAAs, knew how the PGs can help the mothers in the community. However, they didn't know how they themselves would be helped through it.

In 2012, one of the members of PG in Durgapur quite eloquently mentioned the importance of trust in a group. She even went as far as saying that it should be a selection criterion:

“Unity should be present among members. The members must have love and respect for each other. We should help each other in any danger/ emergency. This is what we need for formation of a PG.”

Lack of vision, lack of a concrete goal to which one can look forward to be essentially a problem in these group activities.

In one instance in Kendua, a group was on the verge of being broken since 8 of its members were leaving. All of these 8 members were interested to withdraw their money from the PG while other members denied giving it back to them. This resulted into a conflict and the members wanting to leave were saying that Grameen Bank was going to come and take all their money – which is why they wanted to disband.

Though this was a source of conflict, in time, it became a cohesive force in order to keep the group together. It worked as a bond. Consequently, most of the members returned and rejoined the group.

Many a time groups that have been formed could not sustain and disbanded due to the issue related to trust of various kinds – from individual to institutional. A member of a primary group in Kendua stated that they lost interest to continue with the group because they could not trust the bank with their money. Their previous experience with NGO in financial activities was not satisfactory as those NGOs left with their money. They lost their enthusiasm in saving money for themselves and the community as soon as they were told to deposit them in the bank. In some of the cases, the members stopped believing other members of the PG due to their proximity with the NGO staffs or on the issue of supporting to keep the money in bank. In one instance, a CHV who had initiated a group did not deposit the group's money since she was in a crisis. This created dissonance in the group and the group got disbanded. However, later on she wanted to come back to the group, but other members could not trust her any longer.

However, when we went in for the last stage of exploration in the endline, we were met with changed circumstances. Most of the members, including the TTBAAs, knew what to expect from the groups and how these groups were working for a positive change in the community. Trust seemed to have been built in many of the groups, or at least they had figured out how to resolve problems arising from not having much trust amongst them.

A negative experience of a PG was shared by a manager where one group managed to save up to 100,000 BDT and had no bank account. The cashier who was in charge of the money spent part of it (4000-5000 BDT) which destroyed trust of the group members. However, the members managed to solve the problem and the group is still sustaining.

Urban-rural differences of PI

It has been shared by the implementing NGOs that, in the urban areas of Dhaka, the development of PI is two tier, namely the primary groups and the PI. However, this is formed through a three tier system in the rural areas, namely primary groups, UC/CCC and PI.

Selection criteria for urban PI/ PG members are also different from those in the rural areas as most of the people are migratory in nature here. Migration of any group member creates difficulty in the stability of the group. Therefore, the followings are the criteria:

- Age ranges from 15-49 years for female members and 18-55 years for male members
- Income > BDT 3000 / month
- Resident in a particular area for at least 2 years, however, in some areas this criteria reduced to 1 year
- Distinct male and female groups
- Illiterates and female gets priority to be a member

All of the slums were categorized into 4 categories according to their performance and facilities they got, namely A, B, C, and D. PGs in urban slums can allow 15-25 persons. The PI is formed by 2 members from each PGs. All of the sub groups are interlinked. They have different activity based sub committees on health, education, income and so on. The health committee focus on identification of pregnant mothers, checking weight of children and mother on a monthly basis, assurance of vaccination of pregnant mother and delivered mother, supervision of the TBAs and the CHVs working with them, referral to health facilities. One of the staff from SATHI stated the process of referral,

“Each of the subcommittee of health has CHVs and TBAs working under them. The CSBA refer the mother. But, no one will accept if the CSBA refers. Therefore, referral linkage needs to be made. The subcommittee of health talks with and develops a MOU with any upper level staff or manager in health facilities to create linkage (to ensure special care and treatment free of cost)... the CSBA and the TBA start to refer them to the facility and that PG greet/ thanks the manager for in their meeting in once in every three months.”

The capacity of the PGs is measured in every 6 months based on a scale called Community Capacity Indicator and the PIs capacity is assessed with People’s Institution Capacity Indicator. This helps to create a plan for next 6 months and assess the present status of any PI or PG.

The process of choosing a leader is selection in the urban areas as many members do not have good communication among themselves due to slum environment, job type, shifting of income generation works and overall migratory nature. However, if there are more people competing for leadership position, the NGO invite them for election through confidential ballots. The old PI members are more concerned with the position of leadership than the newer PIs as they found this as a platform to join or attend city corporation power structure or a door to the political power.

Leadership development in urban areas is one of the prime outcomes, as different NGO staffs agreed. Changes have been occurred in selection of leaders in the community level in the villages. This changes has been described by one of the NGO worker,

“Those who are rich, were the leaders in the community before. Nowadays, they have started to live at home and the poor people have been in the leadership positions.”

The community people have started to belief in connection with their community. They said that all of the members of the groups were poor and illiterate. However, they have learned to take care of their groups' property and manage groups' activity. This made them more confident, honest, responsible and expert. One of the NGO stated that this is NGOs one major contribution that leadership has been created,

“For management of money, they said, ‘how can we keep this amount of money?’ they have opened their own account... its’ not us but the groups found that they can take responsibility of their own children... the cashier was the poor most... they asked if he took the money... we said, ‘this is all your money. Won’t you find out if he does so?’... therefore, that person felt better and can dream if he has money...”

“If somebody takes any challenge, he will get success”

Leaders are selected by the team members. These people are trained in many skills and are attached to primary groups. They work voluntarily for the society within the health committee and others within primary groups. The NGO staff explained the leaders' selection,

“They consider the skill (of the leader) more than. Whenever, they select somebody as leader, they scrutinize the expertise of the person... they are skilled in selecting skilled person...”

The motivations for these voluntary works are three fold:

- It helps to get respect from other members of the community.
- This is the responsibility of the person to the society and
- The God would be satisfied upon the person for his/ her good will.

Their humanitarian qualities are the most significant resource of the community. This also contributed to women empowerment. One of the NGO staff from PARI stated,

“If the women have to take money from their husband to make the savings of the group, the husband will say, ‘you better leave this group’. These women has been given chance to do poultry or provided with (fruit) plant, lemon tree or guava tree. Their families are getting nutrition from these and they are selling them. Thus they are saving money.”

Women empowerment is another feature of PI that strengthens its possibility for sustaining. In the urban areas, many of the women were under veil when they joined and later they learned to participate actively in the meetings and negotiation of disputes and even in elections.

A leader cannot be selected more than twice for the position of chairman or secretary to a committee in Jamalpur. This is little different in Nokla, where members of a meeting decide who would facilitate the next meeting though they have chairman, secretary and cashier selected for 2 years. This helps in leadership development as all of the members get the chance to handle situation. In general, the committee gets changed in every two years. In the new committee, four of the members out of nine are new and other old members get changes after their two years stay in the committee. All the members go through trainings. However, one of the NGO staff said,

“This is a process that everyone will get training during election...everyone will have leadership training and will have to complete this. (But)... not everyone will be the leader after getting this training.”

In some rare situations, leadership fails for the following reasons:

- The new leader may not be interested to work.
- They may not give importance too activities of the PGs.
- Isolation from friends and family due to workload and mingling with other people from political sphere can change a leader’s mind set and turn him into a greedy person.
- In some cases. The leader can develop some bad habits and forget his motivation. One NGO worker stated a case from Melandoho, Jamalpur,
“we make a person named X to compete as a (UP) member. He got more vote than the chairman. Everyone in this village welcomed him, (and they said,) ‘we are with you in any kind of problem. Never get scared and talk confidently’...But, after he has been a member, he started to be habituated as other members, such as, playing cards. He had some loan from PGs. He did not even pay them and forget the community as other traditional (UP) members.”

After deciding the leaders, the NGOs task is to find out the gaps of him or her and make it up through trainings. One of the NGO workers added,

“after the leader is decided, we give him training support. We have discussion with him and find out his deficits and then we work on it. (We tell him), ‘it is not that you would talk (only), (but) everyone should be given the chance to talk’... this is your responsibility to make others to participate’. We stay with them and let them how to work with others.”

Management of groups

From the baseline, we found the CHV/ CHT as the person responsible to install the PG and along with the NGO staff she also contributes in developing leadership in the PG. During the observation of PG meeting by research team, it has been seen that the leaders (i.e. president, cashier and secretary) are from influential families, such as, wife of the local political leader and so on. In most cases, they are popular among the members.

However, in endline these groups are in their advance stage and more matured state of being, the PGs are working on creating health guidelines, flipcharts, and books which they discuss during their weekly meetings. As a group member suggested, their main task is *“to reduce maternal and child mortality in their area.”*

In summary, the activities of the PGs in Kendua are:

- Weekly meeting
- Depositing money
- Sanctioning loan to group members for emergencies
- Working on guideline and health related flip charts and books in weekly meeting

The PG’s activities in Durgapur are as below:

- Weekly meeting
- Depositing money
- Sanctioning loan to group members
- Helping in emergencies
 - Family members
 - Pregnant women who are members of PG

Management of savings

In 2011 and 2012, the members of PG in Kendua have a fixed amount of money to deposit in group's fund which was 5 taka per week for the newly formed PG and 10 taka for older PGs. They also have a fund called emergency fund for that the members pay 2 taka per week. If the members fail to provide the money for any week, they deposit twice amount in the following week. This savings is considered as the most significant motivation to the members of PG.

In 2014, the members in both Durgapur and Kendua said that they must deposit money for emergency fund, even if they are not able to provide the money for regular fund.

The poor women in Durgapur arrange their weekly deposits from various activities that are otherwise also income generating and/or related to their own savings. The activities are (but are not limited to):

- Selling vegetables from the small gardens they have at their house,
- Depositing handful rice every day,
- Sewing,
- Poultry

According to our informants, in Kendua things are also similar where they manage their deposits through the following activities:

- Husbandry
- Selling vegetables grown in the yard
- Poultry

Management of financial activities

In 2012, the husbands' of the female members in Kendua and Durgapur knew about PG that, this is a place for saving money gradually. However, they did not know to whom this money was being deposited and what would be done with it once there was a handsome amount saved. In the initial stages, this activity was not as smooth since there were a lot of confusions over it. Many women did not even know who they were giving their money too, which often made them nervous.

During the initial stages saving money was a technical problem – they did not know how to do it – whether to have it with one specific person or to have it deposited in a bank. A lot of people in Kendua did not trust the bank but many also didn't trust their group members to be entrusted with all the money.

In endline, people are starting to reap the benefits of it already. Even the husbands know where the money is going and how it is being used. This is a positive change since during the initial stages we heard of many husbands becoming a barrier to continue saving money on a regular basis.

Over time, their distrust over the bank has disappeared and people are now okay with idea that it is safe to keep the money there.

All the members can take loan from the PGs. In Kendua, the members can pay back the loan without interest within time. If they need extra time, they have to pay very little amount of interest with the capital. On the other hand, in Durgapur, the members have to pay back a very little amount of interest if they take any loan, which is very little compared to other NGOs. As for example,

“We have to give (interest of) 4 taka for each 100 taka... In other villages and in our villages, they give (loan) on interest on monthly basis or on weekly basis. Suppose, you have to pay 75 taka for 1000 taka weekly which comes to 300taka per month. But, it is 4 to 5 taka for the money we save and it is our money, not someone else’s money.”

Taking ‘interest’ has been considered as “sin” among the Muslim members of the PGs. Therefore, it also created crisis in financial management in some groups. It is a constant dilemma that the PGs have to deal with, especially within the more conservative segments of the population. However, this behavioral aspect is also changing and people are becoming more accepting of the idea.

For giving money to any members, all the members of the PG have to agree on this issue and this has to be passed in the meeting. They do not have any written minutes of the meeting, the cashier keep record of the money given to the members.

PARI staff from Durgapur said,

“Nowadays the PG members can make their own decision on financial issues. They generally keep the money in three separate ways. One part of it is kept in the bank, another is in the form of loan to others and third part is in cash for handling crisis.”

The following financial decisions are taken in the weekly meeting:

- Issues of providing loan and to whom this loan would be given,
- where to spend the money,
- how to collect money for emergency fund
- who should get financial support from the fund

Groups disbanded or collapsing

Our study is not designed to capture the extent (quantitative) to which the PGs are collapsing at any given point in time, but judging from the reports of our informants, it seemed concerning during the initial stages. The reasons we identified in baseline were as follows:

Mistrust among the group members: As pointed out elsewhere, social cohesion has been lacking in Kendua, though it is changing. We also observed this in Durgapur though on a lesser extent. This makes trusting other members difficult for the people, since they are not too aware of the other’s intentions and do not know what, if any, good would come out of it.

Mistrusting the NGOs (previous experience): Right across the field sites, especially in Durgapur, the role of NGOs is sketchy. People are not too sure as to why they are assisting them to form groups. In the presence of this uncertainty, people make up stories and they start to gain grounds over time.

Lack of clarity regarding PG's objectives: Not knowing what the objectives are is a major concern, since that alone can guide people in the right direction and not know them can simply destroy an association. However, this is changing since by now people have become confident about the purposes of forming the groups and are taking active interests in all matters pertaining to the groups.

Lack of future plan (with regard to the money saved): We observed that a few PGs lacked any future plans, which dismayed the members and they withdrew, or wanted to, since they couldn't see what would come out of this involvement.

Confusion regarding personal roles and responsibilities: Just like the objectives, people do not seem to be too aware of all of their individual responsibilities. However, as they became aware of these roles and responsibilities, the situation also has started to change in this regard.

Interest on principal amount is problematic in certain Muslim communities since Islam is against the provision of interest in their banking systems.

In one instance, a group became inactive over an issue relating to providing assistance from their emergency fund to a pregnant mother for her delivery. This woman and her family was unable to return the money to the group after her delivery since they were poor. When the group members contacted the NGO regarding this matter, they suggested that it was okay since it came out of the emergency fund and was not something from which they would generate income. However, this explanation was not comforting for the members and they became uninterested to give their weekly dues. Soon it became inactive due to lack of interest and regular activity.

In the endline, we found changes over the years of implementing the program. Trust within the groups have increased; group members are less weary of the NGOs; members now understand why the NGOs are assisting them to form groups; and above all – group members themselves know why they are forming groups and that it is for their own benefits and not of someone else's. The rate at which the groups were collapsing seem to have slowed down now and the groups have become stable over time.

When asked about groups collapsing, one of the representatives of the implementing agency stated,

"I believe that not all the groups can sustain. There are so many groups. Therefore, it is natural that some of them would get broken."

Communication with NGOs and decision making

Though in the very starting, we found that many of the groups were in dark about their responsibilities and were unable to make any decision alone, thus, highly depended on implementing NGOs. One of the members in Kendua said,

"We don't understand this yet. Tell us more about it. Let us understand."

They stated that they need help from the CHT, CHV and NGOs in taking any decisions. There are no PGs or PIs working with complete independence. However, in the end line, we found the changed situation in

Durgapur and Kendua. In 2014, most of the PG members from Kendua said that they have communication with SATHI, but it has been SATHI only, not any other NGOs. They communicate with other PGs in the union level monthly meetings and ask government health staff to join. One of the members said,

“We communicate with other groups like us (Other sathi groups), when we attend the monthly meeting we just share with them about our activities; about the group works, investment types etc. In Upazila Sathi monthly meeting we all attend and we also share and talk about groups development, government peoples also present there”.

“We do not try to communicate with other organization for our own demand or anything else.”

PGs seemed to have gained the capacity to work more independently over the years but they are still not ready, according to them, to operate completely without assistance.

Engagement with UCs

During the baseline, most of the participants in Kendua informed that they have never heard about UCs, which includes the female members, their husbands, village doctors and CHVs. Only one village doctor, CHV and the TTBA could tell about UC, but they failed to elaborate on it.. The CHV said that, cashier form UC came to meet them and they do not know more about it.

During the end line however, participants were able to talk about UC or CCC in greater details and that it was in fact composed of representatives from several of the PGs like that of their own. However, the awareness still is not of the same level within all of the groups and not all of the groups get to interact and participate in forming UCs on an equal level. Some of the participants from Durgapur heard about the UC or CCC, but could not meet anyone from UC. One of the group members said that they were told that they would have to join the UC.

Engagement with Village doctors

Baseline information on the village doctors suggests that they were not oriented on SUSOMA. Since the baseline, many village doctors have been trained, though most of the village doctors in our sample were not.

One of the village doctors said he had good connection with the CHT and the CHV/ TTBA as she came to his work station regularly and told him about maternal and neonatal health. This village doctor also knew the members of PG as they are from the same locality and was willing to help the people in need. All of the village doctors from Kendua know that SATHI is an NGO that works for reducing maternal and neonatal death. The village doctor, who has been oriented with the SATHI, stated that he already referred nearly one hundred patients with maternal and neonatal health problem to the district hospital in Netrokona. All of them said that the CHT visits and inform about maternal and neonatal health regularly and also provides referral slip. One of the village doctor advised that more programs on awareness building should be initiated here to get good result on maternal and neonatal health and include the religious leaders in disseminating information after Jumma.

In Durgapur, all the village doctors interviewed have stated that they know about PG, and UC. One of them said,

“They (members) meet regularly on Monday... they (only female members) are given advice on maternal and neonatal care....it is good if they can really save money. ”

Village doctors from Durgapur also stated that they have regular contact with the PG members through meetings. One of the village doctor also said that this communication make it easier for the mothers to get care from themselves and their children.

Problems in forming PG

Challenges of having members:

In Kendua, many of the non-group members said that they have not been the members of groups for the following reasons:

- They were not present in this area when these groups are formed, later they migrated here from other places.
- The money has to be paid in every week. Even though the amount is low, they are not able to deposit this on a regular basis.
- Some of them are nervous that what other people would think if they fail to deposit the money even for a week.
- Some of the participants said that they do not like the idea of *shomitee./ group/ dol*
- Some of the women have not got permission from their family members to join this though had willingness to do so.
- Religion has been a barrier in some cases as one of the participant said, *“She is a Maulana’s wife.”*
- Some thought this would deal with interest (profit), which is not allowed in their religion or unethical.
“they collected money first, then it becomes an amount like 10000, 20000, 25000. Now they are investing them with interest. It’s not possible for me to live on interest. This is the main reason. ”
- One stated that she doesn’t have any child, which is why she found this investment as useless.
- Some thought that they would not be able to allocate time after doing household works, child rearing and so on.

According to the informants, the followings are the drawbacks of forming a PG:

Feeling of insecurity to get the deposited money back: One of the PG in Kendua was formed with 20 people and 9 of them left due to this reason.

“Many of the members were scared that their savings will be taken by other. We will not get them back. Therefore, many of the people left.”

As most of the female members of PG migrated from different areas, they are not rich and lack strong communication among themselves.

“They (local people) are living here on the government’s allocated land. Their husbands may have a shop, or engaged in small business...they have too many children to have any surplus from their income...”

Personal conflict among the members: One of the PG get broken on the same day of formation due to personal conflict of two wives of the same person.

Absence of the NGO staffs from the initial stage: Some of the female members of the PG in Kendua said that some people do not trust these PGs as no “officers” or NGO staffs were there from the early stage. Some of the members said,

“Many people say, ‘officers do not come (here) ... no signatures from the officers are here.’”

No paper works: As there are no papers, or slips came from organizational level, people have less faith in PG formation or deposition of money in Kendua.

People from different background: Many of the people in Kendua have migrated from different areas in Bangladesh. Therefore, they have different types of motivations and cannot comply with the PG formation processes. They are less confident about depositing money. The CHV from Kendua explained,

“People (living here) came from different cluster villages, or districts or other places.”

Policy of ‘interest’ sharing in the form of profit: The Muslim community living in the do not prefer the scope of getting ‘interest’ as this is forbidden in the religion. Therefore, they are not interested to form a group.

Most of the challenges and concerns mentioned above were found during the baseline exploration as is expected since forming of groups were taking place at that point in time. Over time, things have become more stable and people are more understanding of the purposes of the groups and the need to be in the groups over a long period of time.

Section 3: Impact of Social Capital on social determinants of Health Equity

In this section, we presented our findings that showed how increase in social capital might have impacted the indicators of health equity, i.e. access to health and health care in Durgapur and Kendua in Netrokona. As discussed earlier, population from these two upazila did not have full access to government health services during baseline due to their financial capacity, transportation cost and availability and also social injustice of not having the health care providers providing good care. Their absence in the health care facilities also hindered contributed in this regard. However, results from endline showed that this situation has improved with increased number of health service providers in health care facilities, greater linkages have been established and communication between local health care providers (CHV, TTBA, VD) and the public health care providers has improved. Influence of elites in terms of making the health care professional be more responsive to the needs of the people has increased as well.

Understanding health equity

Though it is not clear if people understand health equity as a concept, the activities of the PGs prove that they save and work toward ensuring that most of the members have access to the health fund. From the baseline, we found that all the PGs have their emergency fund to help the pregnant mothers in which they are committed to save 2 taka per week. In some of the areas, such as Kendua, they call this as *lillah fund*. If the members fail to provide the money for any week, they deposit twice that amount in the following week. This savings is considered as the most significant motivation to the members of PG. Many of the groups helped pregnant mothers for delivery or a pregnant mother's family member to get treatment. Though these assistances came from the emergency fund, mothers can also get help from the regular funds as loan which has to be returned within a given time with or without any interest depending on the rules agreed upon among the group members of specific PGs.

To carry on with the activities, most of the PGs have regular weekly meetings that are facilitated by the PG leaders to collect the regular deposits, calculating the deposited amount, and discussing financial and other emergency issues. In case of a crisis or health related needs, they can call immediate meetings to make financial arrangements if required. We found the PG members to carry out this tradition even in our Endline. PGs are working on creating health guidelines, flipcharts, and books which they discuss during their weekly meetings. As a group member suggested, their main task is “*to reduce maternal and child mortality in their area.*” This emergency help is not limited to the group members but also to any mother of the locality.

In 2014, the members in both Durgapur and Kendua said that they must deposit money for emergency fund, even if they are not able to provide the money for regular fund.

Prioritizing health

In the baseline we found that, though the PGs think that their financial capacity is not yet up to the standard to make massive plans, they are hopeful to do some activities which would reduce their problems with finance, health, and any other kind of difficulties. Their money would be used for any kind of income generation activities only if they can deposit a good amount. Some of the group members have already invested the money. This money can be given to the members as loan. Their future plans was associated with cattle farming, invest on rice cultivation/ share cropping, use for marriage ceremony of their children, use in case of need/ difficulties/ emergencies, keep the money in Bank, buy a pond and

start fish farming, provide the money as loan to the members of the PG with or without interest and lastly for the wellbeing of family members, especially for their children.

Just opposite to what we had when PGs planned during the initial stages of the program, in 2014 we found most of the members interviewed agreed that they prefer to use the emergency fund for the mothers and children who have to be taken to the hospital. This directly related to the interventions focused on health concerns and activities of SUSOMA. Most of the members of the groups and PI are highly motivated to spend the money for maternal and child health emergencies which implies that they understand the concept of getting health care. One of the member from kendua said,

“Isn’t it good if we spend for our mothers and children when they will need emergency health care! Suppose, the mother needs to deliver in the hospital, then, we should take her immediately. This is our main task (responsibility).”

However, one of the PG members from Durgapur said,

“We are aiming to save some money in the bank, such as 500 or 1000 taka per month. If the bank, then, provides us with loan, we will use the money to buy power tiller. If we rent that to other people, we will be able to earn more money.”

Improved Communication with Elites

Since the beginning PGs have been highly appreciated by the local leaders. In fact, the support they are receiving is acting as an active encouragement of the members of the groups to further concentrate on their activities. In Kendua, PGs have received donation in many format, such as,

- Many of the chairmen have provided BP machine and weight machine to CHVs so that they can do check-ups properly.
- The UP chairman also provided 20 kg flour and 20 kg rice for the emergency health fund of one PG.
- Village primary school teachers also managed to donate money
- In general most of the money is collected from the villagers.

From our findings in Endline, we found that support of the social elites persisted over the years. We found the active involvement of the elites in transporting, counseling and referring the patients to the health care providers, donating for the wellbeing of the PGs and supporting them in many other ways. In Kendua, we found that the seniors of that area said that they found all the groups as very useful. Most of the members said that they have got donations in the form of cash money, warm clothes for extreme poor, weight machines for mothers, rice, flour, edible oil and so on from the community, local government and local leaders where the social elites influences the decision on receiving them smoothly.

Linkage with local health care providers

Baseline information also showed that the village doctors as not oriented on SUSOMA, however, they knew that the PGs are small groups that save money. Since the baseline, many village doctors have been trained, though most of the village doctors in our sample were not.

It eh endline, we found that many of the village doctors are acting actively in the referral of maternal health patients to the formal health care facilities. One of the village doctors said he had good connection

with the CHT and the CHV/ TTBA as she came to his work station regularly and told him about maternal and neonatal health. This village doctor also knew the members of PG as they are from the same locality and was willing to help the people in need. All of the village doctors from Kendua know that SATHI is an NGO that works for reducing maternal and neonatal death. The village doctor, who has been oriented with the SATHI, stated that he already referred nearly one hundred patients with maternal and neonatal health problem to the district hospital in Netrokona. All of them said that the CHT visits and inform about maternal and neonatal health regularly and also provides referral slip. One of the village doctor advised that more programs on awareness building should be initiated here to get good result on maternal and neonatal health and include the religious leaders in disseminating information after Jumma prayer.

In Durgapur, all the village doctors interviewed have stated that they know about PG, and UC. One of them said,

“They (members) meet regularly on Monday... they (only female members) are given advice on maternal and neonatal care....it is good if they can really save money. ”

Village doctors from Durgapur also stated that they have regular contact with the PG members through meetings. One of the village doctor also said that this communication make it easier for the mothers to get care from themselves and their children.

Engagement of GO

In the endline, we have found that there is active engagement between the GO and the PG members on ensuring health care. In our baseline study, we could not get such information. The PG members meet the GO health officials in the monthly meetings in Union level. One of the PG member from Kendua said,

“Each of the PG has representatives who are TTBA. The TTBA refers patients to UHC’s FWA and request her to provide support to our patient. In most of the cases, we talk over the phone to upazila health complex DAI (FWA) about patients’ situation. We do not try to get help from government directly but we try to receive help from health facilities according to our demand. ”

PG members help the GOB in many ways, such as, informing the community about EPI and sending the list of new pregnant mothers and so on. The government health staffs also invited them to join some of the meetings other social elites where information provided by PGs influenced decision making and plan development of GOB. One of the PG members from Kendua said,

“We are not involved directly in government programs but in EPI sessions we support them, our TTBA and CHV also support them, our TTBA also sent pregnant mothers and newborn list to government health officials. We inform the community when the EPI sessions start. Directly our group was not involved with government works/program. We just support government in hand wash and EPI programs. CHT (name)di inform us about government program.”

“In upazila and district level we are respected, our list and our information helps government... and in district level meeting CHT (name)di represented us. She told us that our information influence government decision.”

Members of Durgapur also join meeting with GOB health staffs and other local elites. They shared their experience,

“We have good relations with government. We have meeting with chairman, member, school teachers, leaders from the community and PARI staffs, all of these people. Sometimes this is weekly or monthly. However, it doesn’t occur in every month. PARI discusses about maternal and child health. The GOB health staffs provided medicine. They talk about nutrition and food practices. Members (UP) also provide speech. However, they didn’t ask for any help from government, but it is possible to ask for. We are not attached to any government program. The government doesn’t even invite us in their programs. But, we invite them.”

“In EPI, the CHVs help if the government health staffs ask for help. The PG members also assist in EPI. Representatives from clinic and hospital work together and have meetings. Information collected by PG are provided to the hospital even if the members fail to join the meeting.”

“In the district level, we don’t get any value. The government staffs always say that “you are doing well,” but, they don’t provide us with any help in developing plans or development activities.”

In Durgapur, one of the PG group members is also a member to the community clinic management group.

“The government already donated 50000 BDT in community clinic management fund. PARI invites these community clinic groups in their programs also.”

Capacity building of CHV

In our baseline study, we observed CHV training that they get from the NGO office (SATHI and PARI). This took place in batches. These batches consist of around 16-22 participants. They are trained by the NGO staff from Netrokona and Mymensingh offices. Attendance and compliance to this training is high. The contents of the training include the following:

Pregnancy and newborn surveillance:

- Listing of all newly married women
- Listing of pregnant woman
- Listing of recently delivered women

During pregnancy:

- Danger signs of pregnant mothers
- Vaccine for the pregnant mothers
- Activities of a pregnant mother
- Do’s and Don’ts during pregnancy (ANC, not lifting heavy loads, danger signs, rest during pregnancy, having nutritious and adequate amount of food,

Post-delivery and Neonatal care:

- How to wrap t a newborn from 15th -28th day of its life
- Weighing newborns
- Benefits of breastfeeding; hand washing

In the endline, we found that the CHVs have been able to remember much from what they learnt from their training and have been able to apply them in real time situation. One CHV from Durgapur states,

“I received the CHV training 4 years ago when the group started. it was a 5-day long training in SUSOMA sathi office in Kendua upazila of netrokona district. (CHT) apa,(name) Vhai and other trainers trained us. I received training on pregnant mother and new born. They taught us on how to counsel pregnant mother. They also trained us on health education, food practices, hand washing, how to take weight of newborn, how to take care of babies. We were given some logistics to do these works. In those days, they talked about Sustho Shishu o Ma. We learned how to identify danger signs, newborn wrapping, weight measurement, what to do after identification of danger signs, breastfeeding, hand washing and so on. About pregnant mother, they trained us on danger signs. We learned that mothers can’t lift heavy things during pregnancy, they should have 4 ANC. They taught us food practices, what to do in case of any complications in pregnancy period, how to refer and where to refer, I have the referral slips, and sometime I refer them in the government health facilities. I also do a list of pregnant, newborns, recently delivered women, babies under 28 days and provide this to my supervisor (CHT). ”

CHV from Durgapur also emphasized on her communication with the public health facilities, as she said,

“I communicate with government health facility when I identify any complications in pregnant mothers; I communicate with FWV and FWA apa in FWC. Sometimes, I go with mother and talk with them (FWV). Sometimes, I talk with them over phone. Doctors respect us and also help us.”

One of the CHVs from Kendua shared her experience and told the importance of the training:

“We have learned a lot. We will be able to use them in action. If anybody delivers a baby in the neighborhood or anyone from our relatives, we will be able to use our knowledge to make them understand more or provide them with advices or educate them on these issues.”

One of the task of the CHV is to help community people to form PG and to motivate them to create and emergency fund that would be used for the wellbeing of pregnant mothers and child of the community. The members of a particular team shared their experience with the CHV’s contribution in formation of the team,

“She told, ‘you should form a PG. you should deposit 10 taka or 5 taka. If you deposit this money, that will be good for you. This is to keep our health better. If we deposit, that will bring profit for us. If we have money, that money will be used for the pregnant mother to take her (to the hospital).’ This is the reason for our creating this group.”

In the baseline, most of the informants’ perception regarding public health facilities was negative due to its being ineffective even in the working hour, health care providers’ bad behavior or their absence. One of the CHV has shared her experience that she assisted a 8-months pregnant mother with advice and let her to the hospital which helped her to get the opportunity for safe delivery from the hospital. She said that they are not hindered from the community to do their duty; however, most of the public health centers remain closed generally. Therefore, community people cannot get timely care from there.

Public health facilities, especially at the union levels, most often remain closed during the time when women are in fact free from their daily chores. This is a finding that stands true through the country.

Our endline survey states that the CHVs have the capacity to counsel the mother on many of the maternal and neonatal health related issues in both Durgapur and Kendua. They do household visits and identify the mothers and counsel them on healthy lifestyle and getting proper care. However, during a meeting with CHT in Kendua in our baseline survey, the CHT complained that the CHVs have not done the household visits properly as they could find very few women as pregnant which is not possible. In the endline, we found that the FWV seems to be happy as the pregnancy identification of CHV and sharing of that data helps the government information system in an excellent way.

In the endline, we found TTBA visits households and perform health promotion activities to all the mothers in the catchment area while in the baseline some of them preferred home delivery over facility delivery and felt capable of handling any kind of maternal complications. One of the TTBA from Durgapur said during the end line,

“I haven’t referred any mother to the hospital... I don’t do that without any approval from the doctor. If the doctor from DSK find any problem after doing check-ups for 4 times and ultrasound, only then he refer the patient. In two of the cases, the mother had delivery at home. The hospital staffs were called, but they came late and the delivery had taken place already. ”

Our baseline study found TTBA activities as following:

- Work on maternal and neonatal health promotion
- Encourage to have 4 ANC checkups, send patient to the hospital, enhance patients’ communication with the doctor
- Trained to identify danger signs of pregnant mother (severe headache, bleeding, edema, severe pain during labor, convulsion, delay in plasma, other organs of baby coming out earlier) and send her to hospital in case of presence of any, i.e. they would send the pregnant mother to hospital for foul smelling urination.
- *“After training now I can understand easily what is good and what will be bad for patient.. if I see any problem , I say to them, ‘take her to the hospital’, they listen to me. Isn’t this a change?” (TTBA, Kendua)*

One of the TTBA we interviewed in endline in Durgapur said that she has referred at least 20 pregnant mothers to the hospital, out of which 5 had c-section and 15 had normal delivery in the hospital. She said that,

“The baby was too big in the womb that is why I send her to the hospital. If we do this delivery at home, there could be pressure in brain. If the doctor suggests that there are problems after doing ultrasound, we send these mothers to the hospital. ”

The TTBA also does the following:

- Identify neonatal danger signs (if the umbilical cord does not dry up, infections, cold, breathing problems)
- Encourage to provide colostrum to the baby
- Assist hospital/ government staffs to be informed about pregnant mothers and present during delivery

- Their target group include mothers and their family members including mother-in-law and the unmarried
- They also encourage other members to save more

One of the TTBA who is a member of a group in Durgapur for last 4 years said,

“If any mother/ pregnant mother need any money during her pregnancy, if she doesn’t have any money, the groups provide her with money as loan. This money is given as loan without interest and the mother has to pay it back when possible. This mother can be a member or not.”

Much of the TTBA activities remain the same over the years as our endline study reveals.

During the baseline, TBAs were just being trained. Therefore, there was not much to report on them. However, over time, TBAs have been trained and as it has been documented, they have been maintaining linkages with the health system steadily. In the end line, TTBAAs said that they had meetings with government health staffs on a regular basis. On these meetings they share information on,

“If someone gets pregnant, if mothers have any danger signs present or if the ultrasound report is not good.”

They said that as a member of PARI, they meet with GOB health workers and the local elites. The GOB health workers respect them. One of the TTBA said,

“How is it that they don’t respect us. We go to them with patients. If they don’t respect us, if they won’t provide quality care, why would we go there? Could we go to them if they don’t respect us?”

TTBAAs found that their life has been changed since they joined these groups in terms of knowledge, relationships with people and new linkages with elites and government officials. One of the TTBAAs states that there are changes in the society as well after commencing groups,

“Mothers died, babies died previously...any woman might have 10, 5 , 7 or 8 children... nowadays they have 2 at best or 3. Isn’t this a change? The mother in labor died before as soon as she delivers... Now you won’t find any mother dying even if you search thoroughly... none of the newborns die now...very few babies are born with weight less than 3 kilo ... Mothers go to the hospital as they understand that delivery at hospital would ensure good health for the mother and the baby... isn’t the change that happen after they got the message?”

Confidence building at individual and group level

During the baseline, several members said that they will be able to use the money that they are saving for their family’s well-being through the benefits from several investments. However, that was still in the planning stage. One of the female members said,

“We have created this PG...if I die; my child will be able to get back the money after 5 years and will say that his/her mother left this money for him/her.”

However, they are not yet certain if they can take all types of decision by themselves. They thought that they are in the learning stage yet and will gain more knowledge from the CHVs. One of the PG members said,

“We are learning from her (CHV). We have to learn for her more.”

In the endline, we found that people are becoming more and more confident over the passing years. In Kendua, most of the participants said that they are benefitted as they learned about maternal and child health besides management of a group through leadership qualities and are more conscious now. They learned about the following:

- Danger signs
- Vaccination
- Health care during and after pregnancy
- Health check-ups
- Record keeping
- Monitory management
- Team management

One of the PG group said that they are confident that they would be able to run alone even if the support from SATHI is taken out. One of the members said boldly,

“Yes now we think that we can work as an organization”.

“We think that now our organization/group can replace the government offices / private completely.”

“Yes we are capable we can”

“We can work individually”

One of the PG of Durgapur said that it is not possible to run alone without help of others. She states,

“This group cannot work alone without assistance from government or at NGO level as if they didn’t help us, we couldn’t do what we have done yet. They are the partner of our success.”

The president of a PG in Durgapur said,

“If PARI won’t help us in this way, we would not be successful in saving mothers and babies. I heard that they are taking out their support in next October. So, we are trying to get ready to work alone.”

Some members in Durgapur said that, the president of the PG was also invited to get training on managing PG.

The capacities are developed at individual level in the following areas:

- Development of knowledge about maternal and child health

- Managerial capacity
- In some instances, decision-making capacity
- Confident to run the PG without NGOs help in some areas

We found that the PG members are not only thinking about their family's wellbeing but also interested to help their community people, especially the pregnant mothers. One of the female member presented in a FGD said,

“Suppose, anyone is in danger and we give her the money. After she is rescued from the suffering... and she gives back the money to us... None of the members give us any profit... but give back the capital money.”

They said that they are becoming more knowledgeable from day by day from the discussion with CHVs, especially on the maternal health. However, they know little or nothing about neonatal health. In Kendua, the CHVs have regular meeting with the CHT where a lottery takes place. Each of the members selects a topic and tells others on the topic which increases their knowledge. Most of the CHVs can tell something on these topics.

The learning included the following,

“the pregnant mothers...if they suffer from fever, they need to go to the hospital... what happened if they suffer from headache, abdominal pain, fever, convulsion, bleeding... you know, if these symptoms are seen, the mothers need to be taken to hospital. We have learned all of these things...”

The members in Durgapur stated that they are satisfied as their activities helped the rural women,

“This is not mere wastage of time...but, we are helping...we are helping the pregnant mothers and the children. This is our reason to be happy.”

Members' activities are also praised by their family members and the community people. One of the female members said,

“I took an amount of 1500 taka...for my sick husband...He has some chest disease... So, I took 1500 taka from here as I could not manage it at that moment... This money was used for curing my husband...My husband praised me for this...everyone does so...”

The capacities are developed at group level in the following areas:

- Tendency to join group discussion in taking any decision
- Learning from CHVs/ CHT/ and other programme partners
- Inclined to help the community people
- Collective savings
- Collection sharing of ideas

Members from Kendua said that dissemination on groups' activities would bring success,

“We need to share about our group activities with community peoples, we need to arrange a large monthly meeting with community people in each and every month, and we need group works for that.”

Members from Durgapur set an example of collective sharing of thought,

“with 30 taka from each, the members arranged annual meeting where they not only shared their ideas but also accommodate entertainment for children and refreshment for the attendees. ”

One of the staff from PARI Development Trust expressed,

“Everyone deposits 2 taka per week in this lillah fund. In general, this fund may not seem to be necessary, but, sometimes people may need an surgery and may have to go to Mymensingh (for further treatment). Then, they have to pay a lot of money for that. Suppose, there are 2-4 thousands taka has been deposited in this fund. They donate this money. None has to return this. They say, ‘we give alms to the beggar in a small amount which is not really that much helpful. They (save the money and) donate warm clothes during winter and also give them semai, sugar, saree and lungi.”

The PIs in Netrokona are highly motivated to work in reducing maternal and neonatal death. The PI leaders and the members took this task seriously.

“I was in the primary group first... then I went to the UC and then I got elected in the PI (she smiled)...I am happy to be here, as all the activities that are carried on here are the most important for the community people.”

Examples of activities of PI members would make this much clear:

- The PI in Kendua successfully helped a mother with complications. This mother has several cases of child death. Therefore, the PI president identified her as a ‘risky’ case and took her to the hospital in Netrokona. She was later referred to Mymensing Medical College. The PI president collected the money from the emergency fund and helped in c-section. Therefore, the mother’s life was saved.
- There is a central committee in PI that is responsible for monitoring activities of PGs on neonatal and maternal health issues and others.
- Each of the PG submit 10 taka to the PIs and this money is deposited to the bank account
- The PI members meet regularly to discuss on the PG activities and updates. They also call for suggestions from others.

The PI observed in Durgapur had the following special features:

- None of the PI members are poor now
- All of the members’ decision would ensure the future plan of the PI or at individual level.
- In case of providing loan from the emergency fund, the members call a meeting and disburse the money as soon as possible. At the same time, they ensure follow-up of the patients.
- The PI invested money on ventures that helps to carry the patients to the hospital, such as, van.
- The PI is well aware of the step down of NGO after a certain period. They are not yet confident, but, they are getting prepared to do so.

In Durgapur, two of the PIs were old as they were formed under another programme and another one is a new PI. All of the PIs were found active. Both of the old PIs have good linkage with the public health system, and other local government offices. One of those PIs has the plan to buy land and develop an

office there. Another old PI has already bought their land. Both of the old PIs are confident that they would be able to continue without the NGO cooperation.

Section 4: Social Capital and Health Care Seeking

In this section, we would share our findings on impact of increase in social capital and change in health care seeking behavior. During our formative study, we found that most of the informants are unaware of services available in the public health service facilities and have negative ideas regarding these facilities. They used to see the village doctors and the traditional birth attendants for maternal and child health problems. However, at 2014, it seems that the community people have increased faith on formal health care and trying to seek care from these places.

Health care seeking Behavior and practices

During the baseline, the PG members said that they have learned about maternal health from NGO staff, but, they are not informed about child or neonatal health. However, in the endline, we found the group members stating that they now have learned about both maternal and neonatal/child health from the CHT, FWV and CHVs. The TTBA, who have well communication with PGs, said that this initiative would be helpful for all the mothers in this locality as this would not only help in health related emergency, but also for income generating activities.

One of the PG members from kendua said that the CHVs have given them information on what to do in emergencies, such as, if any pregnant mother falls in any type of problem or if anybody suffered from any danger signs and where to take the sick person.

“She (CHV) told us where to go if anybody becomes pregnant and suffers from headache and fever.”

After three years of intervention in Kendua, the non-members started to know that these groups also care for health of mothers and babies. The women of Meladahar village who are not members of any groups or NGO activities found that these group is different than other NGOs (i.e. ASHA, BRAC, PADAKKHEP, SAS, CMC) working there whose activities are “merely exchange of money (depositing money weekly and getting loan)”. Though the group is also engaged in monetary matters it also deals with issues of maternal and child health emergency, health education, compilation of information on pregnant mothers, identification and their regular health check-ups, and other health needs. The CHV provides regular visit to the mothers, provide booklets to the mothers so that they can take better care for their health. They stated that due to this group the general consciousness regarding maternal health has increased. One of the women who is not a member of the group said,

“This women’s group is totally different. They work with their own members. They find out what is the expected date of delivery, date to vaccinate... they work on these issues. They also provide booklets. They give four times checkup...they tell us how to take care of the baby... how to provide care... the pregnant mother shouldn’t do hard work... They (group) also work with the government hospital. ”

In Durgapur, one of the group members described the mechanism of using their savings and linkage with public hospitals,

“We deposits money in the form that each of us gives 2 taka which constitute 50 taka per month. We also go for seasonal money collection twice a year. We deposit this money in the emergency fund. If someone gets sick, if the pregnant mothers faces any trouble or if the newborn are in bad health, we send them to the hospital with this money. We take the pregnant mothers. We help her.

We call the van or person to accompany her. We have referral slip with us. We write the name of the patient and her husband's name on it. We take that with us and show that to the doctor. Then, they find that this patient is from PARI and provide emergency treatment. They help us. Otherwise, they won't."

Referral linkage with health system

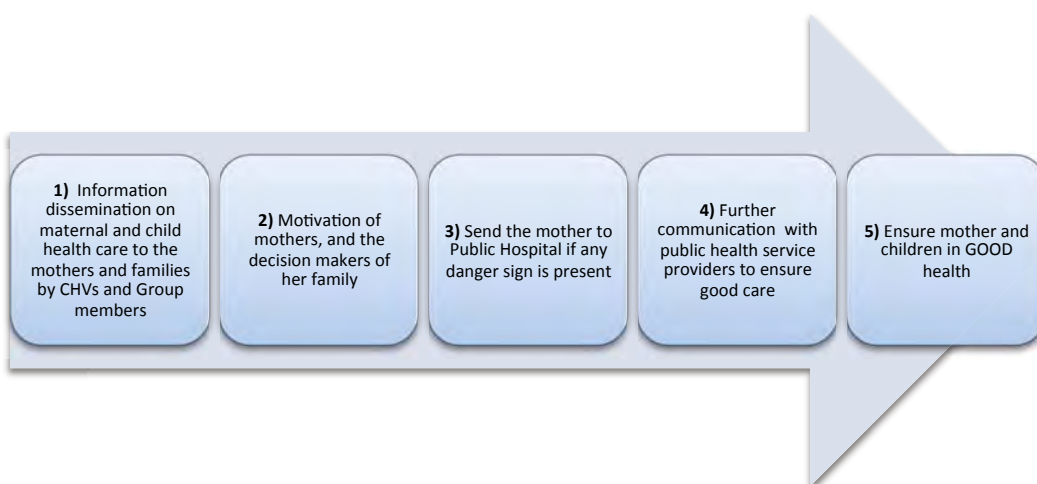
In 2011, we did not find many cases of referred pregnant mothers to the facility for delivery. However, in 2014, we found three active PIs in Durgapur (namely, Hira, Mukta and Jhinuk) and one in Kendua (Shukher Shondhane society) both of which are playing important roles in improving maternal care, including referral. In Durgapur, participants from all three PIs confirmed that they assisted in sending patients to the hospitals and helping them to get timely care through improved connection with local elites.

One of the Managers (Durgapur) explained that their organizations goal is to ensure empowerment of women and PIs are aimed to increase social capital among the poor and reduce poverty. These two are interconnected, as he describes,

"Two things work here. One is increase in capital (in term of money) and another is increase in capacity to boost in capital. The jovial natures they have... that means, when we initiate the process to develop a group, we say that e will not only think about money, but, being grouped means making relationships, i.e. making sisterhood, in which she will cry for me when I am in trouble and I will smile when she would be happy. The most significant result of being grouped is the development of solidarity."

The PI members do not only save and use the money for further investment or help the mother and child in danger to get timely treatment, they also work on any community need, such as, if there is a broken road, they reconstruct it, said PARI manager. The emergency fund helped 216 patients in Durgapur which acted as a factor in reduction of maternal and neonatal death.

Their activities can be described with the following chart:



Flow Chart 1: PI's involvement in ensuring health care

One of the PI members from Durgapur stated how they helped a mother who suffered from a danger sign in her seventh and half months of pregnancy. She articulated in the following way,

“She was bleeding a lot. It was seventh and half month of pregnancy. Her mother-in-law and father-in-law decided that she should stay at home as bleeding is natural during delivery. They thought this is her time to deliver the baby. So, we went there. We talked and talked. They (mother-in-law and father-in-law) refused to take her to the hospital. Then, our president went there and made them to understand the situation. She took her (mother in bleeding) to the hospital where she got treatment and come back home. She (mother) didn’t deliver there (hospital) on her seventh and a half months, but later on ninth months. But, her mother-in-law and father-in-law thought it was time to deliver and that’s why she doesn’t have to take to the hospital!”

To help this mother, they provided loan of 1500 BDT for her treatment. As this is to save this mother and her child, they keep it as interest free and to be provided back in small installment over a long period. According to them, money is another de- motivating factor in getting treatment.

They stated some challenges in sending patient to the hospital. They are:

- Some of the family members disapprove to send the patient to the hospital.
- Some of the parents of newborn or children under five years do not understand or underestimate the danger signs. In one of the cases was of delivery of triplet where the PI of Kendua sent the mother to the Mymensing Medical College Hospital and helped her with a loan of 2000 BDT. The mother had history of her four children to die just after delivery, therefore, she requested for c-section and delivered three healthy kids- one girl and two baby boys. However, after returning home from hospital, the daughter got infected with Pneumonia and die later. The mother and family could not identify that the daughter is suffering from this disease. Another case was of a *Hazong* mother, where baby’s organs other than head were coming out first during delivery. The mother of the pregnant mother begged to one of the manager,

“I don’t need any son-in-law, but, save my daughter. If my daughter survives, she will have babies.” The PI in that area provided a 2000-taka-loan to the mother and sent her to the hospital where she got treatment and come round.

- Sometimes, the doctor in the hospital denied to provide care in past after they send patient there. One of the PI member states that,

“We send a delivery case to Mymensingh (Mymensing Medical College Hospital) once. Then the doctors disallowed to provide any treatment to her. Then our president calls over the RMO (residential medical officer). He helped afterwards. ”

She also said that the meeting they have at district level public health service providers (both health services and family planning officials) once in three months, has created linkage with the health services and helped in reducing this kind of refusal of patients from hospitals.

SATHI staff explained linkage with GO and PI in the following way,

“Two representatives from each PI join the Upazila Technical Meeting where other participants are upazila health and family planning officer (chairperson), UFPO (co-chairperson), PARI

health coordinator (secretary) and others are the respectable guests. Here the PI members represent their community. They also have regular meeting with chairmen. In the district level, the PI members and the CHVs join the meeting. The public health staffs didn't give them any value before, however, it is different now. They are well respected there."

Challenges in continuing PI'S tasks

To run the activities of PI in improving maternal and child health care cadres of dedicated community members are needed. They have to be highly motivated and should motivate others. However, the way to organize the groups was not always smooth. Implementation agencies found the following challenges:

- Lack of support from family or community for the female members act as a big issue as all the members are female and they need help from their family to continue work.
"local religious leaders posed a lot of problems in making the women to work outside their home. We also had to manage husbands and the mothers-in-law."
- Some of the PG members tried to invest the money on interest which is as much as 10 taka per 100 taka. Many members disagreed and many of the groups broke down or about to broke. Therefore, PARI has to go and counsel the PGs not to do that or make the interest much less.
- In the initial stage, PARI has to provide help in every decision making. No, almost all the groups are capable of decision making, even the financial ones.
- There were many NGOs working here before PARI started working here, whose main activities were based on providing loan to applicants and PARI as aimed to empower the local poor with their own money. Therefore, PARI had to motivate them to save money and use that money for investment rather getting loan on interest that is not easy to pay back in a lifetime.
- In the initial stage, the retention of CHT was higher as they lacked support from their family as well as the community.
- Training of the CHV is generally 5 day-long. During this period she has to stay far from home, which is not approved or taken very well by the family members.
- The time *provided* (2009-14) is not really enough to ensure sustainable leadership in community.
- Male participation is necessary *which is at its minimum level*.
- Collection of seasonal donation is not always approved by the family members as this is not good-looking if *women go from house to house to collect money, paddy, rice and so on*.
- Formation of PGs is not uniform. Sometimes they improvise the rules and bend the inclusion criteria for membership.
- Though there are challenges, managers are hopeful about the future sustainability of PI model as one of them said,

"The present PI leadership trends make me to believe that they will sustain for a longer period. However, in the initial stage, we may have to suffer a bit. The good thing is as we tried our best to build capacity and teach them on how to keep on working. They have started to show us their best. Some already build sustainability fund by themselves. My experience says if people are trained well, they can work better. " (manager, durgapur)

One of the PARI staff shared the experience,

“There are some families that don’t allow women to work outside. As for example, we had been to a...para. Three PI leaders were with us. We work there until 8 pm. Then, one of the leader’s husband was angry. Will he allow her to work again? ”

“PI will survive, I believe. Because, there are some leaders who are unique and they have a dream now that they will work for the society and community. ” (manager, kendua)

Table: Challenges in health seeking from public health services found in 2011-12 and 2014

Challenges	2011-12		2014	
	Durgapur	Kendua	Durgapur	Kendua
People’s Knowledge on danger signs, health problems	Present	Absent	Improved	Improved
Health care Providers Behavior	Not always welcoming Some did not care for even patients with severe cases.	Sent to hospital in rare cases Many who visited by themselves to the hospital complained regarding absence of health care providers even during duty time.	Mostly welcomed Strong connection established between the health service providers and the PI leaderships.	Mostly welcomed Strong connection established between the health service providers and the PI leaderships.
Distance	Worked as a demotivating factor, used van, boat as transportation to go to hospitals	Very few went to hospital	Use emergency fund to take to the hospital whatever the distance is.	Use emergency fund to take to the hospital whatever the distance is.
Cost of treatment	People borrow (with interest) from different sources, sell properties and some uses emergency fund	Very few uses emergency fund	Emergency fund is there for members and non-members to get health care Money is provided in form of loan without interest in small	Emergency fund is there for members and non-members to get health care Money is provided in form of loan without interest in small

			installment over a longer period.	installment over a longer period.
Communication with elites	Present.	Absent or present in small scale.	Improved through tri-monthly meeting with local elites, public health service providers and inter-personal relationships with them.	Improved through tri-monthly meeting with local elites, public health service providers and inter-personal relationships with them.
Inability to decision making	Present in some areas.	Present in almost everywhere.	Present in small scale.	Present in small scale.
Family member's disapproval	Present in some areas.	Present in almost everywhere.	Present in small scale.	Present in small scale.
Communication with Community Clinic	Absent	Absent	Present	Present

Discussion: Impact of social capital in health equity and referral

In both of the upazilas, we have seen changes over time in terms of health equity and referral of maternal and neonatal cases to formal health care facilities. It is evident from studies that health equity exists where all the members from the community have equal opportunities to be healthy, which is, undoubtedly, connected to factors such as socio-economic status, ethnic identity, religious identity, gender, sexual identity and physical fitness or disability. Ensuring health equity is influenced by distribution of social determinants of health, i.e. level of education, housing, transportation system, employment opportunities, social security and access to public health systems. Changes in any of the social determinants of health can cause changes in health equity.

We can discuss the health equity situation of Kendua and Durgapur in terms of four issues, such as, the role of the public health service practitioners, capacity building of the community people in terms of achieving health equity, presence of actions as social movement and its sustainability.

Our exploration shows that there had been ample changes in public health service providers' attitudes and professional behaviors towards the rural community members of the Netrokona. We found that many of the neonatal and maternal cases were never referred to the health care facilities because of predicted nature of the health care behavior. The most general complaint against them was related to their absence in the hospital during working hour and neglecting the patients after arrival to the facility. Distance, transportation and financial problems were other factors. However, later we found public health care professionals effectively using health care resources. The local and informal health care providers who were not interested to refer any patient were more eagerly communicating with the formal health care providers in any kind of need which results into a better health outcome for women and child in the community.

Capacity building among the community people is another excellent outcome that we found in the intervention area. Organizational experience suggests that it takes around 2 to 3 three years before one can observe some of the expected changes in the community. Perception of groups has clearly changed over time. Initial apprehension is just about all gone and has become replaced with confidence in the groups, its activities, and vision. Even the non-members are now able to talk about the things these SUSOMA women's groups are doing. The vision that it relates to a collective action for the good of all in the community seemed to be lacking in the initial stages. However, this is not the case anymore. This was more pronounced in Kendua than in Durgapur, but the differences are all but gone now. If we look into the matter with a probing set of eyes, we saw that the activities in Kendua were limited to savings and sanctioning loans, with no vision of development, while there are some added activities in Durgapur to make it a bit different. However, there have been positive changes. Regularizing weekly meetings, discussing financial matters, deliberating emergency issues, accounting for regular and emergency funds, and working on creating maternal and child health related materials is what management of PGs is all about now. In their mature state of being, these activities run smoothly as the members see clearly the benefits that are being reaped from their activities. People those who have been in the PGs for some time, feel an ownership in this. The cadre of informal health care providers, i. e., TTBA, TBA and VD who seemed to be the first health care seeking contact for any mother or neonate in danger, has become more powerful agent in referring. Community members of this area are getting empowered with an increase in their savings and are thinking of improving the community as well, through better transportation system, better economy with businesses like poultry, farming, animal husbandry and so on. With improved

financial capacities, the members as well as non-members of PIs are concentrating on getting better health care. We found that there had been changes in knowledge regarding health, danger signs and information on where and how to get good health care. The emergency fund, unquestionably, have great influence in creating the confidence to face maternal and neonatal health disasters and the capacity to think about the community together. The group leaders have to show their performance in cash management, decision making and management of the group members which also made them courageous. A linkage with social elites is crucial for visibility and support. However, this should be actively sought and not passively received, which still is the case with many of the PGs.

We found that the capacity of the PG members is enthusiastically used in manifold activities that are creating a social movement in the intervention area, where they are actively collaborating with the government in several of their programs, i.e. EPI, hand-washing, maintaining pregnancy register. Participation in their programs was also observed and heard about. This is going a long way in soliciting governmental support and acknowledgement. Regular training of the CHVs is essential for their development with regard to their skills in identifying maternal childhood danger signs. This also helps them in their referral chain and consequent linkage with the public health facilities. Regular training of the CHVs on PG formation and health related matters are making them confident in managing cases in the community. However, their management is mostly related to counseling and referral. The referral part of their activity is often hampered due to non-functioning public health facilities, which the PGs are also trying to work with. They are trying to hold the providers accountable and motivate them to provide services regularly. TTBAAs are proved as an asset to the program. They work as linkages to the health facilities and also provide training and knowledge to the groups of which they are often a part of. Initially the village doctors were not trained and they did not know much about SUSOMA activities with regard to maternal and child/neonatal care that were being implemented through its activities. However, since then many of the VDs have been oriented and they have come to find out about the activities. It is difficult groups to work with, since they are well set in their ways, however being able to include them in PG activities are benefiting the cause of SUSOMA. Besides conducting their regular activities of identification of danger signs, counseling, and referral, CHVs also take active part in raising awareness regarding mothers' and children health issues with the communities they live in. They take initiatives to establish linkages with the government health care providers as well. All of these activities is also helping spread the word of their groups and even the non-members are getting to know about them.

One of the major issues the programme should think about is based on its sustainability as there have been several issues related to disbanding and groups collapsing. However, over the years, they have been able to minimize the issues and the collapse is less heard of than before. However, as manager of the NGOs suggested, it is natural to expect that some of the groups simply wouldn't sustain for whatever reason. Initial days of unsure and nervous members are long gone it seems. These days most of the PG members appeared confident, able to talk about their activities, and confident that they were able to sustain even without the intervention from the NGOs. This most certainly relates to the interventions of the program of forming groups and discussing and implementing activities together. Just as in the case of individual, the groups are also becoming more and more confident. They are venturing to take their own decisions and also wanting to expand their activities into the wider community. They are planning on trying to involve people from the community in general into some of their activities. Light of hope seems

to be shining slowly but surely. It is only prudent not to expect radical changes in a project like SUSOMA, where all is dependent on community uptake of intervention messages, group formation, savings, and development. All of this takes a lot of time – more time than time-bound research projects can offer! The most important thing, as we look at it, is the connection between mother and child health and overall development. And this connection has been made with success as our report details out. As people realize the connections between saving money, gaining knowledge on maternal and child health concerns, and times of need and danger, the more they feel the need to be a part of the groups. The more it starts to act as safety nets for them. This is also expressed in their activities and enthusiasm.

Findings: Assessment of Social capital

All of the findings that we present here are from the surveys conducted at the baseline and endline phases of the OR to measure social capital based on the tools adapted from the World Bank package of tools for the same purpose.

In this regards we would like to mention that when we conducted our initial interviews in 2012, the project, known as SUSOMA, was still only in its formative stage where the Primary Groups were being formed. In terms of processes being unfolded on the ground, Durgapur has been farther ahead than Kendua, which spoke for a number of differences between the two field sites. In addition, unlike Kendua, in Durgapur there has been older People's Institutions (PIs) already in existence at the time of introducing the project in the area. In other words, people in the community in Durgapur are relatively more aware and oriented to the activities of PIs. Capacity building, which is related to all the integrated activities of the project, ensued once the groups were formed and they became regular in their meetings and savings activities. Experience of implementing People's Institutions around the country makes it clear that organizations like the People's Institutions take a lot of time to gain grounds and before it starts to bear fruits. Organizational experience suggests that it takes around 2 to 3 three years before one can observe some of the expected changes in the community. In fact, when we conducted the endline interviews and observations in 2014, managers still suggested that the time was not ripe yet.

Contextual factors (descriptive statistics and qualitative findings)

Here we present our findings, presented in tabular comparative format from the household questionnaire (n=335 during baseline and 310 during endline). Wherever necessary and relevant, we would be sharing qualitative insights into the issues discussed.

Structural social capital

Table 1: Organizational density and characteristics

Item	Baseline			Endline		
	Durgapur n (%)	Kendua n (%)	Both n (%)	Durgapur n (%)	Kendua n (%)	Both n (%)
Are you or is someone in your household a member of any groups or organizations? (yes)	114 (71.2)	105 (60)	219(65.4)	99(66.9)	99(61.1)	198(63.9)
Do you consider yourself/household member to be active in the group?						
Leader	8 (7.0)	15 (14.3)	23 (10.5)	20(20.0)	18(18.2)	38(19.2)
Very active	66 (57.9)	80 (76.2)	146 (66.7)	37(37.4)	58(58.6)	95(48.0)
Which of these groups is the most important to your						

Item	Baseline			Endline		
	Durgapur n (%)	Kendua n (%)	Both n (%)	Durgapur n (%)	Kendua n (%)	Both n (%)
household?						
ASA	11 (9.6)	13 (12.4)	24 (11.0)	5(5.1)	6(6.1)	11(5.6)
Grameen Bank	9 (7.9)	16 (15.2)	25 (11.4)	0(0.0)	0(0.0)	0(0.0)
BRAC	5 (4.4)	3 (2.9)	8 (3.6)	4(4.0)	6(6.1)	10(5.1)
DSK	12 (10.5)	0 (0.00)	12 (5.5)	7(7.1)	1(1.0)	8(4.0)
PARI (SUSOMA)	66 (57.9)	0 (0.00)	66 (30.1)	72(72.7)	1(1.0)	73(36.9)
SATHI (SUSOMA)	0 (0.00)	71 (67.6)	71 (32.4)	1(1.0)	74(74.8)	75(37.9)
Are group members mostly of the same extended family? (yes)	27 (23.7)	15 (14.3)	42 (19.2)	39(39.4)	8(8.1)	47(23.7)
Are members mostly of the same religion? (yes)	97 (85.1)	86(81.9)	183 (83.6)	72(72.7)	68(68.7)	140(70.7)
Are members mostly of the same gender? (yes)	104 (91.2)	101(96.2)	205 (93.6)	92(93.0)	88(88.9)	180(90.9)
Are members mostly of the same political viewpoint or do they belong to the same political party? (yes)	21 (18.4)	18 (17.1)	39 (17.8)	16(16.2)	13(13.1)	29(14.7)
Do members mostly have the same occupation? (yes)	63 (55.3)	87 (82.9)	150 (68.5)	25(25.2)	41(41.4)	66(33.3)
Are members mostly from the same age group? (yes)	23 (20.2)	10 (9.5)	33 (15.1)	3(3.0)	19(19.0)	22(11.1)
Are members mostly from the same education level? (yes)	24 (21.0)	5 (4.8)	29 (13.2)	10(10.1)	12(12.1)	22(11.1)

Most of the people, irrespective of them being members of any Primary Groups belonging to the People's Institution of SUSOMA, belong to at least one group/organization, though the trend is a bit higher in Durgapur than in Kendua (D: 71%; K:60%). The trend remains consistent over the years as the endline suggests (D: 67%; K:61%). This difference in sub-district level is understandable since PIs have been formed in Durgapur much earlier than in Kendua. Among the informants, during the baseline survey, a substantial majority in Kendua (90%) said that they are in fact very active or are leaders in these groups/organizations that they are a part of. The overall trend remained similar during endline, though proportion of people considering themselves as leaders increased substantially (D: 20%; K:18% during endline as opposed to D: 7%; K:14% during baseline) with a similar decrease in active participation.

Active participation/being a leader was considerably higher among the people in Kendua, than in Durgapur during the baseline and the trend remained similar during the endline (D: 65%; K:90% during baseline and D: 57%; K:77% during endline).

In Durgapur, people have been exposed to more NGO activities than in Kendua. It is believed that this aspect of social context has a lot to do with how people respond to new initiatives. In Kendua, after overcoming the initial hurdles of forming groups, people are coming together actively, while people are reluctant in Durgapur, though in some places the intervention has become stable in terms activities and regular meetings.

Among the groups mentioned, PARI in Durgapur (baseline: 58%; endline: 73%) and SATHI in Kendua (baseline: 68%; endline: 75%) were most prominent. ASA and DSK in Durgapur (10% and 11% in baseline and 5% and 7% in endline) and Grameen and ASA in Kendua (15% and 12% during baseline) were also quite popular, though much less than PARI and SATHI. Interestingly, Grameen seems to have seized its activities in both Durgapur and Kendua since no one mentioned them during baseline. There were several others NGOs working in the area, but they were considerably smaller in their membership in these communities.

In terms of group composition, we observed interesting changes during the endline. It seems, people of differing backgrounds, including religion, occupation, and political views are joining the groups, making them more heterogeneous than what we found during the baseline. In terms of religion (Islam) and occupation, the composition was homogeneous during baseline, but not so during endline. In terms of religion, overwhelming majority were Muslims during the baseline survey (D: 85%; K:82%). These proportions decreased significantly when we asked them about it during the endline survey (D: 73%; K:69%). A similar trend with a greater increase heterogeneity was observed during endline with regard to occupation (D: 55%; K:82% same occupation during baseline as compared to same occupation during endline - D: 25%; K:41%). Heterogeneity is much greater in terms of other categories such as political affiliation, age group, and educational level.

Table 2: Decision-making and leadership

Item	Baseline			Endline		
	Durgapur n (%)	Kendua n (%)	Both n (%)	Durgapur n (%)	Kendua n (%)	Both n (%)
How does the group usually make decisions?						

Item	Baseline			Endline		
	Durgapur n (%)	Kendua n (%)	Both n (%)	Durgapur n (%)	Kendua n (%)	Both n (%)
The leader decides and informs the other group members	19 (16.7)	8 (7.6)	27 (12.3)	50(50.5)	23(23.2)	73(36.9)
The leader asks group members what they think and then decides	16 (13.2)	7 (6.7)	22 (10.0)	0(0.0)	3(3.0)	73(36.9)
The group members hold a discussion and decide together	74 (64.9)	90 (85.7)	164 74.9)	45(45.5)	73(73.7)	118(59.6)
Overall, how effective is the group's leadership? (yes)	108 (94.7)	104(99.0)	212(96.0)	97(98.0)	98(99.0)	195(98.5)

With regard to decision-making within the groups, trends remain the same during the endline as found during baseline. A much greater participation was observed among the people in Kendua, where in most cases group members discussed and came upon a decision together (86% in baseline and 74% in endline). Participation was also good in Durgapur (65% in baseline and 46% in endline), but still considerably less than Kendua. The point to be noted here is that there has been a noticeable decline in participation in both sub-districts, but the decline in Durgapur has been striking – about 20% decline.

It should be noted that in 17% of cases in baseline and 50% of cases in endline, group leaders in Durgapur single handedly made decision, while this percentage was much less in Kendua (8% and 23%). However, almost all informants from both of the sub-districts mentioned that the leadership extremely effective.

Table 3: Networks and mutual support

Item	Baseline			Endline		
	Durgapur n (%)	Kendua n (%)	Both n (%)	Durgapur n (%)	Kendua n (%)	Both n (%)
If the primary school of this village/neighborhood went without a teacher for a long time, say six months or more, which people in this village/neighborhood do you think would get together to take some action about						

Item	Baseline			Endline		
	Durgapur n (%)	Kendua n (%)	Both n (%)	Durgapur n (%)	Kendua n (%)	Both n (%)
No one in the village/neighborhood would get together (yes)	7 (4.4)	4 (2.3)	11 (3.3)	143(96.6)	122(75.3)	265(85.5)
Local/municipal government	21 (13.1)	22(12.6)	43(12.8)	2(1.3)	36(22.2)	38(12.3)
Village/neighborhood association	5 (3.1)	0 (0.00)	5 (1.5)	3(2.0)	36(22.2)	39(12.6)
Parents of school children	27 (16.9)	23(13.1)	50(14.9)	3(2.0)	38(23.5)	41(13.2)
The entire village/neighborhood	74 (46.2)	107(61.1)	181(54.0)	2(1.3)	40(24.7)	42(13.6)
Who would take the initiative (act as leader)?						
Chairman	9 (5.9)	18 (10.5)	27 (8.3)	0(0.0)	4(10.0)	4(8.9)
Member	20 (13.1)	18 (10.5)	38 (11.7)	0(0.0)	14(35.0)	14(31.1)
Village leader/Matobbor	30 (19.6)	93 (54.4)	123(38.0)	3(60.0)	19(47.5)	22(48.9)
Children's fathers	11 (7.2)	0 (0.00)	11 (3.4)	0(0.0)	0(0.0)	0(0.0)
Head or assistant head teacher	13 (8.5)	1 (0.5)	14 (4.3)	0(0.0)	2(5.0)	2(4.4)
School committee's head	52 (34.0)	38 (22.2)	90 (27.8)	1(20.0)	1(2.5)	2(4.4)
If there were a problem that affected the entire village/neighborhood, for Instance (i.e. "crop disease"), who do you think would work together to deal with the situation?						
Each person/household would deal with the problem individually (yes)	37 (23.1)	32 (18.3)	69 (20.6)	132(89.2)	141(87.0)	273(88.1)
Neighbors among themselves (yes)	13 (8.1)	8 (4.6)	21 (6.3)	12(8.1)	16(9.9)	28(9.0)
Local government/municipal political leaders	60 (37.5)	53 (30.3)	113(33.7)	8(5.4)	12(7.4)	20(6.5)
All community leaders acting together	19 (11.9)	9 (5.1)	28 (8.4)	6(4.1)	13(8.0)	19(6.1)
The entire village/neighborhood	29 (18.1)	69 (39.4)	98 (29.2)	8(5.4)	17(10.5)	25(8.1)
Who would take the initiative (act as leader)?						
Chairman	40 (32.5)	35 (24.5)	75 (28.2)	3(18.8)	1(4.8)	4(10.8)
Member	33 (26.8)	31 (31.7)	64 (24.1)	2(12.5)	7(33.3)	9(24.3)
Village leader/Matobbor	18 (14.6)	67 (46.8)	85 (31.9)	9(56.3)	10(47.6)	19(51.4)
School committee's head	7 (5.7)	0 (0.00)	7 (2.6)	0(0.0)	0(0.0)	0(0.0)

In order to investigate into the social networks and support that existed within the communities, a couple of different hypothetical scenarios were presented to the informants. For instance, they were asked if the neighborhood school didn't have a teacher for a long time, then who do they think would take action in that regard. Responses show a dramatic reversal of roles in the community. Over the years people seem to have become more realistic and much less expecting of others getting together for a cause. During the baseline the most likely group would have been basically the entire village/community, though this response was more prominent in case of Kendua (61%) than Durgapur (46%). However, during the endline an overwhelming majority suggested that there really wouldn't be anyone getting together to address a cause (D: 97%; K: 75%). Interestingly, despite a large majority suggesting that no one would come forward, a substantial proportion in Kendua suggested (22%-25%) that others like the municipal corporation, a local organization, parents of school children, or the entire village would respond to such a need. This was all but absent in Durgapur.

During the baseline, in terms of leadership, people in Durgapur were divided with the head of the school committee coming on top (34%), with the village leader/matobbor and member of the union parishad coming in next (20% and 13% respectively). The situation in Kendua seemed markedly different, where most of the informants suggested that it would be village leader/matobbor first (54%) and only then the school committee's head (22%) and members and/or chairman of union parishad (both at 11%). The situation observed during the endline was markedly different. It was primarily the matobbor (D: 60%; K: 48%), with hardly any mention of the school committee's head as in baseline.

When they were asked about problems relating to agriculture (i.e. pest-epidemic) during the baseline survey, people in Kendua thought that it would concern the entire village, hence it would be all of them who would get together to solve the problem (39%), while people in Durgapur relied more on the local government (38%) than they did on the community at large (18%). In terms of leadership, people in Durgapur thought that it would be chairman of the UP who would take the lead (33%), while in Kendua people thought that it would be the community leader/matobbor who would lead (47%). However, things took a drastically individualistic turn during the endline survey where overwhelming majority suggested that it would be the individual families owning up to the problem and solving it on their own (D: 89%; K: 87%).

It should be mentioned here (as it has been mentioned earlier, that over time people have figured out that though it is optimistic to expect that people would get together and work toward a common goal, but it is also unrealistic. Again, previous experiences with other activities might have a lot to do with this.

Table 4: Sources of conflicts

Item		Baseline			Endline		
		Durgapur n (%)	Kendua n (%)	Both n (%)	Durgapur n (%)	Kendua n (%)	Both n (%)
To what extent do differences such as the tend to divide people in your village/neighborhood?							
Education	Somewhat	64 (40.0)	90(51.4)	154(46.0)	65(43.9)	77(47.5)	142(45.8)
	Very much	27 (16.7)	15 (8.6)	42 (12.5)	6(14.)	14(8.6)	20(6.1)

Item		Baseline			Endline		
		Durgapur n (%)	Kendua n (%)	Both n (%)	Durgapur n (%)	Kendua n (%)	Both n (%)
Wealth/material possession	Somewhat	88 (55.0)	105(60.0)	193(57.6)	83(56.1)	94(58.2)	177(57.1)
	Very much	19 (11.9)	26 (14.9)	45 (13.4)	29 (19.6)	10(6.2)	39(12.6)
Landholdings	Somewhat	85 (53.1)	82 (46.9)	167 49.8)	92(62.2)	59(36.4)	151(48.7)
	Very much	28 (17.5)	32 (18.3)	60 (17.9)	21(14.2)	32(19.8)	53(17.1)
Social status	Somewhat	78 (48.7)	61 (34.9)	139(41.5)	86(58.1)	74(45.7)	160(51.6)
	Very much	21 (13.1)	19 (10.9)	40 (11.9)	12(8.1)	37(22.4)	49(15.8)
Gender differences	Somewhat	31 (19.4)	51 (29.1)	82 (24.5)	67(45.3)	86(53.1)	153(49.4)
	Very much	9 (5.6)	6 (3.4)	15 94.9)	11(7.4)	28(17.3)	39(12.6)
Differences in age	Somewhat	34 (21.2)	71 (40.6)	105 (31.3)	85(57.4)	80(49.4)	165(53.2)
	Very much	7 (4.4)	16 (9.1)	23 (6.9)	5(3.4)	26(16.1)	31(10.0)
Length of stay	Somewhat	25 (15. 6)	42 (24.0)	67 (20.0)	62(41.9)	50(30.9)	112(36.1)
	Very much	4 (2.5)	1 (0.6)	5 (1.5)	1(0.7)	5(3.1)	6(1.9)
Political party affiliation	Somewhat	78 (48.7)	93 (53.1)	171 (51.0)	82(55.4)	99(61.1)	181(58.4)
	Very much	46 (28.7)	14 (8.0)	60 (17.9)	30(20.3)	35(21.6)	65(21.0)
Religious beliefs	Somewhat	10 (6.2)	20 (11.4)	30 (9.0)	61(41.2)	42(25.9)	103(33.2)
	Very much	4 (2.5)	2 (1.1)	6 (1.8)	25(16.9)	54(33.3)	79(25.5)
Ethnic background	Somewhat	11 (6.9)	16 (9.1)	27 (8.1)	81(54.7)	96(59.3)	177(57.1)
	Very much	1 (0.6)	1 (0.6)	2 (0.6)	3(2.0)	4(2.5)	7(2.3)

In order to understand and investigate further into structural social capital, we looked into the sources of conflicts in the communities where the study was conducted, namely Durgapur and Kendua sub-districts of Netrokona district. Differences between people are only natural and normal in a society. However, often these differences become the sources of conflicts. This is why we asked whether several of the otherwise known areas of differences ever became a source of conflicts for our informants.

The baseline survey seemed to suggest that in Durgapur the following areas were “somewhat” or “very much” the places where conflicts might have owed its origin: Education (57%), wealth or material

possession (67%), landholdings (71%), social status (62%), gender differences (25%), age (24%), length of stay (19%), political party affiliation (78%), religious beliefs (9%), ethnic background (8%).

In Kendua during baseline, we observed a very similar picture. Here the prime areas of conflicts were: Education (60%), material possession (75%), landholdings (65%), social status (45%), gender differences (32%), age differences (50%), length of stay (25%), political party affiliation (61%), religious beliefs (12%), and ethnic background (10%).

However, there seems to be interesting changes observed during the endline. In both sub-districts, gender differences (D: 45%; K:53%), differences in religious background (D: 41%; K: 26%), and ethnicity (D: 55%; K: 59%) came out as much more of a significant sources of conflict than they were before.

Table 5: Areas of conflicts and problems

Item	Baseline			Endline		
	Durgapur n (%)	Kendua n (%)	Both n (%)	Durgapur n (%)	Kendua n (%)	Both n (%)
Do these differences cause problems? (yes)	33 (20.6)	13 (7.4)	46 (13.7)	33(22.3)	63(38.9)	96(31.0)
How these problems are usually handled?						
People work it out between themselves (yes)	6 (18.2)	9 (69.2)	15 32.6)	31(93.9)	35(55.6)	66(68.8)
Family/household members intervene (yes)	12 (36.4)	5 (38.5)	17 37.0)	20 (60.6)	40(63.5)	60(62.5)
Neighbors intervene (yes)	25 (75.8)	4 (30.8)	29 63.0)	27(81.8)	56(88.9)	83(86.5)
Community leaders mediate (yes)	29 (87.9)	6 (46.1)	35(76.1)	7(21.2)	28(44.4)	35(36.5)
Religious leaders mediate (yes)	17 (51.5)	1 (7.7)	18 (39.1)	8(24.2)	22(34.9)	30(31.3)
Judicial leaders mediate (yes)	25 (75.8)	3 (23.1)	28 (60.9)	18(54.6)	51(81.0)	69(71.9)
Do such problems ever lead to violence? (yes)	9 (27.3)	5 (38.5)	14 (30.4)	19(57.6)	35(55.6)	54(56.3)

Though there are areas of differences in the communities, it is not necessary that the differences would always lead to problems and/or violence. That is why it was important to ask the question directly to know if these differences ever did lead to problems and/or violence. Quite a substantial proportion of Durgapur inhabitants (21%) reported that it did lead to troubles, while only a minority in Kendua (7%) reported that to be the case. However, that was during the baseline, which changed substantially for the people in Kendua where 39% of informants suggested that it did lead to conflicts during the endline (the proportion remained the same in Durgapur during endline).

When the differences did lead to troubles, Durgapur inhabitants during baseline reported, it was the community leaders (87%), neighbors (76%) and judicial leaders (76%) who mediated. On the other hand, in Kendua, it was the people involved who worked it out amongst themselves (69%), followed by the

community leaders (46%). With regard to endline survey results, things changed in favor of the neighbors who, according to the informants, played the most noticeable role in mitigating a conflict (D: 82%; K: 89%). Interestingly, a huge majority (94%) in Durgapur suggested that people worked it out amongst themselves, which was a nominal 18% during baseline.

When asked if these problems ever lead to violence, most of the informants responded in the negative during the baseline survey. However, things changed quite a bit at the endline, where 58% and 56% respectively in Durgapur and Kendua said yes they did lead to violence.

Table 6: Access to services

Item	Baseline			Endline		
	Durgapur n (%)	Kendua n (%)	Both n (%)	Durgapur n (%)	Kendua n (%)	Both n (%)
Are there any services where you or members of your household are occasionally denied service or have limited opportunity to use?						
Health services/clinics	40 (25.0)	25 (14.3)	65 (19.4)	47(31.8)	94(58.0)	141(45.5)
Job training/employment	39 (24.4)	11 (6.3)	50 (14.9)	46(31.1)	36(22.2)	82(26.5)
Credit	39 (24.4)	19 (10.9)	58 (17.3)	49(33.1)	89(54.9)	138(44.5)
Agricultural extension	48 (30.0)	14 (8.0)	62 (18.5)	41(27.7)	52(32.1)	93(30.0)
Justice/conflict resolution	43 (26.9)	46(26.3)	89 (26.6)	67(45.3)	106(65.4)	173(44.2)
Do you think that there are other households in this community that have such access problems? (yes)	70(43.7)	10(5.7)	80(23.9)	44(29.7)	81(50.0)	125(40.3)

Accessibility is an important variable in terms of structural social capital. Therefore, we asked about services that informants and/or their household members are occasionally denied services. According to the informants from Durgapur during baseline, agricultural extension (30%), justice (27%), health services (25%) credit (24%), and job training and employment (24%) were the principle areas where they faces issues with accessibility. On the other hand, informants from Kendua reported that they faced issues at justice (26%) and health services (14%) primarily. However, during the endline, access to legal services (D: 45%; K: 65%), health services (D: 32%; K: 58%), and credit services (D: 33%; K: 55%) became more prominent. Interestingly, during both baseline and endline, people in Kendua mentioned health services as an area where they have problems in terms of accessibility.

Interestingly, when asked about households other than informants' own and if they faced similar issues with regard to any of those same services during the baseline survey, 44% in Durgapur suggested in the affirmative, while only 6% in Kendua confirmed the same. The proportion for Kendua increased by many folds and reached 50% during the endline survey.

Table 7: Collective action

Item		Baseline			Endline		
		Durgapur n (%)	Kendua n (%)	Both n (%)	Durgapur n (%)	Kendua n (%)	Both n (%)
How often have members of this village got together/petitioned officials with development goals?							
	Never	67(41.9)	30(17.1)	97(29.0)	75(50.7)	25(15.4)	100(32.3)
	Once	51(31.9)	34(19.4)	85(25.4)	39(50.7)	28(17.3)	67(21.6)
	A couple of times	39(24.4)	108(61.7)	147(43.9)	29(19.6)	98(60.5)	127(41.0)
	Frequently	3(1.9)	3(1.7)	6(1.8)	5(3.4)	11(6.8)	16(5.2)
Was this action/were any of these actions successful?							
	Yes, all were successful	5 (5.4)	34 (23.4)	39 (16.4)	10(13.7)	16(11.7)	26(12.4)
	Some were successful	32 (34.4)	39 (26.9)	71 (26.8)	47(64.4)	111(81.0)	158(75.2)
	No, none were successful	56 (60.2)	72 (49.7)	128(53.8)	16(21.9)	10(7.3)	26(12.4)
How often in the past year have you joined together with others to address a common issue?							
	Never	84 (52.5)	97 (55.4)	181(54.0)	91(61.5)	22(13.6)	113(36.5)
	Once	22 (13.7)	31 (17.7)	53 (15.8)	29(19.6)	38(23.5)	67(21.6)
	A couple of times	49 (30.6)	42 (24.0)	91 (27.1)	27(18.2)	86(53.1)	113(36.5)
	Frequently	5 (3.1)	5 (2.9)	10 (3.0)	1(0.7)	16(9.9)	17(5.5)
In the last three years have you personally done any of the following things							

Item	Baseline			Endline		
	Durgapur n (%)	Kendua n (%)	Both n (%)	Durgapur n (%)	Kendua n (%)	Both n (%)
Voted in the elections (yes)	132 (82.5)	156(89.1)	288(86.0)	131(88.5)	155(95.7)	286(92.3)
Actively participated in any association (yes)	93 (58.1)	95 (54.3)	188(56.1)	68(46.0)	106(65.4)	174(56.1)
Made a personal contact w/ influential person	81 (50.6)	67 (38.3)	148(44.2)	40(27.0)	118(72.8)	158(51.0)
Actively participated in an election campaign	60 (37.5)	59 (33.7)	119(35.5)	44(29.7)	90(55.6)	134(43.2)
Contacted your elected representative	100 (62.5)	102(58.3)	202(60.3)	62(41.9)	112(69.1)	174(56.1)
Talked with other people in your area	86 (53.7)	86 (49.1)	172(51.3)	62(41.9)	112(69.1)	174(56.1)
Made a monetary or in-kind donation	87 (54.4)	113(64.6)	200(59.7)	63(42.6)	129(79.6)	192(61.9)
If some decision related to a development project needed to be made, do you think the entire village/ neighborhood would be called upon to decide or only the community leaders will decide?						
The community leaders would decide	106 (66.2)	23 (13.1)	129(38.5)	49(33.1)	24(14.8)	73(23.6)
The whole village would be called	54 (33.7)	152(86.9)	206(61.5)	99(66.9)	138(85.2)	237(76.5)
Overall, how would you rate the spirit of participation in this village/neighborhood?						
High	66 (41.2)	82 (46.9)	148(44.2)	43(29.1)	58(35.8)	101(32.6)
Very high	62 (38.7)	50 (28.6)	112(33.4)	24(16.2)	30(18.5)	54(17.4)
How much influence do you think people like yourself can have in making this village a better place to live?	143 (89.4)	167(95.4)	310(92.5)	144(97.3)	112(69.1)	256(82.6)

In terms of collective action, the data on the two sub-districts yielded very intriguing results. 42% of Durgapur informants reported that they never got together and jointly petitioned government officials or political leaders to initiate and/or take up a developmental project, while 62% of the Kendua informants suggested that they have done it at least a couple of times during the baseline. The trend remained similar during the endline when 61% of Kendua residents suggested that they have done it a couple of times while majority in Durgapur suggested that they never did it. In addition, during the baseline, around 23% of Kendua informants reported that their action has always been successful in this regard (as opposed to only 5% in Durgapur). During the endline, 81% in Kendua suggested some of their actions were successful, while around 64% of Durgapur residents suggested the same.

During the baseline survey when we asked about getting together to address a common concern, both Durgapur and Kendua informants reported in a similar fashion: in Durgapur 45% reported getting together at least once and 42% in Kendua reported the same in order to address a common concern. However, in both the sub-districts, around half of the informants reported not getting together ever for such a cause (D: 53%; K: 55%). However, when we asked the same during endline survey, the data yielded results that portrayed the sub-districts in accordance with other data, which was 62% of informants in Durgapur said that they never got together to address a common concern, as opposed to only 14% in Kendua. In Kendua, around 53% informants said they got together at a couple of times with only 18% in Durgapur to address a common concern.

On an individual level, it seemed people were more inclined toward taking actions and participating in activities that had collective value both in Durgapur and in Kendua. It was the most apparent when it came to political processes such as voting; 83% in Durgapur and 89% in Kendua reported that they voted for their candidates in the last local and/or national elections. As reported earlier, they again reported that they took active part in their associations (D: 58%; K: 54%). They also reported that they kept personal contacts with influential persons (D: 50%; K: 38%) and their elected representatives (D: 62%; K: 58%). A substantial proportion of the informants also reported that they actively participated in election campaigns (D: 38%; K: 34%). Talking to other people about the issue (D: 54%; K: 49%) and/or making a donation was another area where they excelled (D: 54%; K: 49.1%). Overall, the trends remained pretty similar during the endline survey, though marked differences were noticed between the people in the informants in two sub-districts in terms of specific actions like participating in an association (D: 46%; K: 65%), making contacts with influential persons (D: 27%; K: 73%), participating in an election campaign (D: 30%; K: 56%), contacting the elected representative (D: 42%; K: 69%), and making donations (D: 43%; K: 80%).

When the informants were asked about if they think the entire village would be called upon if a new developmental project was to be taken up, Durgapur responded in a negative way (34%), while Kendua was extremely positive (87%). According to the informants in Durgapur, it was going to be only the leaders who would decide (66% as opposed to 13% in Kendua). During the endline survey however, the proportions remained the same for Kendua while it improved for Durgapur (entire village being called 67% and community leaders would decide 33.1%).

Cognitive social capital

Table 8: Solidarity

Item		Baseline			Endline		
		Durgapur n (%)	Kendua n (%)	Both n (%)	Durgapur n (%)	Kendua n (%)	Both n (%)
Suppose someone in the village/neighborhood had something unfortunate happen to them, such as a father's sudden death. Who do you think they could turn to for help in this situation?							
	No one	1 (0.6)	28 (16.0)	29 (8.7)	4(2.7)	5(3.1)	9(2.9)
	Family	43 (26.9)	87 (49.7)	130(38.8)	140(94.6)	140(86.4)	280(90.3)
	Neighbors	96 (60.0)	50 (28.6)	146(43.6)	2(1.4)	15(9.3)	17(5.5)
Suppose your neighbor suffered an economic loss, say (i.e. "crop failure"). In that situation, who do you think would assist him/her financially?							
	No one	9 (5.6)	30 (17.1)	39 (11.6)	5(3.4)	7(4.3)	12(3.9)
	Family	19 (11.9)	93 (53.1)	112(33.4)	134(90.5)	128(78.6)	262(84.5)
	Neighbors	70 (43.7)	41 (23.4)	111(33.1)	7(4.7)	26(16.1)	33(10.7)
	Community leaders	25 (15.6)	3 (1.7)	28 (8.4)	1(0.7)	0(0.0)	1(0.3)

In terms of trying to understand "cognitive social capital," we investigated into aspects related to solidarity, trust, mutual cooperation, and conflict resolution as indicators. Table 8 describes the data on solidarity.

Reliance on family came out as the most prominent trend in Kendua when it came to seeking help during a crisis/unfortunate event. 50% of the informants reported that they would rather turn to their families than their neighbors (29). A reverse trend was observed in Durgapur, where 60% reported that they would rather turn to the neighbors. A similar preference for the family over neighbors and vice versa was observed when asked about the same thing, but from the opposite angle (i.e. who do you think would help?). This seemed to confirm that the responses were not due to chances. Reliance on neighbors is a good indicator of solidarity in a society. During the endline survey, this trend of trusting the family over anyone else was confirmed by overwhelming majority (D: 95%; K: 86%). A similar pattern was observed when asked about the neighbor's loss and what they would do during an economic crisis of their own.

Table 9: Trust and cooperation

Item	Baseline			Endline		
	Durgapur n (%)	Kendua n (%)	Both n (%)	Durgapur n (%)	Kendua n (%)	Both n (%)
Do people trust each other in lending/borrowing? (yes)	142 (88.7)	170(97.1)	312(93.1)	142(96.0)	154(95.1)	296(95.5)
Do you think over the last few years this level of trust has gotten better, worse, or same?						
Better	53 (33.1)	80 (45.7)	133(39.7)	65(43.9)	97(59.9)	162(52.3)
Gotten worse	41 (25.6)	20(11.40)	61 (18.2)	0(0.0)	0(0.0)	0(0.0)
In comparison to the other places, how much do the people here believe each other? (borrowing/lending)						
More	71 (44.4)	128(73.1)	199(59.4)	24(16.2)	72(44.4)	96(31.0)
If someone from the village goes away for a while, who would they leave their fields with?						
Neighbor	17 (10.6)	16 (9.1)	33 (9.8)	4(2.7)	12(7.4)	16(5.2)
If you suddenly had to go away for a day or two, whom could you leave your children with?						
Other family member	107 (66.9)	162(92.6)	269(80.3)	146(98.7)	146(90.1)	292(94.2)
Neighbor	14 (8.7)	7 (4.0)	21 (6.3)	1(0.7)	14(8.6)	15(4.8)
Other relatives	33 (20.6)	3 (1.7)	36 (10.7)	0(0.0)	0(0.0)	0(0.0)
Do you think that people in this area are more concerned about family welfare than village welfare?						
Strongly agree	141 (88.1)	43(24.6)	184(54.9)	113(76.4)	69(42.6)	182(58.7)
If a community project does not directly benefit your neighbor, do you think your neighbor would give time?	93 (58.1)	148(84.6)	241(71.9)	98(66.2)	103(63.6)	109(35.2)
If a community project does not directly benefit your neighbor, do you think your neighbor would give money	60 (37.5)	136(77.7)	196(58.5)	30(20.3)	111(68.5)	141(45.5)
Do you agree or disagree to the following						
Most people in this village/ neighborhood are basically honest and can be trusted						
Strongly agree	44 (27.5)	70 (40.0)	114(34.0)	49(33.1)	55(34.0)	104(33.6)
Agree	49 (30.6)	75 (42.9)	124(37.0)	72(48.7)	90(55.6)	162(52.3)
People are always interested only in their own welfare						
Strongly agree	132 (82.5)	43 (24.6)	175(52.2)	115(77.7)	50(30.9)	165(53.2)
In this village/ neighborhood, one has to be alert or someone is likely to take advantage of you.						
Strongly agree	121 (75.6)	26 (14.9)	147(43.9)	57(38.5)	53(32.7)	110(35.5)

Trust becomes apparent when it comes to lending and borrowing money to/from others. Informants from both sub-district reported that they do trust others in their communities in terms of lending money to or borrowing from them (D: 89%; K:97%). The proportions remain similar during the endline (D: 96%; K: 95%). Only a minority thought that this situation has gotten worse over the years (D: 26%; K: 11%), while a substantial proportion thought it has gotten better (D: 33%; K: 46%). Interestingly, no one in either of the sub-districts thought that it has gotten worse during the endline. During the baseline, they also thought and reported that their communities are more trustworthy than others when it came to lending/borrowing money (D: 44%; K: 73%). However, proportions in this regard waned substantially during the endline (D: 16%; K: 44%).

Though inhabitants of both sites reported high level of trust amongst themselves, this didn't translate into trusting them (people other than their own family members) with their land/property – only an insignificant minority reported that they might leave their fields in the custody of their neighbors (D: 11%; K: 9% during baseline and D: 3%; K: 7% during endline). When it came to entrusting their children with someone while they were gone for a few days, it was overwhelmingly other family members or other relatives (D: 88%; K: 95% during baseline and D: 99%; K: 90%), and hardly ever anyone beyond the folds of their families.

When directly asked to compare family welfare with that of village welfare, it became clear as to where people stood in terms of their allegiance, and we observed that 88% of the Durgapur inhabitants sided with family, while only 25% from Kendua sided with the family in this regard. During the endline survey, the proportions were D: 76%; K: 43%. Similarly, 58% of the informants from Durgapur reported that they think their neighbor would give time to a project even if it didn't directly benefit them, while this was around 85% for people in Kendua (the proportions were D: 66%; K: 64% during the endline survey). In terms of giving money in a similar situation the percentage was 38% and 78% respectively (the proportions were D: 20%; K: 69% during the endline survey). In terms of thinking if the villagers were generally honest and trusting, 59% in Durgapur and 83% in Kendua reported that they either agreed or strongly agreed that to be the case (the proportions were D: 82%; K: 90% during the endline survey). Regarding self-centered welfare, 83% informants in Durgapur reported that was really the case, though only 25% agreed in Kendua (the proportions were D: 78%; K: 31% during the endline survey).

It seemed the sense of “community” was lacking in Durgapur during baseline, but that may not be the case anymore. When asked if one needs to be alert so that they are not taken advantage of, 76% informants in Durgapur reported affirmatively, while only 15% agreed in Kendua during baseline, while the proportions were D: 39%; K: 33% during the endline survey.

Table 10: Conflict resolution

Item	Baseline			Endline		
	Durgapur n (%)	Kendua n (%)	Both n (%)	Durgapur n (%)	Kendua n (%)	Both n (%)
In your opinion, is this village generally peaceful?	134 (83.7)	167(95.4)	301(89.8)	146(98.7)	152(93.8)	298(96.1)
Compared with other villages, is there more or less conflict here?						
Less	98 (61.2)	148(84.6)	246(73.4)	127(85.8)	100(61.7)	227(73.2)
Suppose two people in this village/neighborhood had a fairly serious dispute with each other. Who do you think would primarily help resolve the dispute?						
No one – they will work it out themselves	15 (9.4)	0 (0.0)	15 (4.9)	20(13.5)	3(1.9)	23(7.4)
Neighbors	92 (57.5)	103(58.9)	195(58.2)	101(68.2)	83(51.2)	184(59.4)

In terms of considering if the communities were peaceful, informants in both sub-districts mentioned that they are and their responses remained consistent over the years (D: 83%; K: 95% during baseline and D: 99%; K: 94% during endline). They also thought that their communities were comparatively more peaceful than the other ones around (D: 61%; K: 85% during baseline and D: 88%; K: 62% during endline). However, if there was a conflict, most of the people in both sub-districts thought that it would be their neighbors who would come to resolve their conflicts (D: 58%; K: 59% during baseline and D: 68%; K: 51% during endline).

Social capital

As mentioned earlier, formative research was carried out to understand the current situation in the two sub-districts that we worked in, namely, Durgapur and Kendua of Netrokona District. The formative research also allowed us to adapt the WB Tool to measure Social Capital and make it culturally relevant to our context. The revised tool was then administered into the community. In what follows, we provide a comparative set of two analyses, one from the baseline data, and the other from the endline data.

Development of scale

The first stage of analysis of social capital was the development of a scale that can then be used to measure differing levels of social capital and how that fares with other relevant variables, i.e. membership in a community group or residence in a specific area. We followed the exact same procedure to analyze both baseline and endline data. The following steps were taken in the development of the scale (we include the findings both the surveys in here):

1. Recoded dichotomous variables
2. Check for successful recoding
3. Reliability analysis – 1st round
4. Interpret the first round of reliability analysis
5. Reliability analysis – 2nd round (with reduced number of variables; during the baseline, this was 17 variables, while during the endline it was 35 variables)
6. Interpret the second round of reliability analysis

7. Create social capital scale and create bar charts

Recoding dichotomous variables

First of all, only those variables were used that had a response from the entire sample of informants. The same set of variables was used for the analyses of both the surveys.

In order to recode the dataset, we recoded the variables that were coded 1=Yes and 2=No into 1=Yes and 0=No. For this, we recoded the following 50 (fifty) variables:

- Are you or is someone in your household a member of any groups or organizations?
- If the primary school of this village/neighborhood went without a teacher for a long time, say six months or more, which people in this village/neighborhood do you think would get together to take some action about
 - No one in the village/neighborhood would get together
 - No one in the village/neighborhood would get together
 - Local/municipal government
 - Village/neighborhood association
 - Parents of school children
 - The entire village/ neighborhood
- Are there any services where you or members of your household are occasionally denied service or have limited opportunity to use?
 - Education/schools
 - Health services/clinics
 - Housing assistance
 - Job training/employment
 - Credit
 - Transportation
 - Water distribution
 - Sanitation services
 - Agricultural extension
 - Justice/conflict resolution
 - Security/police services
- In the last three years have you personally done any of the following things
 - Voted in the elections
 - Actively participated in any association
 - Made a personal contact with influential person
 - Made the media interested in a problem
 - Actively participated in an information campaign
 - Actively participated in an election campaign
 - Taken part in a protest march or demonstration
 - Contacted your elected representative
 - Attend to protest forceful possession
 - Taken part in government meetings/ offices
 - Talked with other people in your area about a problem

- o Notified the court or police about a problem
 - o Made a monetary or in-kind donation
 - o Volunteered for a charitable organization
- Have you been approached by someone personally during the last three years who asked you to do any of the following
 - o Voted in the elections
 - o Actively participated in any association
 - o Made a personal contact with influential person
 - o Made the media interested in a problem
 - o Actively participated in an information campaign
 - o Actively participated in an election campaign
 - o Taken part in a protest march or demonstration
 - o Contacted your elected representative
 - o Attend to protest forceful possession
 - o Taken part in government meetings/ offices
 - o Talked with other people in your area about a problem
 - o Notified the court or police about a problem
 - o Made a monetary or in-kind donation
 - o Volunteered for a charitable organization
- If some decision related to a development project needed to be made in this village/neighborhood, do you think the entire village/ neighborhood would be called upon to decide or would the community leaders make the decision themselves?
- Do you think that in this village/ neighborhood people generally trust one another in matters of lending and borrowing?
- If a community project does not directly benefit your neighbor but has benefits for others in the village/neighborhood, then do you think your neighbor would contribute time for this project?
- In your opinion, is this village/neighborhood generally peaceful or conflictive?
- Do people in this village/neighborhood contribute time and money toward common development goals?

Checking recoding was successful

In order to check if the recoding was successful, we ran frequency tables for the entire set of variables (i.e. variables that were recorded in previous step.) Please look at the frequency tables from both the surveys in the annex.

First round of reliability analysis

Once the frequency tables were generated, a reliability test was conducted in the following way:

```
RELIABILITY  /VARIABLES=[all the recoded variables]  /SCALE('ALL VARIABLES') ALL
/MODEL=ALPHA  /STATISTICS=SCALE  /SUMMARY=TOTAL.
```

Interpreting first round of reliability analysis

First of all, we present the BASELINE interpretation of the reliability analysis.

Scale: ALL VARIABLES**Case Processing Summary**

		N	%
Cases	Valid	334	100.0
	Excluded ^a	0	.0
	Total	334	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.761	50

The following table shows the item to total statistics of just the first variable from the baseline data, but it was done for all of the variables (50). Please refer to the complete item-total statistics in the annex section of the report.

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
x4a1	15.8743	29.378	.309	.754

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
16.5299	31.199	5.58559	50

Now, here we present the ENDLINE analysis of the reliability analysis.

Scale: ALL VARIABLES**Case Processing Summary**

		N	%
Cases	Valid	310	100.0
	Excluded ^a	0	.0
	Total	310	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.900	50

The following table shows the item to total statistics of just the first variable from the endline data, but it was done for all of the variables (50). Please refer to the complete list in the annex section of the report.

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
x4a1	20.6968	79.325	.249	.899

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
21.3355	81.693	9.03841	50

Once the reliability analyses were complete, we proceeded to conduct the second round of reliability analysis as described in the following section in order to create the additive index/scale.

Second round of reliability analysis with reduced set of variables

For the second round of reliability analysis, we reduced the number of variables with the following stipulations:

Variables were deleted if:

- Item to total (the entire scale) correlation was negative
- Item to total correlation was positive, but was less than 0.3
- Cronbach's alpha increased (i.e. improved or was > 0.761 during the **baseline** and > 0.9 during the **endline**) when the item was deleted

For reliability, we did the following (as expressed earlier for all variables)

RELIABILITY /VARIABLES=[reduced set of 18 variables for baseline and 37 variables for the endline]
/SCALE('ALL VARIABLES') ALL /MODEL=ALPHA /STATISTICS=SCALE
/SUMMARY=TOTAL.

Interpreting second round of reliability analysis

Second round of reliability analysis during the BASELINE was interpreted in the following manner:

Reliability

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	334	100.0

	Excluded ^a	0	.0
	Total	334	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.791	18

The table showing the item to total statistics of all 18 variables can be located in the annex below the table for item to total statistics of all 50 variables (baseline).

Variables that had item to total correlation less than 0.3 were deleted (=x4d5k), leaving a total of 17 variables to compute social capital measure at the final stage.

Similarly, the second round of reliability analysis during the ENDLINE was interpreted in the following manner:

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	310	100.0
	Excluded ^a	0	.0
	Total	310	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.918	37

The table showing the item to total statistics of all 37 variables can be located at the bottom of the table for item to total statistics of 50 variables (endline) in the annex section.

Just as it was done during baseline, we deleted the variables that had item to total correlation less than 0.3 (=x4c5h, x4c5i), leaving us with a total of 35 variables to compute social capital measure at the final stage.

Creating social capital scale and creating barcharts

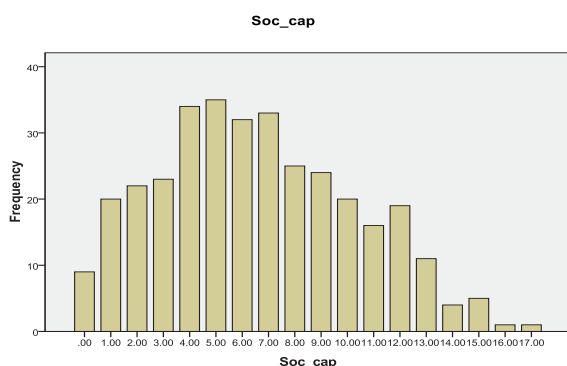
At the final stage, as per the analyses above, a total of seventeen (17) variables were selected to construct the baseline social capital scale, while a total of thirty-five (35) variables were selected to construct the

endline social capital scale. In order to do construct the scale, the following was done (in SPSS as in other cases):

Here the first set of analysis provides the social capital scale as obtained from the baseline data.

COMPUTE Soc_cap= x4a1 + x4d4b + x4d4e + x4d4f + x4d4h + x4d4i + x4d4j + x4d4k + x4d4n + x4d5b + x4d5c + x4d5e + x4d5f + x4d5g + x4d5h + x4d5i + x4d5k + x4d5n. EXECUTE. FREQUENCIES VARIABLES=Soc_cap / BARCHART FREQ /ORDER=ANALYSIS

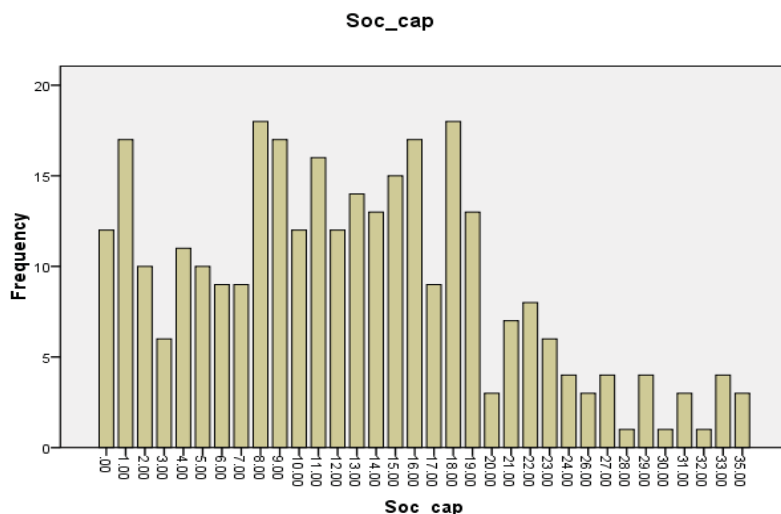
(The computed Social Capital Scale can be found in the annex section of this report).



Similarly, now we provide the social capital scale as obtained from the endline data:

COMPUTE Soc_cap=x4b1b + x4b1c + x4b1d + x4b1e + x4c5a + x4c5b + x4c5e + x4c5f + x4c5g + x4d4b + x4d4c + x4d4d + x4d4e + x4d4f + x4d4g + x4d4h + x4d4i + x4d4j + x4d4k + x4d4l + x4d4m + x4d4n + x4d5b + x4d5c + x4d5d + x4d5e + x4d5f + x4d5g + x4d5h + x4d5i + x4d5j + x4d5k + x4d5l + x4d5m + x4d5n. EXECUTE. FREQUENCIES VARIABLES=Soc_cap /BARCHART FREQ /ORDER=ANALYSIS.

(The computed Social Capital Scale can be found in the annex section of this report).



Measurement of social capital

Baseline analysis of social capital

In order to apply the social capital scale, we look for associations between the social capital scale and other independent variables of interest. For the present, we have considered two such variables, a. Membership status, and b. Area of residence (Durgapur or Kendua sub-districts).

First we looked at any possible associations with social capital and **residence of the informants**.

MEANS TABLES=Soc_cap BY upz

Soc_cap * Upz

Report

Soc_cap

Upz	Mean	N	Std. Deviation
18	6.6063	160	3.29684
47	6.5345	174	4.08811
Total	6.5689	334	3.72473

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
Soc_cap * Upz	Between Groups	(Combined)	.429	1	.429	.031	.861
	Within Groups		4619.487	332	13.914		
	Total		4619.916	333			

Measures of Association

	Eta	Eta Squared
Soc_cap * Upz	.010	.000

Then we looked into any possible association between social capital scale and their **membership status** (whether or not members of PARI or SATHI).

Soc_cap * Memtype1

Report

Soc_cap

Memtype1	Mean	N	Std. Deviation
Member	8.2216	167	3.49940
NonMember	4.9162	167	3.17637
Total	6.5689	334	3.72473

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
Soc_cap Memtype1	Between Groups	(Combined)	912.287	1	912.287	81.691	.000
	Within Groups		3707.629	332	11.168		
	Total		4619.916	333			

Measures of Association

	Eta	Eta Squared
Soc_cap * Memtype1	.444	.197

Endline analysis of social capital

Similarly, in order to apply the social capital scale, we look for associations between the social capital scale and other independent variables of interest during the endline as well. We have considered two such variables, a. Membership status, and b. Area of residence (Durgapur or Kendua sub-districts).

First we looked at any possible associations with social capital and **residence of the informants**.

Soc_cap * Upz

Report

Soc_cap

Upz	Mean	N	Std. Deviation
18	9.2432	148	6.63799
47	15.7963	162	8.06968
Total	12.6677	310	8.10186

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig
Soc_cap * Upz	Between Groups	(Combined)	3321.256	1	3321.256	60.310	.000
	Within Groups		16961.521	308	55.070		
	Total		20282.777	309			

Measures of Association		
	Eta	Eta Squared
Soc_cap * Upz	.405	.164

Then we looked into any possible association between social capital scale and their **membership status** (whether or not members of PARI or SATHI), just as we did during baseline.

Soc_cap * Memtypal

Report

Soc_cap

Memtypal	Mean	N	Std. Deviation
Member	15.3484	155	7.58895
Non-member	9.9871	155	7.72329
Total	12.6677	310	8.10186

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
Soc_cap * Memtypal	Between Groups	(Combined)	2227.616	1	2227.616	38.001	.000
		Within Groups	18055.161	308	58.621		
		Total	20282.777	309			

Measures of Association		
	Eta	Eta Squared
Soc_cap * Memtypal	.331	.110

DISCUSSION: Social capital Measurement

Structural social capital

Organizational density and characteristics

Membership status of people conforms to the fact that PIs have been formed in Durgapur much earlier than in Kendua, though the difference is closing rapidly. However, in terms of active participation or being a leader is concerned, Kendua is far ahead indicating their interest in forming groups and working together. Interestingly, it was higher in Durgapur during the initial stages, but due to people being substantially more active in Kendua, as observed during baseline, the overall situation has changed. Data on Social Capital also indicates to the same.

In Durgapur and Kendua, SATHI and PARI are ubiquitous in terms of membership and popularity and people are often very critical about other NGOs and their activities. All the other NGOs are pretty negligible with respect to them. What needs to be kept in mind is that the NGO activities have been historically extensive in Durgapur and people have formed entrenched beliefs regarding their work. One thing to note here that PARI only works in Durgapur and SATHI only works in Kendua – therefore their presence in the area is mutually exclusive. This is programmatic strategy from SUSOMA project, of which these NGOs are a part of.

The groups were primarily homogeneous during our initial exploration, except with regard to political participation and age. Interestingly, most of the people belonged to the same occupation (agriculture) in Kendua than in Durgapur. This might be an indication of Kendua being a relatively newer community, where occupational diversity hasn't really flourished as much as it has in Durgapur. It is now clear that the word is spreading and more and more people from differing backgrounds are joining the groups. Heterogeneity is on the rise.

Decision-making and leadership

Participatory approaches are markedly more prominent in Kendua than in Durgapur. People in Kendua fall back on groups' decision more than relying on the leaders, which is much less among the groups in Durgapur. Moreover, the tendency to rely on the leaders is increasing at a faster pace in Durgapur.

Networks and mutual support

People seem to have become more realistic and do not expect much from local organizations. They seem to believe no one would come to address an issue such as a problem with the local school. However, this problem was less acute among the people in Kendua than in Durgapur. This trend was observed during the baseline exploration that the role of the entire community came out as more prominent in Kendua than in Durgapur.

In Durgapur, reliance is more on the elected representatives than general community members, while it is a bit reversed in Kendua. The village matobbor is the one traditional source of help – more so than any other individual and/or organization in the communities. As suggested earlier, the endline survey saw people becoming more reliant on themselves rather than others in the village. This could be treated as people becoming more realistic and not that things have dramatically changed within the communities.

Sources of conflicts

During the baseline, Political party affiliation played the pivotal role in Durgapur where conflicts originated, closely followed by disputes over landholdings, material possessions, social status, and education. On the other hand, people were categorical in terms of their denial about ethnic background, religious beliefs, length of stay, age, and gender differences playing any role at all in giving rise to any conflict/s.

Interestingly, gender differences, religious background, and ethnicity, things that were not mentioned in our earlier exploration, came out as prominent sources of conflict during the endline.

Areas of conflicts and problems

We reported during the baseline that it seemed from the responses of the informants that differences led to troubles only in Durgapur, and that was largely not the case in Kendua. And, even if the differences led to troubles in Kendua, involved people were able to resolve the issue themselves, unlike people in Durgapur where community leaders, neighbors, and judicial leaders had to step in.

During the endline we observed that quite a bit seems to be saying different things about people in Kendua – we observed differences in several areas in Kendua, unlike Durgapur. This might be suggestive of the fact that Durgapur is a more stable population, while people in Kendua are only recently becoming stable. However, we are not certain as to why this is the case.

The role of neighbors must be acknowledged here – it is mostly the neighbors that come forward when there is a conflict. However, family members and judicial members also play a significant role.

Judging from the endline results, sources of conflict needs to be addressed properly since most of the people suggested that they lead to conflicts that result in violence.

Access to services

During the baseline, we reported that in both Durgapur and Kendua, justice and health services were mentioned as places where people faced issues related to accessibility. In addition, agricultural extension was also mentioned in Durgapur. These are important areas where having problems related to access can and may result into disasters for the people, especially the poor and the marginalized.

Quite similarly, accessing justice, health, and credit services have come out to be the most prominent areas where people have problems during the endline as well. In addition, it should be mentioned that people in Kendua seem to have a particular problem with health services. It is either about them not getting the required services or them being relatively more aware of what they need and what they do not have with regard to health, indicating that SUSOMA is working well in that area. These results are troubling since this is a major pathway through which social capital may be perceived to operate in order to increase health outcomes.

Collective action

As other data reflecting on group dynamics suggest, people in Kendua are more inclined toward taking group actions than people in Durgapur. We believe that the difference is due to deeply entrenched values and cultural practices where people are well set in their ways in Durgapur with regard to how they would address a certain issue. It is a reflection of those values and practices, i.e. they are more dependent on leaders than getting together to stand up for something.

As suggested elsewhere, people in Kendua more often than people in Durgapur get together to address common concerns. This is yet another arena where it indicates Kendua residents' higher social capital, where there is more confidence in group dynamics and collective action than in Durgapur. Political processes were highlighted (i.e. voting in elections, taking part in campaigns, keeping contact with elected representatives) in terms of individual involvement having collective impacts. Individual level differences were not as pronounced during the baseline survey as it became during the endline with regard to maintaining social ties with influential people, participating in political processes, and making donations. Kendua seems far ahead on this than Durgapur.

In a more matured state of being, we believe, the community groups are having an impact in that they are making people more self-reliant and confident in their groups and people in general rather than relying on the leaders. Conversely, the distrust regarding leaders is showing more and more each year.

Cognitive social capital

Solidarity

Crisis and dealing with crisis, either one's own or of a neighbor, the responses clearly indicated informants' choice of family. The importance that was placed on neighbors earlier in the project seems to have diminished entirely. During the baseline exploration we saw people in Durgapur would rather rely on leaders to decide on important issues including their developmental projects. We also saw the same people would rather rely on their neighbors over their family members in times of crisis for monetary or any other kind of support. This has decidedly changed over time.

Trust and cooperation

Surveys indicate that people in both the sub-districts remain trusting of each other, though they do not seem to think as highly of their own communities when compared to others. This, we believe, is a result of mobility and interaction, which has increased over the years. More specifically, trusting one's own family was of much higher value than any other category of people.

It seems, people in Kendua are more likely to value the welfare of the village over the value of their own families than the people in Durgapur, where the allegiance clearly is with their families or the individual themselves first.

It might be safe to hypothesize here that newly formed communities are more hopeful in their initial stages till their expectations are not crushed and/or frustrated.

Conflict resolution

It can generally be stated the most of the respondents in both of the sub-districts believe that their communities are peaceful and that they can rely on their neighbors in times of conflicts. However, when it came to actual disputes, though in most cases there would be neighbors intervening, for some of the cases in Durgapur it was suggested that it would be the person in conflict themselves resolving the disputes. This, we believe, is an indication of somewhat "individualistic" stance of the people in Durgapur.

Measure of social capital

Baseline measure

According to our analysis, the computed cronbach's alpha came out to be .791 when computed against 18 variables. After that, one further variable was dropped and an additive social capital scale was created. After this, we looked at the association between social capital scale and residence of the informants. This yielded a difference of means not statistically significant (means Durgapur 6.6063 and Kendua 6.5345, significance: p value .861).

When we looked at the association between social capital scale and membership status of the informants (i.e. if they were members or not of PARI or SATHI), it yielded a difference of means that came out to be statistically significant (means Member 8.2216 and Non-member 4.9162; significance: p value .000).

Endline measure

According to our analysis during the endline, the computed cronbach's alpha came out to be .918 when computed against 37 variables. After that, two further variables were dropped and an additive social capital scale was created. After this, we looked at the association between social capital scale and residence of the informants. This yielded a difference of means that was statistically significant (means Durgapur 9.2432 and Kendua 15.7963, significance: p value .000).

When we looked at the association between social capital scale and membership status of the informants (i.e. if they were members or not of PARI or SATHI), it yielded a difference of means that also came out to be statistically significant (means Member 15.3484 and Non-member 9.9871; significance: p value .000).

These analyses conform to the descriptive statistics, which also indicated that there should be a significant difference between the social capital means in two different groups, i.e. members and non-members, and also in between people belonging to two different sub-districts, i.e. Durgapur and Kendua. We believe that both the communities have become more or less stable and that the differences that we see now in terms of Kendua having more social capital than Durgapur is indicative of real differences as we have noted in our discussion section.

This is a preliminary set of analysis of social capital, while several other analyses are possible.

Conclusion and Utilization of results

It is evident from the social capital measurement survey that the differences between social capital measures of the members and non-members, it is clear that the members are different from the non-members in terms of decision making processes, their networks and mutual support, their ideas about the sources and areas of conflicts, their understanding of access to services, levels of solidarity, trust, and cooperation they feel, and how they resolve conflicts. These are what makes up for their social capital measure and makes it better for the members than the non-members.

The qualitative data also supports that all the members and almost all the non-members are well aware of the idea of forming social group to save money and use that for communal benefit, such as, spending for maternal and neonatal patients, building roads or buying van to transport patients to the hospital.

Leadership qualities were building up in the intervention areas. Some of the groups were disbanding, however, many of them got reformed again after solving their problem. Many of the groups had problem in investing their savings as they were not interested to do anything that would go against their religious beliefs. Members of the groups were ready to help any mother and child in need of health care despite of their religion, identity or membership to groups and they seemed to understand the importance of timely treatment from the facility. TTBAAs are working within their best for awaring the mothers, family members and the decision makers on significance of referral to facilities than treatment by informal providers after observing any danger signs. The level of confidence of the PI members has increased upto such a level that they are now able to solve their own problems, can communicate with social elites as well as the people from formal institutes and are achieving trust from them as a result of their improving performance in managing groups, money, health care and non-health related tasks and so on.

This result would recommend scaling up this PI model in different areas of Bangladesh, especially among the marginalized people who have low health outcome. At the same time, we also think that five years is not enough to change the behavior. Therefore, to sustain the behavior change in getting formal health care for maternal and neonatal health, the duration of PI model intervention should be longer. We also recommend that learning from PI model can be applied to Community Clinic Support Group (CSG) members who are actively working in the whole country on the same field of improving child and maternal health activities as World Renew does.