Local Innovation for Better Outcomes for Neonates (LIBON) Project

PLAN Nepal Child Survival Project XXII
Sunsari, Parsa, and Bara Districts in Nepal

Final Evaluation Report

30th September 2007 to 29th September 2011

Cooperative Agreement No. GHN-A-00-07-0006-00

Report Prepared
By

Mahesh K. Maskey – Lead Evaluator, Final Evaluation Team
Bhagawan Das Shrestha – Field Program Manager – LIBON
Dipak Dahal - Monitoring and Evaluation Officer – LIBON
Sher Bahadur Rana – Health Coordinator – Plan Nepal
Harpreet Anand – Program Manager -- Plan USA

Submitted: December 23, 2011

Plan International USA

HARPREET ANAND, *PROGRAM MANAGER, FIELD PROGRAM SUPPORT*
Plan International USA, Inc.
1730 Rhode Island Avenue, NW, Suite 1100
Washington, DC 20036
Tel. (202) 223-8325
harpreet.anand@planusa.org

Plan International NEPAL

BHAGWAN DAS SHRESTHA, *FIELD PROGRAM MANAGER*
Plan International NEPAL
Shree Durbar, Pulchowk-3
P. O. Box: 8980
COUNTRY, ZIP CODE: 44700
Tel. + 977 1 5535 560 extensión 135
bhagawan_das.shrestha@plan-international.org

ACRONYMS and ABBREVIATIONS

AHW	Auxiliary Health Worker
ANC	Antenatal Care
ANM	Auxiliary Nurse Midwife
BCC	Behavior Change Communication
BPP	Birth Preparedness Package
CB-IMCI	Community-based Integrated Management of Childhood Illness
CB-NCP	Community-based Neonatal Care Program
CBO	Community-based Organization
CDK	Clean Delivery Kit
CDP	Community Drug Program
CHD	Child Health Division (MoHP)
CHW	Community Health Worker
CHX	Chlorhexidine
CS	Child Survival
CSHGP	Child Survival and Health Grants Program
CSSA	Child Survival Sustainability Assessment
CSTS+	Child Survival Technical Support +
DAG	Disadvantaged Group
DDC	District Development Committee
DHO	District Public Health Office
DHS	Demographic and Health Survey
DIP	Detailed Implementation Plan
DPHO	District Public Health Office
DTOT	District Training of Trainers
EDP	External Development Partner
FCHV	Female Community Health Volunteer
FE	Final Evaluation
FGD	Focus Group Discussions
FHD	Family Health Division (MoHP)
FP	Family Planning
HA	Health Assistant
HF	Health Facility
HFMC	Health Facility Management Committee
HMIS	Health Management Information System
HQ	Headquarters
HP	Health Post
IEC	Information, Education, Communication
IDI	In-Depth Discussions
IMCI	Integrated Management of Childhood Illness
IOM	Institute of Medicine
KPC	Knowledge, Practice and Coverage
LBW	Low Birth Weight
LIBON	Local Innovation for Better Outcomes for Neonates
LQAS	Lot Quality Assurance Sampling (statistical method)

MCHW	Maternal and Child Health Worker
MDG	Millenium Development Goal
M&E	Monitoring and Evaluation
MG	Mothers Group
MINI	Morang Innovative Neonatal Intervention
MNC	Maternal Neonatal (or Newborn) Care
MNCH	Maternal, Neonatal and Child Health
MoHP	Ministry of Health and Population
MOU	Memorandum of Understanding
MTOT	Master Training of Trainers
NFHP	National Family Health Program
NGO	Non-governmental Organization
NHEICC	National Health Education and Information Communication Center
NHSP-IH	Nepal Health Sector Programme – Implementation Plan
NNH	Neonatal Health
NNM	Neonatal Mortality
PHC/ORC	Primary Health Care / Outreach Clinic
ORS	Oral Rehydration Solution
ORT	Oral Rehydration Therapy
PHC	Primary Health Center
PNC	Postnatal Care
PSBI	Possible Severe Bacterial Infection
PVO	Private Voluntary Organization
PWG	Pregnant Women's Group
RCSD	Resource Center for Sustainable Development (Sunsari NGO Partner)
RHC	Reproductive Health Committee
RHCC	Reproductive Health Coordination Committee
RHFA	Rapid Health Facility Assessment
SA	Supervision Area
SBA	Skilled Birth Attendance/Attendant
SHP	Sub Health Post
SLC	School Leaving Certificate
SM	Safe Motherhood
STD	Sexually Transmitted Disease
TBA	Traditional Birth Attendant
TRM	Technical Reference Material
TT	Tetanus Toxoid
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
USG	United States Government
VDC	Village Development Committee
VHW	Village Health Worker
WHO	World Health Organization
WRA	Women of Reproductive Age

Acknowledgement

We express our deep gratitude to PLAN Nepal and PLAN USA for entrusting us the task of final evaluation of Local Innovation for Better Outcomes for Neonates (LIBON) project in Sunsari, Parsa, and Bara Districts of Nepal. In particular, the support of Mr. Donal Keane, Plan Country Director, and Mr. Subhakar Baidya, Plan Program Support Manger is highly appreciated.

Our special thanks to Dr. Bal Krishna Subedi, Chief, Policy and Planning Division, MOHP, Nepal, Mr. Parashuram Shrestha, Chief CB-IMCI, Child Health Division, and Dr. Shilu Aryal, Chief, Safe Motherhood Unit, Family Health Division who contributed their experience and expert opinion in the Final Evaluation sharing workshop.

We also want to acknowledge the active participation in the FGDs and IDIs by Ms. Naramaya Limbu, Aid Development Program Management Specialist, USAID, Nepal, and Ms. Mangala Manandhar, Senior Public Health Officer, Family Health Division, DoHS, MOHP Nepal during their field visits. We at the same time gratefully acknowledge the kind support, enthusiasm and active participation of all the government staffs and staffs of Plan offices in the district and sub-district level the district health and public health officers, health facility in-charge, and FCHVs of Wards visited all have shown high motivation and enthusiasm in ensuring data quality of the final evaluation field visit.

Finally, we are indebted to the pregnant women, members of mothers groups, the mothers-in-law, and husbands who participated in the FGDs and IDIs and provided valuable information to the final evaluation team. The collection of qualitative data and triangulation of quantitative data would not have been possible without their cooperation.

Table of Contents

A. Executive Summary

The Local Innovation for Better Outcomes for Neonates (LIBON) project (2007-2011) of PLAN Nepal is designed to assist the Ministry of Health and Population (MoHP) in reducing neonatal mortality in three districts of lowland Terai region of Nepal. In Sunsari and Parsa, the LIBON project primarily assists the Community-Based Newborn Care Program (CB-NCP) run by the Government of Nepal. In Parsa, an additional Chlorhexidine (CHX) component for prevention of neonatal sepsis was included. Bara does not have CB-NCP or CHX component, so it serves as a learning site for understanding the sustainability issues of child survival programs.

The overall goal of the project is to reduce the burden of neonatal mortality in Nepal, which will be reached through the achievement of the following result-oriented objectives:

Result 1: Increased Access to Neonatal Health services in Sunsari and Parsa

Result 2: Increased Demand for Neonatal Health services in Sunsari and Parsa

Result 3: Increased Quality of Neonatal Health services in Sunsari and Parsa

Result 4: Strengthened support for Neonatal Mortality reduction in Nepal

Several strategies have been adopted by LIBON to achieve the result-oriented objectives, including community-based service delivery to increase ACCESS, and social inclusion to increase EQUITY to meet Result 1; community mobilization to increase DEMAND to meet Result 2; Health systems strengthening to increase QUALITY to meet Result 3; and Stakeholder sharing and collaboration to increase SUPPORT to meet Result 4.

The central feature of the LIBON project is to support the maternal and child health activities of the Government, particularly the CB-NCP program, through the Pregnant Women's Group (PWG) approach. The PWGs are a socially cohesive group of pregnant women operating in a small localized community such as a Ward. These groups meet periodically to discuss issues related to pregnancy and birth, develop birth preparedness plans, and monitor their own pregnancy using a social mapping mat. The PWG is facilitated and supported by Female Community Health Volunteers (FCHVs), and constitutes a sub-group of the larger Mothers groups (MG) of which the FCHV is the member secretary.

The LIBON project supports all seven major components of CB-NCP program in Sunsari and Parsa, namely: (1) behavior change communication; (2) promotion of institutional delivery and clean delivery practices for home deliveries; (3) postnatal care; (4) community case management of pneumonia/Possible Severe Bacterial Infection (PSBI); (5) care of low birth weight (LBW) newborns (<2,500 grams); (6) prevention and management of hypothermia; and (7) recognition of asphyxia with initial stimulation and resuscitation of the newborn baby. Training, self-learning tools and necessary equipment form the major components of support.

The project was implemented in strong partnership with the District Public Health Offices (DPHO) and various levels of health institutions, with an inbuilt mechanism of bottom-up monitoring. The data generated is further triangulated with qualitative data at the end of the project, obtained through focus group discussions and in-depth interviews conducted with

PWGs, FCHVs, Mothers-in-Law, Husbands, and the Health post In-charge and District (Public) Health Officer in the three districts.

The Technical Intervention components of the project covers a population estimated to be over 900,000 in the three districts; the expected pregnancies per year in three districts were reported as 21,990 in Sunsari, 15,521 in Parsa, and 17,465 in Bara, as per Health Management Information System (HMIS) Section for FY 2011.

The overall rapid CATCH indicators improved in the end-line survey. The children aged 0-23 months whose births were attended by skilled personnel increased by 36 percent (Sunsari) and 34 percent (Parsa), a post-natal visit from an appropriate trained health worker within three days after birth also increased by 35.4 percent (Sunsari) and 34 percent (Parsa). Likewise, diarrhea cases in the last two weeks who received Oral Rehydration Solution (ORS) and/or recommended home fluids increased by 48.2 percent (Sunsari) and 39 percent (Parsa) and appropriate care seeking for pneumonia increased by 46 percent (Sunsari) while it decreased in Parsa by five percent. In Parsa where CHX piloting had been carried out, 82.7 percent of newborns had Chlorhexidine application in the umbilical stump at the end of the project compared to none during baseline.

The qualitative data also reveals an improvement in health seeking behavior and a reduction in maternal and neonatal health problems since the beginning of the project. This was the response from all the different target groups interviewed. This is also consistent with the quantitative data obtained during final evaluation not only of Sunsari and Parsa but also of Bara district. In Bara, the PWGs that started in 2003 are still running with impressive accomplishments in maternal and child health, despite facing problems during the years of political unrest in Nepal.

The achieved results at the final evaluation are indicative of the project's successful implementation. LIBON's progress is attributed to many factors that include effective implementation of CB-NCP activities with innovative initiatives such as the PWGs facilitated by FCHVs; strong MOHP partnerships; intensive training and orientation programs; health education sessions on Maternal and Newborn Health (MNH) services at Village Development Committee (VDC) level; public commitments by pregnant women, their mothers-in-law and husbands (decision makers), service providers (health workers and FCHVs) who aid utilization of maternal and newborn health care practices; strong local support from VDCs and other stakeholders, community expansion of birthing centers; and regular review meetings. The fact that this project could continue amidst a most turbulent period of political transition in Nepal point to the merit of the design of the program as well as the determined efforts in implementation.

The government policy for recruiting ANMs and health workers locally appears to be the single most important cause for the availability of skilled birth care and expansion of birthing centers, undertaken through community support. Social recognition awards to FCHVs, ANMs, and other key staff based on performance is an important factor in keeping their motivation high. Refresher training of all categories of health workers and an expansion of physical facilities for birthing centers was the expressed demand in all the districts, both in the VDCs that were running birthing centers and those where the communities were aspiring to open them on their own initiative.

Recommendations

- New and Refresher Training for health staff, including FCHVs
- Incentives/motivation for FCHVs, ANMs, and other key health staff
- Improve delivery of supplies to the community level
- Targeted BCC for decision-makers
- Respond to demand for birthing centers at the VDC level
- Continue support and proper execution of incentive schemes for pregnant mothers and FCHVs
- Scale-up PWG approach to all districts
- Incorporate PWG model within CB-NCP program
- Introduce CHX as a component of PSBI prevention
- Replicate the effectiveness of group commitments as a strategy in other MNH programs

Table 1: Summary of Major Project Accomplishments

Goal - To Sustainably Reduce Neonatal Mortality in Nepal

Result 1:Increased access to neonatal health services in Sunsari and Parsa

Project Inputs	**Activities**	**Outputs**	**Outcomes**
• CBNCP program • Pregnant Women Group approach	• MTOT &TOT on CBNCP • Cascade training: MOHP & FCHV • Supply of newborn care medical tools like color coded weighing scale, mucus extractor and bag and mask • PWG formation focusing on disadvantaged groups • Behavioral mapping of utilization of maternal newborn health services by using social map on mat (can be used by an illiterate woman too)	• Increased knowledge and skills of management of newborn care at community and health facility • Increased knowledge on danger signs during the pregnancy, at birth, after delivery and newborns	• Increased skilled delivery care. • Increased first check by skilled provider - by district • Increased care seeking for critical neonate care • Increased treatment of neonatal infections

Result 2:Increased demand for neonatal health services in Sunsari and Parsa

Project Inputs	Activities	Outputs	Outcomes
• PWG approach initiated to disadvantaged groups • Mass health education followed by public commitments	• Orientation to district and VDCs stakeholders in PWG • Training on PWG to FCHVs and formation of PWG • Health education on danger signs of pregnancy, at birth after birth and newborn by behavioral mapping mat • Mass health education followed by public commitments on utilization of maternal and newborn health services by decision makers (husbands and mothers-in-law), service providers and pregnant women in a group • Local FM radio broadcasting on dangers sing of newborn and essential newborn cares	• 260 PWGs and 123 PWGs formed in Sunsari and Parsa district respectively. There are 2,912 members (64% illiterates, 25% Dalit, 38% tribal (janjati) and 2% Muslim) • 835 mass health education sessions reaching 11,871 target groups in three districts (25% Dalit, 30% Janjati and 18% Muslim)	• Increased ante natal and post natal checkup including newborns • Increased institutional delivery • Increased iron and folic acid tablet consumption
Result 3:Increased quality of neonatal health services in Sunsari and Parsa			
Project Inputs	**Activities**	**Outputs**	**Outcomes**
• Baseline, midterm and end line survey by LQAS and Child Survival sustainability	• Data collection and analysis of data by sub district wise (Ilaka) and indicators wise. Planning by districts to increased	• The action plans prepared and implemented by district health offices	• All most all the target of the project (as of DIP) were met or even surpassed in the

assessment • Follow up after CBNCP training and onsite coaching • Quarterly review HMIS data	substandard indicators and Ilakas. • The knowledge and skills of health workers and FCHV on the newborn care and management was assessed and gave on site coaching	• 288 health workers and 169 FCHVs were onsite coached on newborn care and newborn sick management • Increased monitoring & adjustments based on data	end line survey
• *Result 4:Strengthened support for neonatal mortality reduction in Nepal*			
Project Inputs	**Activities**	**Outputs**	**Outcomes**
• Dissemination of best practices of LIBON • Chlorhexidine (CHX) operational research	• PWG approach was shared to all regions of Nepal, Nepal Perinatal society, APHA 2011 and GHC 2009 • Training on CHX to all health workers and FCHVs in Parsa • Supply of CHX to pregnant women through PWGs and health facility and birthing centers and district hospital • Shared the finding of the CHX ops research to national level	• Coverage is high–about 82.7% of newborns in Parsa District had CHX applied to their umbilicus–but compliance (the application of an entire tube of CHX all at once within two hours of cutting the cord) is lower, at 66.4%. Women who belong to PWGs are 1.3 times more likely to apply CHX correctly	• Pregnant women group is incorporated in CBNCP program in Sunsari and Parsa • CHX application around the newborn umbilicus stump to be approved as part of the National program in Nepal • CHX drug is also included in Nepal's essential drug list to be supplied by GoN

B. Introduction - Overview of the Project Structure and Implementation

(i) Project Goals, Objectives and Strategies

The Local Innovation for Better Outcome for Neonates (LIBON) project (2007-2011) implemented by Plan Nepal was designed to assist the Ministry of Health and Population (MoHP) in reducing neonatal mortality and meeting the Millennium Development Goal 4 by promoting safe motherhood practices and applying simple low cost approaches to newborn care. The project was implemented in Sunsari, Parsa and Bara districts located in the Terai region of Nepal. These districts are characterized by low socio-economic status, limited access to health services, frequent political unrest, and a substantial population of marginalized, Dalit, and minority ethnic groups. In Sunsari and Parsa, the LIBON project primarily supported the Community-Based Newborn Care Program (CB-NCP) of the Government of Nepal. In addition to CB-NCP, the project in Parsa included an additional component for Chlorhexidine (CHX) application on the umbilical stump for preventing neonatal sepsis. Bara served as a learning site after handover to the MOHP, and was being monitored as a learning site for understanding the sustainability issues for child survival programs; the CB-NCP program was not implemented in Bara district.

The overall goal of the project was to reduce the burden of neonatal mortality in Nepal which was divided into three impact-oriented and innovative sub-goals:

Sub-Goal 1: To reduce neonatal mortality in the districts of Sunsari and Parsa through the application of an integrated, community-based package of interventions and service delivery strategies.

Sub-Goal 2: To promote social inclusion and a fact-based decision making process for the planning and resource allocation of district-based child, maternal, and neonatal programs.

Sub-Goal 3: To assist the MOHP and other constituencies in the preparation and use of knowledge, policy, and investment products that will accelerate the reduction of neonatal mortality.

These goals were reached through the achievement of following result oriented objectives:

- **Result 1:** Increased Access to Neonatal Health services in Sunsari and Parsa
- **Result 2:** Increased Demand for Neonatal Health services in Sunsari and Parsa
- **Result 3:** Increased Quality of Neonatal Health services in Sunsari and Parsa
- **Result 4:** Strengthened support for Neonatal Mortality reduction in Nepal

Several strategies were adopted by the LIBON project to achieve these results, including community-based service delivery to increase ACCESS and social inclusion to increase EQUITY to meet Result 1; community mobilization to increase DEMAND to meet Result 2;

health systems strengthening to increase QUALITY to meet Result 3; and stakeholder sharing and collaboration to increase SUPPORT to meet Result 4.

The central feature of the LIBON project was its support of maternal and child health activities of the Government, particularly to the CB-NCP program through Pregnant Women's Group (PWG), a socially cohesive group of pregnant women operating in a small localized community which serves as a political and administrative unit such as the Ward. These groups meet periodically to discuss issues related to pregnancy and birth, birth preparedness plans, and to implement a self-monitoring mechanism of their health seeking behavior using the social mapping mat (see Annex 16 for visuals of the mat). The PWG is facilitated and supported by Female Community Health Volunteers (FCHVs), and constitutes a sub-group of a larger mothers group of which the FCHV is the member secretary. This approach evolved over many years of experience (1998-2006) in implementing USAID-funded child survival (CS) programs by Plan Nepal, and particularly from lessons learned during the second CS program (2001-2006) in Bara, as the program made concerted effort to reach the unreached.

In the two districts where the CB-NCP program was instituted, LIBON project's main activities were focused on supporting the CB-NCP program which also included the provision of Co-Trim tablets from FCHVs and Gentamycin injection from Village Health Worker (VHW) for the early management of Possible Severe Bacterial Infection of newborns. The LIBON project supported all the following seven major components of CB-NCP program:

1. Behavior change communication;
2. Promotion of institutional delivery and clean delivery practices in case of home deliveries;
3. Postnatal care;
4. Community case management of pneumonia/Possible Severe Bacterial Infection;
5. Care of low birth weight (LBW) newborns (<2,500 grams);
6. Prevention and management of hypothermia; and
7. Recognition of asphyxia with initial stimulation and resuscitation of newborn baby.

The LIBON project was implemented in partnership with the District Public Health Office (DPHO), Health Posts and Sub-health Posts, with an inbuilt mechanism for bottom up monitoring. LIBON also partnered with non-governmental organization (NGOs) and community based organizations (CBOs). Monthly maternal and child health related data reviews at the sub health post, at Village Development Committee (VDC) level, and at the health post at the Ilaka level were conducted along with quarterly reviews at the district level. These regular reviews were supplemented by baseline, mid-term and end-line surveys using Lot Quality Assurance Sampling (LQAS) to ensure quality of quantitative data. The quantitative data was further triangulated with qualitative data at the end of the project, obtained through focus group discussion and in-depth interviews conducted with PWGs, FCHVs, Mothers-in-Law, Husbands, Health Post In-charge and DPHO Officers in the three districts. The final evaluation report was prepared taking into account both quantitative and qualitative data and a review of the several relevant documents.

(ii) Health Care Delivery System of Nepal

Nepal's health care delivery system reaches the community through a constellation of government health institutions, mid-level health workers and female community health volunteers. At the central level, the Ministry of Health and Population is mainly engaged in policy formulation, planning, and monitoring and evaluation. The Department of Health Services is responsible for execution of these policies and implementation of the plan. Currently Nepal is divided into five administrative regions and there are five regional directorates in each of these regions. These regional directorates carry the task of coordination and monitoring of health activities in the districts of the region.

There are 75 districts in Nepal and each has either a District Health Office (DHO) or a District Public Health Office (DPHO) which serves as a nodal point for integrated district health system. Each district is further divided into electoral constituencies, each having a Primary Health Center (PHC) with a Physician as In-charge, several Ilakas each having a Health Post (HP) with a Health Assistant as In-charge, and many Village Development Committees (VDCs) with a Sub-health Post (SHP) and an Auxiliary Health Worker (AHW) as In-charge. The VDCs are divided into 9 wards, each having one (or more based on population) FCHVs who engages in health promotion activities particularly related to maternal and child health. The FCHVs are the member secretary of the Mothers Groups (MG) in the Ward, which hold regular monthly meetings and discuss issues related to health.

The PWGs initiated by the child survival program of Plan Nepal form one sub- group of this larger MGs. The FCHVs are supported and supervised by the staffs of Sub-health post such as VHW and Maternal and Child Health Worker (MCHW), who report to them every month about their record keeping. The SHP, HP and PHC also have a mobile arm, the Primary Health Care/Out Reach Clinic (PHC/ORC), which takes primary health care services to the neighborhoods of the 2 or 3 wards at a time every week covering the entire VDC in one month. Many of the pregnancy related checkups and safe motherhood activities are conducted through this outreach clinic.

The LIBON project operated in all these levels – coordination with Ministry of Health and Population, Department of Health Services and Regional Health Directorates support to D(P)HO and health institutions at various levels, and FCHV and PWG at the community level. Training and orientation was the major component of support that was provided not only to health professionals and FCHVs, but also to various sectors related to health. Supplies of the equipment and other logistic needs, support to the infrastructure development for birthing centers were also other important areas of support. The population of the three districts together represents approximately five percent of the total population of Nepal.

(iii) Trends in Nepal's progress toward meeting MDGs related to Maternal and Child Health

Over the past two decades, Nepal has taken initiatives that have achieved substantial reduction in child and maternal mortality ensuring its progress in meeting MDG-4, and keeping it on track for MDG-5. It has also significantly improved equity of access to health services, particularly that of marginalized castes and ethnic groups, and beginning to reduce the extreme disparities between population of different socio-economic gradient. (NHSP-IP).

The goals, result-oriented objectives, strategies and interventions of the LIBON project were consistent with the policies, plans, programs and strategies of the MoHP to reduce child and maternal mortality rate as proposed in the Three Year Interim Plan (2007/8-2009/10), and NHSP-II (2010-2015). Table 2 (below) shows the targets and progress achieved to meet MDG 4 and 5 by the end of 2015. This national context of progress and targets are helpful in understanding the achievement of LIBON districts as they provide a basis for comparison with the national average. The table below demonstrates that for the year 2006, some of the achievement in both maternal and child MDG indicators exceeded the target set for that period.

Table 2: Nepal's Progress towards Millenium Development Goals (MDG) 4 and 5

Indicator	Achievement			2006		DHS 2011	2015
	1990	1996	2001	Achievement	Target (NHSP IP-I, 2007)	Achievement	Target (MDG report 2010)
MDG 4 - Child Health							
Infant Mortality Rate (IMR)	108	79	64	48	45	46	34
Under-5 mortality rate(Per 1000 live births (UMR)	162	118	91	61	72	54	54
Proportion of one year olds immunized against measles	42	57	71	85	N/A	87.7	90
MDG 5 - Maternal Health							
Maternal mortality ratio (per 100,000 live births)	850	539	415	281	380	Not available	213
Percentage of deliveries attended by health care providers (doctors/nurse, midwife)	7	9	11	20	18	36	60
Contraceptive prevalence rate (percent)	24	29	39	44.2	N/A	43.2	67

Source: DHS reports and NHSP IP I

(iv) Project Location

Sunsari district lies in eastern Nepal and Parsa district in the central region, together they constitute a population of over 1.2 million. Bara district also lies in central region with a population of 623,350.

Sunsari is recognized as having a more and better trained sub-District level health staff; younger and better-educated FCHVs and more birthing facilities. In addition, in Sunsari the LIBON program was complemented by a full Plan Nepal Core program's set of health interventions, including CB-IMCI and HIV services. Even in the difficult period, the MOHP and LIBON staff were able to work within a slightly better security situation than in the other two LIBON

supported districts. All these factors and the CB-NCP trainings and initial package of supplies to FCHVs and health facilities have contributed to Sunsari's high performance.

In Parsa, the staff is less trained at the sub-District level, and the district has fewer birthing facilities. Unlike Sunsari, the LIBON program in Parsa was not complemented by the full Plan Nepal Core program's set of health interventions including CB-IMCI and HIV services. The Chlorhexidine program was implemented in this district only, with impressive success.

Bara district borders with Parsa, and the two districts share many geographical and cultural similarities. However, Bara is much more rural and underdeveloped compared to Parsa in terms of all the development indicators. It did not have either the CB-NCP or CHX programs, therefore the LIBON project in Bara had limited components. The FCHVs do not receive performance-based incentives provided by the CB-NCP program. Of the three districts, the security situation in Bara was the most severe in affecting MOHP staff where turnover was as much as six times in the period of 18 months before MTE. The situation has improved but the transfer of staff members continues to be a problem.

The LIBON project initiated PWG formation in Sunsari in July 2008, almost a year earlier than the implementation of government run CB-NCP (April 2009). There are 260 active PWGs in EOP with a total of 2055 pregnant women members, 23 Birthing Centers and two Emergency Obstetric Care (EmOC) venues in Sunsari.

In Parsa the LIBON project started one year later than Sunsari but had the CHX program. There were 123 active PWGs in Parsa in September 2011 with a total of 857 pregnant women members. In these two districts, there are a total of 383 pregnant women groups comprised of 2912 members, among them 64 percent were illiterate, 65 percent were categorized as disadvantaged, and out of that 25 percent were Dalit/Untouchable; 38 percent were Janajati; and 2 percent were Muslims. Parsa has one sub regional hospital and one government hospital to support CB-NCP program. Government is continuing CB-IMCI program in this district.

In Bara district, child survival projects were introduced in 1997 and the district completed two such CS projects (1997-2001; 2001-2006). The LIBON project started in 2007. Bara was a learning lab for sustainability issues since CB-NCP was not introduced here unlike Parsa and Sunsari and hence the LIBON project's activities were also limited. In FY 2012, CB-NCP is being introduced in Bara by the government. The only ongoing activities in Bara between 2007

and 2010 were the maintenance of the PWGs and follow-up child survival activities. In these three districts the total direct beneficiaries are 643,161 (Table 3).

Table 3: Population characteristics, health status and health service utilization in LIBON districts

DISTRICT	Total Population	Population aged 0-11 months	Pop. aged 12-23 months	Pop. aged 24-59 months	Women of reproductive age (15-49 years)	Annual no. of exp. pregnancies	% of live births reported as smaller than avg. by mothers	% male population literate	% female population literate	No. of Village Devpt .Committees	No. of municipalities	No. of sub-districts
SUNSARI	733,919	18,837	19,286	56,785	139,344	27,869	18	71	50	49	3	12
PARSA	580,572	15,697	16,617	49,533	110,422	20,742	14	55	28	82	1	12
BARA	652,286	17,680	18,616	55,291	125,053	23,538	14	55	29	98	1	15
TOTAL	1,966,777	52,214	54,519	161,609	374,819	72,149				**229**	**5**	**39**

Source: Plan, 2006; DHS, 2001 and projected for 2007/08

(v) Project Design

The LIBON project team included: 2 Program Unit Managers, 2 District Coordinators, 3 Assistant District Coordinators, 1 Monitoring and Evaluation officer, 9 Facilitators, 1 Administrative & Finance assistant, 2 Office Assistants and 1 support staff. A Project Coordinator and Health Coordinator from the central level provided technical backstopping and management of the project at the country office level. A US-based Program Manager provided technical and programmatic support from Plan International USA in Washington DC. LIBON worked in close collaboration with several key partners such as MOHP, USAID, Tribhuvan University Institute of Medicine (TUIOM) for project implementation, sharing of information, feedback, and to conduct training sessions.

In order to reach the community and mobilize local stakeholders for the improvement of maternal and child health, the project developed strong supportive mechanisms with MOHP's

CB-NCP program. Training and orientation to government health and related sectors was the major support for capacity building and effective implementation at the district level. These activities constitute the seven components of CB-NCP which are monitored through ten core indicators (Table 4), with a built-in incentive system for FCHV. The safe motherhood program also provides incentives to pregnant women themselves (Table 5).

Table 4: Technical Intervention Components and Core Indicators

CB-NCP Elements	CB-IMCI Elements	Neonatal Infection	CB-NCP indicator
▪ BCC: Pregnant Women's Group, self-monitoring pregnant women, facilitated by Female Community Health Volunteers (FCHV), mother's cards, public commitments by decision-makers (mothers-in-law) and service providers ▪ Promote institutional delivery and clean delivery practices in case of home delivery ▪ Postnatal care (home visits by FCHVs on 1st, 3rd, 7th and 29th days after delivery) ▪ Community case management of Pneumonia/PSBI at community and health institutions ▪ Identification and management of LBW babies at community and health institutions ▪ Prevention and management of hypothermia at community and health institutions ▪ Recognition of asphyxia; initial stimulation and resuscitation of newborn babies at community and health institutions	▪ Tetanus toxoid to mother ▪ Iron supplements during pregnancy ▪ Skilled Birth Attendance ▪ Hand washing and CDKs during delivery ▪ Place newborn with mother; immediate BF ▪ Drying and delayed newborn bathing ▪ Four ANC visits by skilled staff ▪ Post-partum vitamin A to mother ▪ Knowledge of newborn danger signs ▪ Immediate referral of newborns with danger signs ▪ Albendazole to mother for deworming ▪ Vitamin A during gestation for night blindness ▪ LBW care: kangaroo care, immediate BF	▪ CHX use on umbilicus for both home and health institutional deliveries ▪ Community-Based PSBI diagnosis, referral and treatment (cotrimoxazole by FCHV followed by gentamycin at an MOHP facility)	▪ Percentage of VLBW/LBW babies among all live births weighed by FCHV ▪ Percentage of newborn receiving care on 2-3 days after delivery ▪ Percentage of newborn receiving care on 4-7 days after delivery ▪ Number of neonatal deaths reported by FCHV ▪ Percentage of newborn recorded by FCHVs with PSBI ▪ Percentage of young infants (0-2 months) with PSBI seen by VHW who completed the full course of Gentamycin ▪ Percentage of women whose home birth was attended by skilled Birth Attendant ▪ Percentage of home deliveries where FCHV attended to the newborn. ▪ Percentage of mother whose newborn was kept skin to skin contact to her immediately after birth where FCHV attended to the newborn ▪ Percentage of mother who breast feed their newborn within 1 hour where FCHV attended to the newborn

Table 5: FCHVs' incentive in CB-NCP program and PW/PN Mothers incentive in Safer Motherhood Program

FCHVs (CB-NCP)	PW / PN (Safer motherhood)
Performance based incentive of NRs 200 - 400 to FCHVs per delivery cases for their presence at birth in home, weighing the newborn, 1st, 3rd and 7th days post natal home visit and finally to close form on 29th days. If institutional delivery need to immediate visit at home as well as 3rd and 7th days home visit and closed form on 29th days.	4 times ANC visit by pregnant women getting NRs 400 and transportation cost during delivery getting NRs 500 in Terai region

The USAID Mission/Nepal provided technical oversight to the LIBON project through monthly meetings. Throughout the study period it actively promoted coordination among the partners and stakeholders. The mission's negotiations with the MOHP supported an active PVO role in the roll out of the CB-NCP, enhancing Plan's capacity for quality program management.

Save the Children (US), CARE Nepal, Helen Keller International, UNICEF and the Nepal Family Health Project (NFHP) II were among the INGOs/PVOs collaborating partners. Monthly meetings, sharing of technical resources and exchange of feedback across the various partners implementing CB-NCP and similar projects played an important role in the successful implementation of LIBON project.

Tribhuvan University Institute of Medicine (TUIOM) actively collaborated with LIBON on LQAS training and data collection. This partnership created capacity among TUIOM faculty and students apart from providing LIBON the data in three intervals.

Plan USA's strong technical backstopping and program support was an integral part of the program strategy that provided technical resources, skills development on program as well as finance, monitoring and operations research support to LIBON staff.

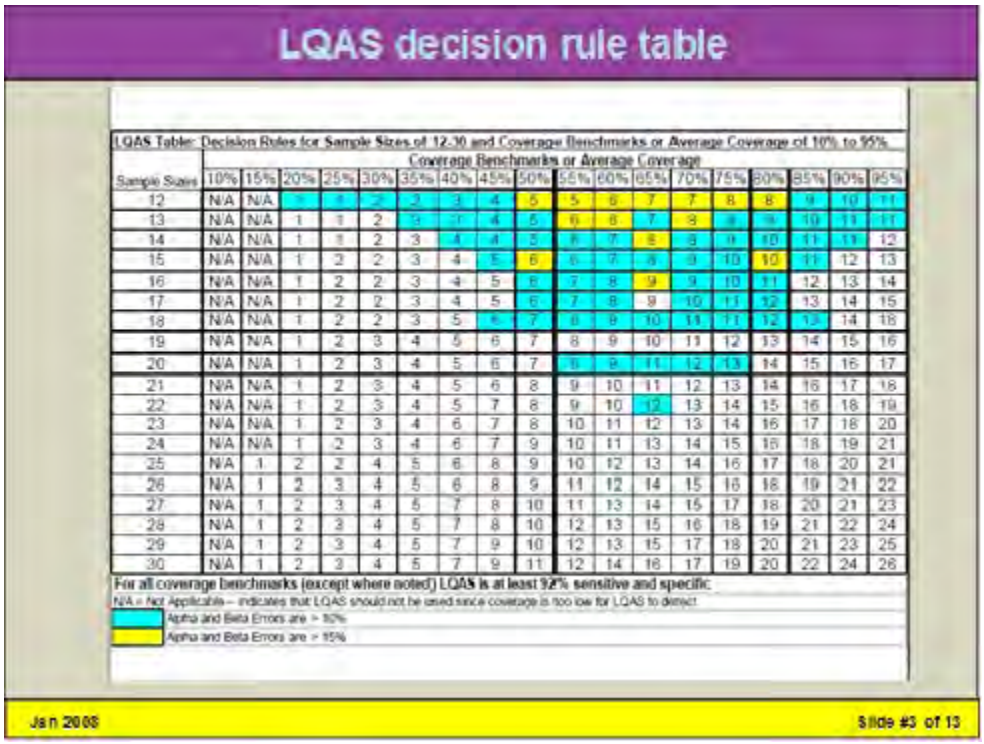
C. Evaluation Assessment Methodology and Limitations

The final evaluation adopted a comprehensive approach by collecting both quantitative and qualitative data The project consistently employed the standard approach of Lot Quality Assurance Sampling (LQAS) for quantitative data collection for the baseline, mid-term and end-line surveys to assist in mid-term and final evaluation. The availability of the quantitative data using the same sampling method in three points in time provided valuable information for trend analysis of different indicators. The qualitative data used both focus group discussion with target groups and in-depth interviews of key informants. The methods of data collection and their limitations are described here in brief and in detail in Annex 9.

(i) Quantitative Data: Lot Quality Assurance Sampling (LQAS)

The quantitative survey findings document and update the current levels of knowledge, practice and coverage of pregnant women and mothers of newborns about birth preparedness, safe motherhood and newborn care. Such periodic monitoring helps the program manager to identify better or lesser performing areas and plan accordingly to get better results. It also helps in monitoring and evaluating the progress of the public health intervention.

For the purpose of data collection, the three districts were divided into existing DHOs/DPHO Supervision Areas (SAs) - Ilakas (including the municipalities' slums) to measure the achievements and performance results against indicators based on the decision rules. Parsa district was divided into 13 Supervision Areas (12 Ilakas of Parsa DPHO and 1 municipality), Sunsari into 15 SAs (12 Ilakas of Sunsari DHO and 3 municipalities) based on Ilakas of DDCs and DHO/DPHO Supervision Area and Bara district into 7 SAs based on CS-XVII Project final evaluation Supervision Area. A sample size of 19 study subjects with the required characteristics was selected per SA. The number was so decided because if a smaller number was taken then the



alpha and beta error would be greater than 10 percent. On the other hand, taking more subjects than 19 would have increased time and cost but not necessarily reduced the margin of error.

In assessing coverage, all the samples taken from each Supervisory Area were aggregated in order to obtain a large enough sample size to estimate the proportion in each population subgroup. Total sample size for Bara is 133 mothers (19 households x 7 Supervisor Areas=133), for Parsa, 247 mothers (19 households x 13 Supervisory Areas = 247) and for Sunsari, 285 mothers (19 households x 15 Supervisory Areas = 285).

By utilizing coverage benchmark or the baseline threshold for an indicator as a predetermined level of coverage, LQAS applied decision rules as to whether an individual or an intervention area reached the average coverage benchmark/threshold or was above or below it.

Limitations of the Sampling - LQAS, though a useful tool in measuring progress of project implementation, provides only aggregate estimates of the districts and quantifies process indicators.

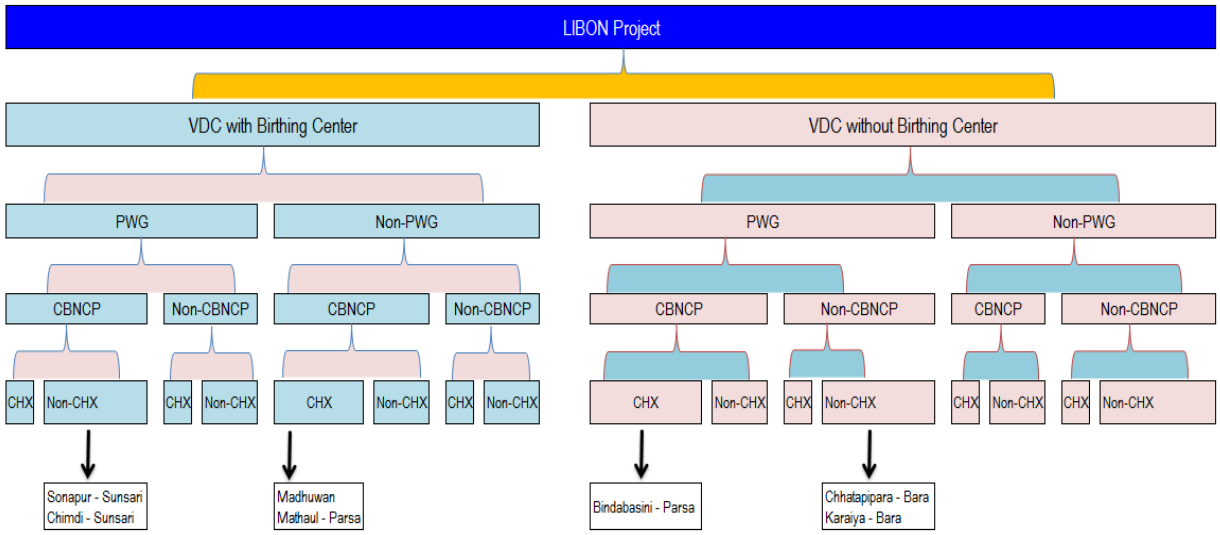
(ii) Qualitative Data

Review of key documents, Focus group discussion (FGD) and In-depth interview (IDI)
A team of final evaluators comprising of district LIBON project staffs, Plan USA, USAID Nepal, Care Nepal, Family Health Division, Regional Health Directorate, District Public Health offices, community and external consultant collected the qualitative data by visiting the three districts (Table 6). The following steps were taken for collection of the qualitative data. The main objective of the data collection was to triangulate the findings of quantitative survey with the observation and inputs from the beneficiaries, key informants and service providers in the project districts.

- Review of key documents
- Team planning meeting with key project staff

- Development of tools for FGD and IDI for key target groups, informant and stakeholders.
- Debriefing and feedback on tools from Country Management Team (CMT)
- Field work for data collection – 3 districts (Sunsari, Parsa and Bara)
- Preparation debriefing presentation *(including quantitative and qualitative information)* to national stakeholders
- Drafting and finalization of report

Before the FE team held a meeting to plan field visit and develop tools to gather qualitative data, several documents were carefully reviewed by the final evaluation team such as USAID guidelines for Final Evaluation, Detail Implementation Plan (DIP), Final LQAS and CSSA report, Mid-term Evaluation Report, Plan Nepal Annual reports, Chlorhexidine (CHX) Report. The VDC and wards were selected to have as much variation as possible in terms of presence and absence of birthing center, PWG, CB-NCP, CHX application. (See the matrix below).



The final evaluation team selected two VDCs per district: one that had a birthing center and another that did not. Within these two categories, the team also visited three VDCs with PWG groups and one that did not have a PWG. Among them, two VDCs had a CHX program and other two did not include a CHX program. All the selected VDCs for the qualitative evaluation are middle-range VDCs (i.e. neither high nor low performing). All together 6 FGD and 5 IDI were conducted in each of the districts with six different target groups and key informants: two each for PWG/MG (FGD), Mothers-in-law (FGD), Husband (FGD), FCHV (IDI), Health facility in-charge (IDI), and one each for DHO/DPHO(IDI). It is a common practice in Nepal that the decision about pregnancy care and child birth is taken by the mothers-in-law or husband rather than the woman herself; in order to gain the perspectives of these decision makers, the final

evaluation team interviewed both these groups. The evaluation team was divided into five sub-groups for data collection. For consistency purposes the team leader/facilitator of sub groups remained the same. Informed verbal consent prior to initiating each IDI/FGD was taken. The field visit was completed in 9 days from 10-18 September, 2011. Three days were spent per district, first half of each day for field visit and data collection; second half of the day for debriefing between team members and data quality check. The findings were shared in a final evaluation sharing workshop.

Table 6: Field Data Collection Visit Dates

Activities / District	Sunsari – DHO	Parsa – DPHO	Bara – DHO
Visited Date	10 – 12 Sep	13 – 15 Sep	16 – 18 Sep
VDC	Chimdi and Sonapur	Madhuwan Mathaul and Bindabasini	Chhatapipara and Karaiya
FGD	PWG/MG Mothers-in-law /Husband	PWG/MG Mothers-in-law Husband	PWG/MG Mothers-in-law Husband
IDI	FCHV Health facility in-charge	FCHV Health facility in-charge	FCHV Health facility in-charge
IDI	DHO	DPHO	DHO

Limitations of the Method – During the first VDC visit in Sunsari, the final evaluation team attempted to interview the mothers-in-law and husbands within one FGD group. This was immediately recognized as problematic since the husbands in the group were not comfortable speaking up in front of the women. Moving forward, the FGD for the decision makers was separated into two (one for the mothers-in-law and the other for husbands) allowing for greater male involvement in the FGD process. Furthermore, due to time and resource constraints, not all variations seen in the matrix were captured in the characteristics of the communities interviewed. Lastly, local language presented a partial barrier which was overcome with the help of interpreters. The evaluation tools were developed centrally and revised in the field, especially after the initial VDC visit which was used as a pre-testing site.

D. Data Quality and Use

(i) Data Processes Overview

LIBON project followed the CB-NCP monitoring guidelines developed collaboratively by all implementing partners in its two CB-NCP Districts of Parsa and Sunsari. It also conducted two additional data quality checks: survey and CSSA data collection at baseline, midterm and end of project. However, HMIS data was used to evaluate the LIBON project only in CSSA tools. Since the LIBON project uses only CB-NCP forms, survey and CSSA, and internal quality control mechanisms (e.g., management and financial reviews) to assess its progress; assessment of HMIS data in terms of CB-NCP is not done in mid-term or final evaluation.

However, LIBON staff were actively involved in various monthly reviews of HMIS data with their MOHP counterparts for service quality control as part of the District-level capacity building and system strengthening. This collaborative monitoring and quality control efforts that LIBON staff conducted with their MOHP counterparts was intended to assure quality access to services. LIBON and MOHP Staff at each level (SHP; HP/ORC; Ilaka; District) reviewed HMIS indicators to monitor progress against targets, understand the constraints at the facility levels, and support the development of action plans to remedy any shortcomings.

The LIBON project employed the LQAS sampling methodology and trained IOM faculty and students and MOHP staffs. After each round of surveys, data was processed by an external consultant and then discussed extensively in a workshop with all implementing partners to evaluate progress, identify challenges, and develop further action plan. In final evaluation qualitative data were collected for triangulation and validation of the findings obtained from quantitative data.

Because of adequate sample size, precision error below 10 percent and strict protocol observed during data collection, analysis, monitoring and review meetings, the quantitative data overall appears to be of high quality. The qualitative data obtained in final evaluation is supportive of the findings of quantitative data.

(ii) *CB-NCP monitoring system*

A major strength of the CB-NCP monit**o**ring system is that it collects census data of pregnant women and the services and behaviors they engage in at the household and community levels. This is invaluable information for the successful implementation of a community-based maternal and neonatal survival program in a country where roughly 65percent of the women still deliver at home. The act of counting pregnant women in their community has been an empowering process: women see it as important and worthy of attention. This positive attitude is reinforced by the self-monitoring technique used in the PWG: monitoring themselves in front of their peers has proved a powerful mechanism for data quality and BCC adherence. Making a collective effort in birth preparedness planning has increased their social cohesiveness, reduced the social distance between different castes and ethnic groups and empowered them to become more assertive about their right to health.

(iii)Neonatal Death Records

With the new CB-NCP PNC, any neonatal deaths that occur in a facility go into that facility's records and are submitted to the CB-NCP pilot M&E system which is then linked to Neonatal Health Information System (NHIS) data base. These neonatal deaths are discussed with other CB- NCP outcomes at the SHP level on a monthly basis, and any neonatal deaths recorded are discussed again at the monthly Ilaka Review Meetings. Such information is still inadequate for comparison and trend analysis since the records are available only from the last year. However, this practice may prove a major step in community based surveillance system of monitoring reduction in neonatal deaths.

(iv) Qualitative Data

During the final evaluation the field validation exercise to explore the qualitative side of the quantitative indicators proved an invaluable source of information in understanding the "why" and "how," about the progress made and formulating recommendations. Experience of final evaluation field experience and also of MTR is suggestive that while qualitative issues are drawn from field staff experience and discussed verbally in monthly review meetings and reflected in action plans, the project did not employ a formal qualitative monitoring mechanism which could have been vital in turning all this data into useful decision-making information during the life of the project.

E. Presentation of Project Results

(i) Qualitative results

Analysis of qualitative data is presented in the sections that follow, highlighting key observations, areas for improvement, and sustainability of the program. Issues common to Sunsari and Parsa districts are first described, followed by key observations in individual districts; the observation on Bara is described separately. Field visits by VDC resulted in specific observations and characteristics which are expressed in the flow chart of the matrix in Annex 6. These characteristics are summarized in the table below.

Table 7: Field Observations during VDC visits, by district, conducted during FE

Sunsari District	
Sonapur – Sub health post	Chimdi – Sub health post
▪ Community supported birthing center	▪ Government supported birthing center
▪ Marginalized "Dalit" community	▪ Muslim community
▪ Musahar ward has pregnant women group	▪ Muslim ward has pregnant women group
▪ CB-NCP program	▪ CB-NCP program
▪ No Chlorhexidine (CHX)	▪ No Chlorhexidine (CHX)

Parsa district	
Madhuwan Mathaol – Sub health post	Bindabasini – Sub health post
▪ Community supported birthing center	▪ No birthing center
▪ Mixed community	▪ Marginalized community
▪ No pregnant women group	▪ Pregnant women group
▪ CB-NCP program	▪ CB-NCP program
▪ Chlorhexidine	▪ Chlorhexidine
Bara district	
Chhatapipara – Sub health post	Karaiya – Sub health post
▪ No birthing center nearby (closest is 15 minute drive)	▪ No birthing center nearby (closest in Birgunj or Kalaiya)
▪ Mixed community	▪ Mixed community
▪ Pregnant women group	▪ Pregnant women group
▪ No CB-NCP	▪ No CB-NCP
▪ No CHX	▪ No CHX

(ii) Quantitative findings

Quantitative data is presented by categorizing it according to the four expected results:

1. Increased Access to Neonatal Health services in Sunsari and Parsa,
2. Increased Demand for Neonatal Health services in Sunsari and Parsa
3. Increased Quality of Neonatal Health services in Sunsari and Parsa; and
4. Strengthened support for Neonatal Mortality reduction in Nepal.

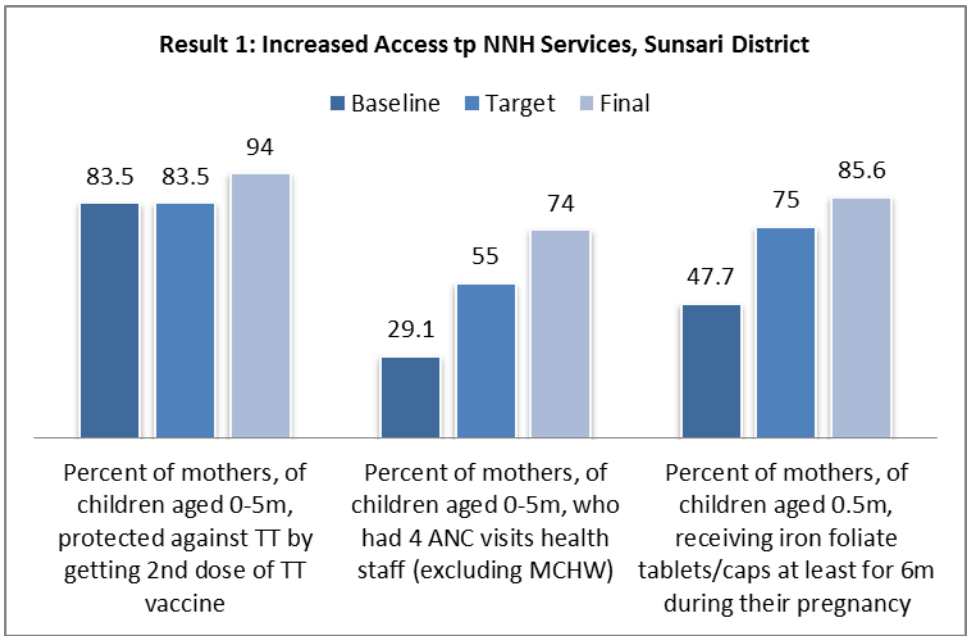
Detailed monitoring and evaluation matrices obtained from quantitative data, for each district, are included in Annex 6. In this section, some selected indicators are highlighted through bar graphs below. The survey data utilized 0-5 month's old children for project core indicators denominator, and Rapid CATCH indicators utilize mothers with 0-23 month old children for denominator.

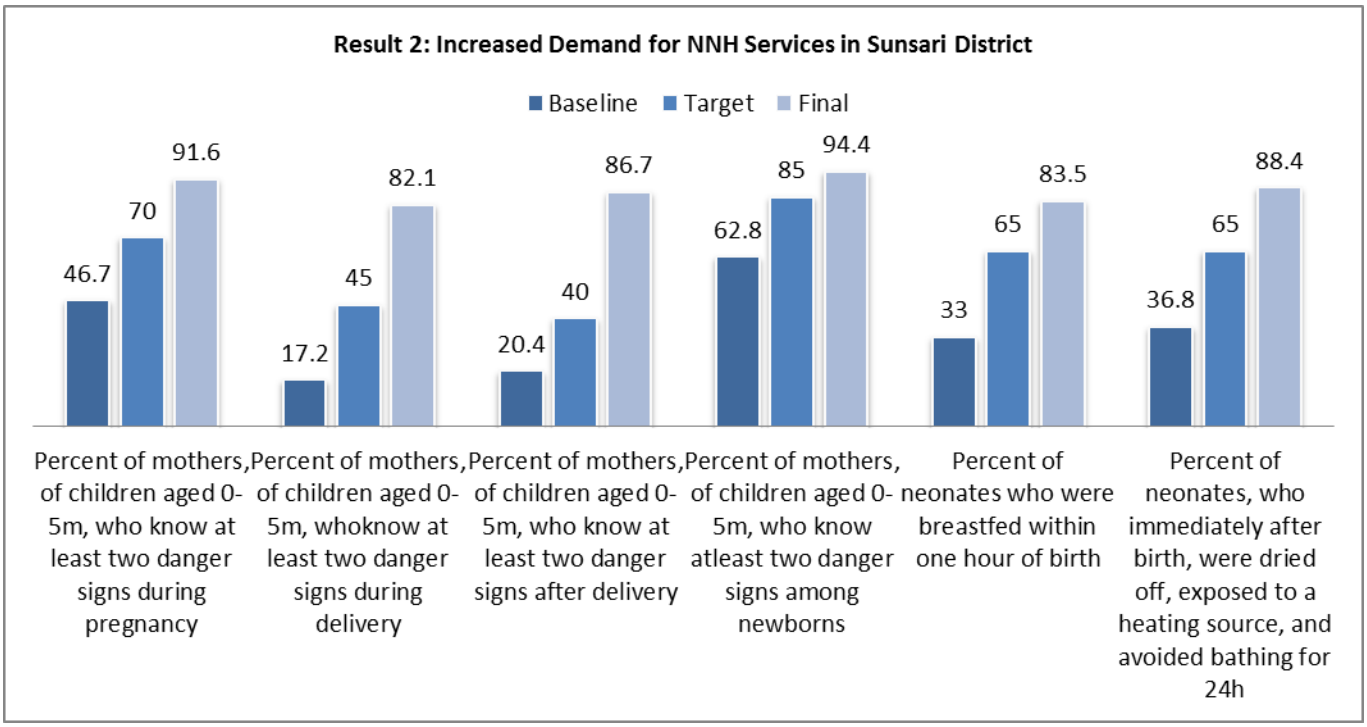
The quantitative data show that the project exceeded the set targets for most of the indicators. For instance, the comparison of baseline and end line data in Sunsari reveals the increase in women knowing two dangers signs during delivery went from 17.2 percent to 82.1 percent, far exceeding the set target of 45 percent for this indicator; similarly, in Parsa knowledge of at least two danger signs post delivery increased from 27.5 percent to 96.8 percent, exceeding the target of 40 percent for this target. The graphs that follow present more such findings.

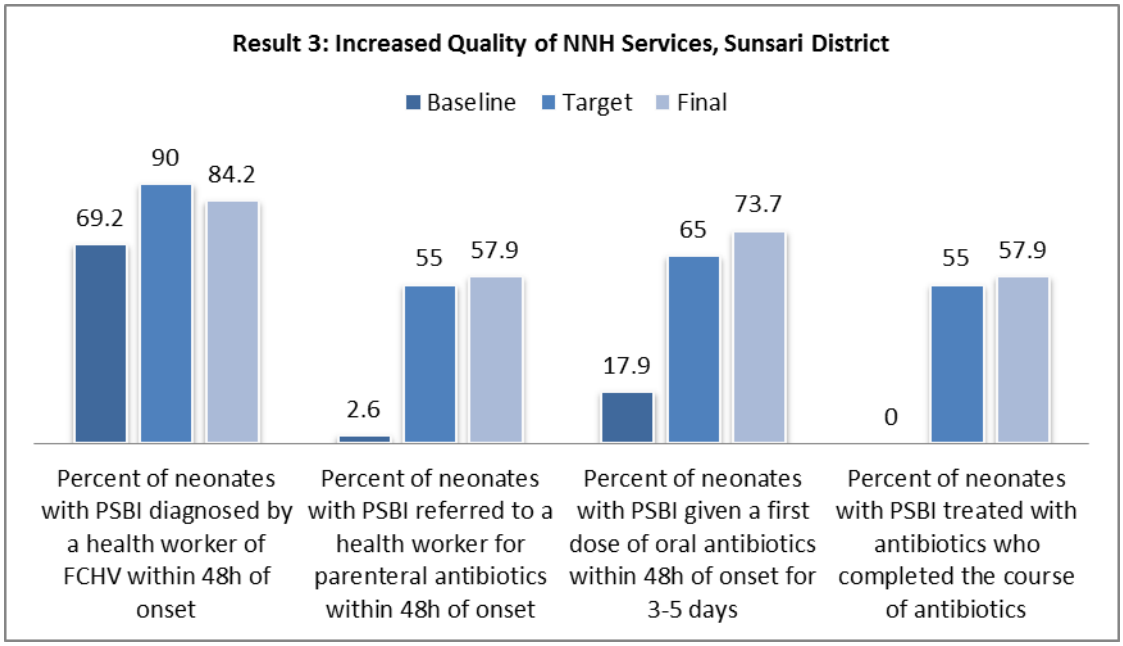
In Bara district, child survival projects were introduced in 1997. Bara completed two such CS projects (1997-2001; 2001-2006). The LIBON project started from 2007 therefore the comparison of quantitative data is between the end-line data of CS project (2006) with end-line

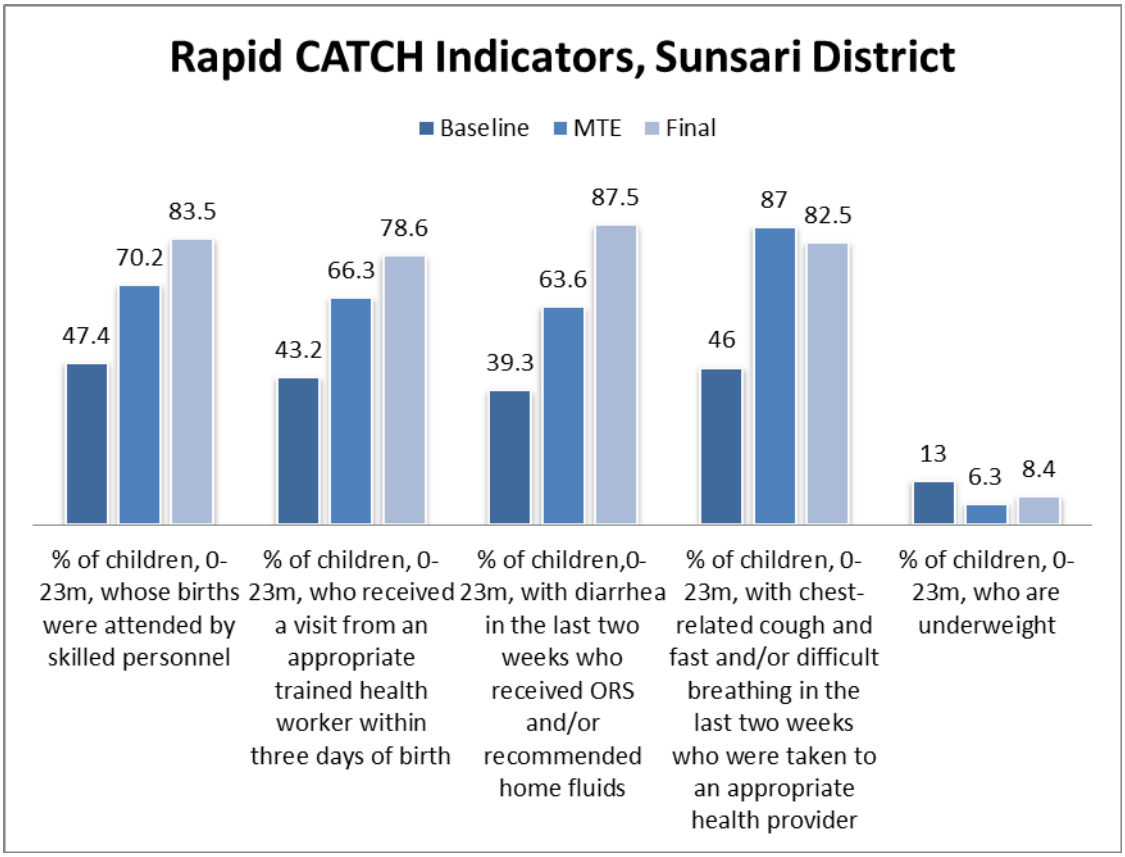
data of LIBON project (2011). There was political unrest in Bara district after 2006 and Plan Nepal had halted all the activities for more one years in Bara. Thus some indicators decreased in Bara during the MTE but it was maintained or increased in the end line survey.

Sunsari District

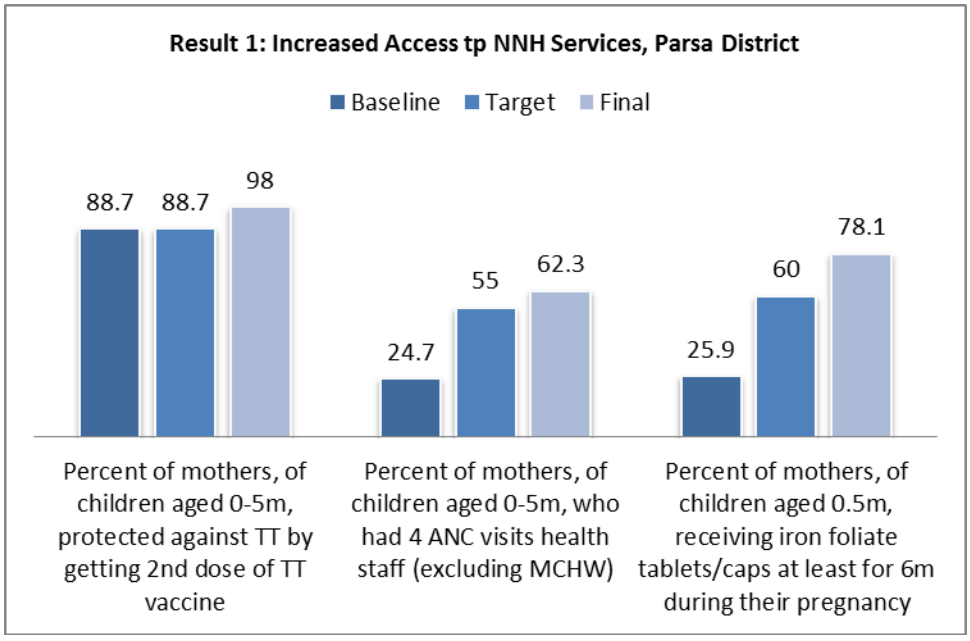


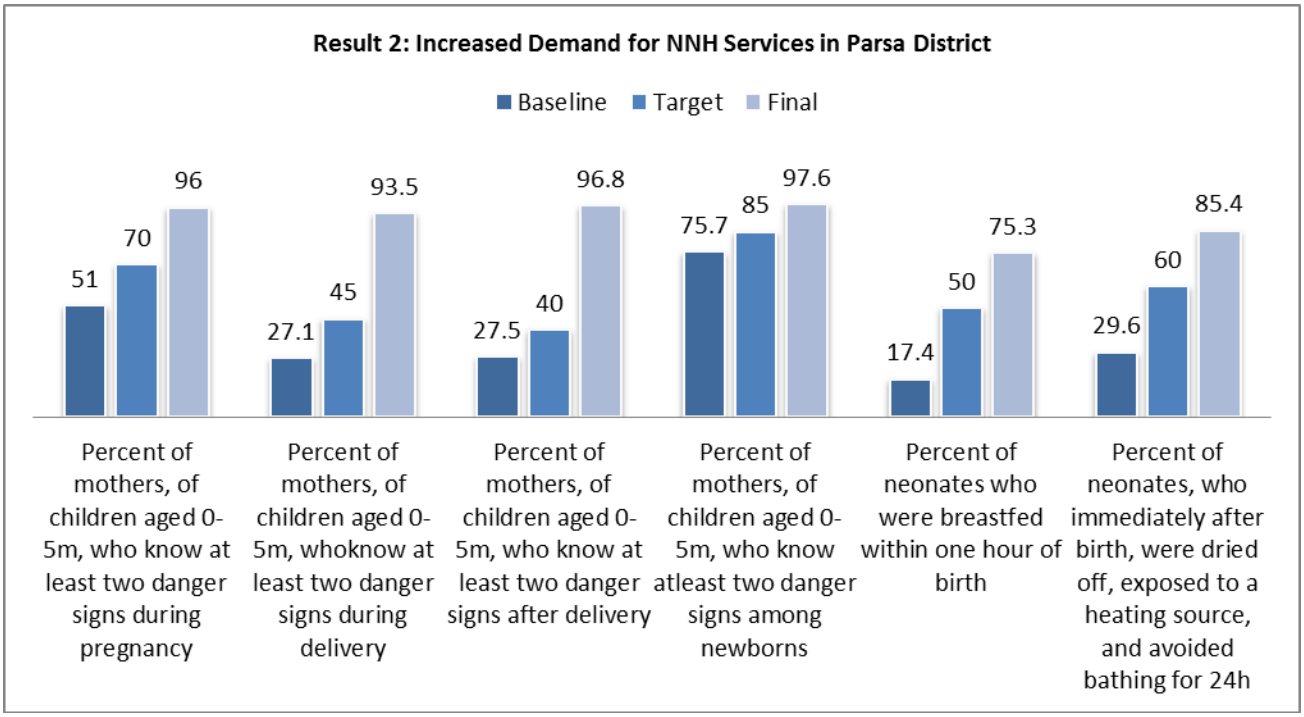


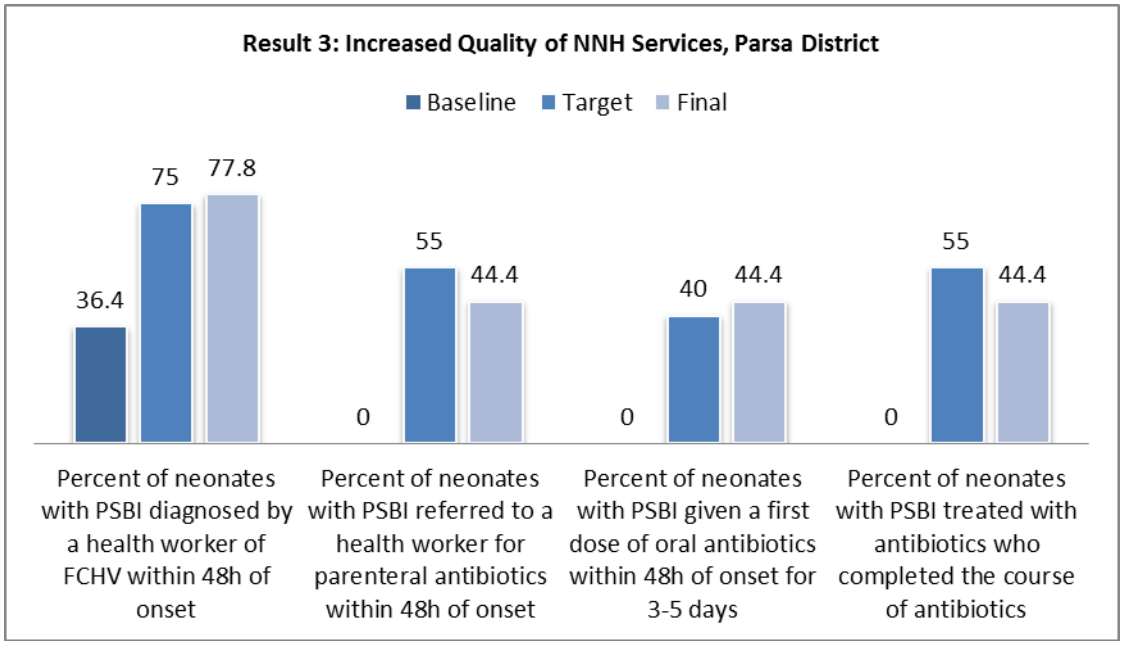

Result 3: Increased Quality of NNH Services, Sunsari District
Baseline
Target
Final
69.2
90
84.2
2.6
55
57.9
17.9
65
73.7
0
55
57.9
Percent of neonates with PSBI diagnosed by a health worker of FCHV within 48h of onset
Percent of neonates with PSBI referred to a health worker for parenteral antibiotics within 48h of onset
Percent of neonates with PSBI given a first dose of oral antibiotics within 48h of onset for 3-5 days
Percent of neonates with PSBI treated with antibiotics who completed the course of antibiotics

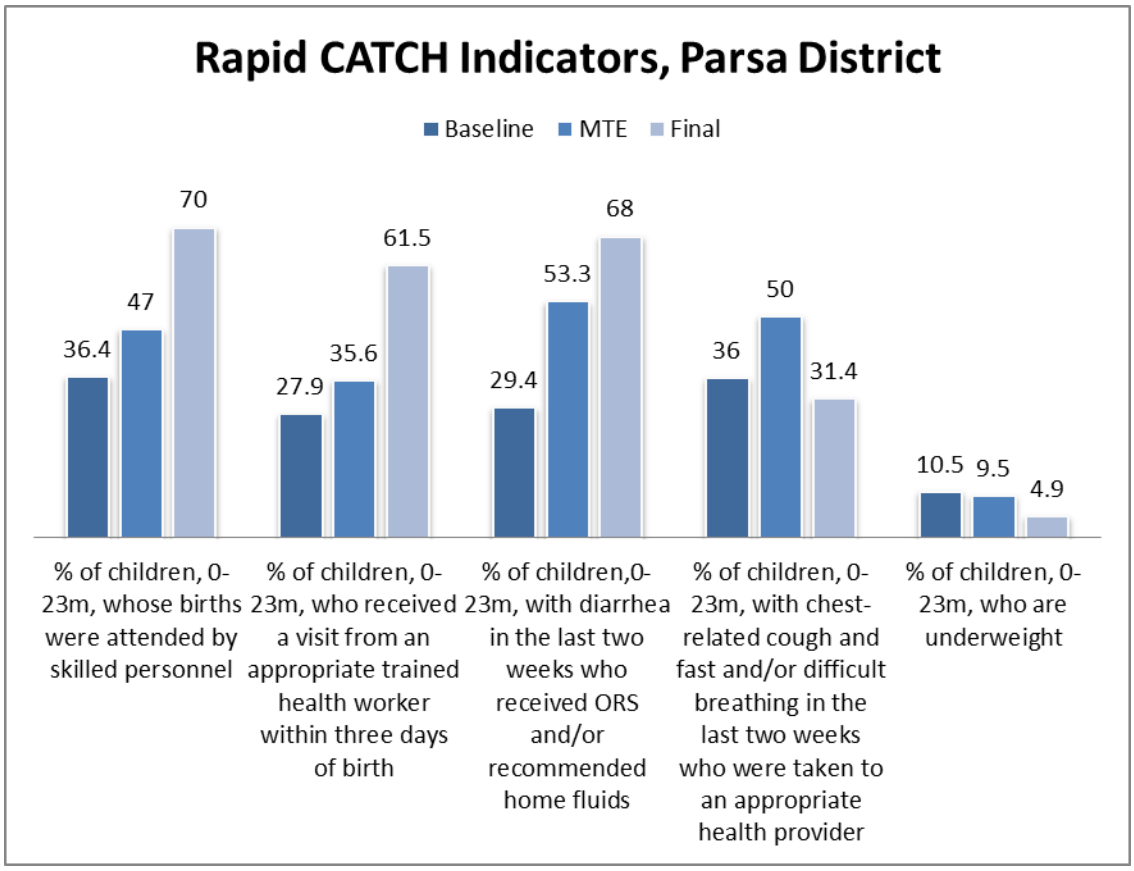

Rapid CATCH Indicators, Sunsari District
Baseline
MTE
Final
47.4
70.2
83.5
43.2
66.3
78.6
39.3
63.6
87.5
46
87
82.5
13
6.3
8.4
% of children, 0-23m, whose births were attended by skilled personnel
% of children, 0-23m, who received a visit from an appropriate trained health worker within three days of birth
% of children,0-23m, with diarrhea in the last two weeks who received ORS and/or recommended home fluids
% of children, 0-23m, with chest-related cough and fast and/or difficult breathing in the last two weeks who were taken to an appropriate health provider
% of children, 0-23m, who are underweight

Parsa District

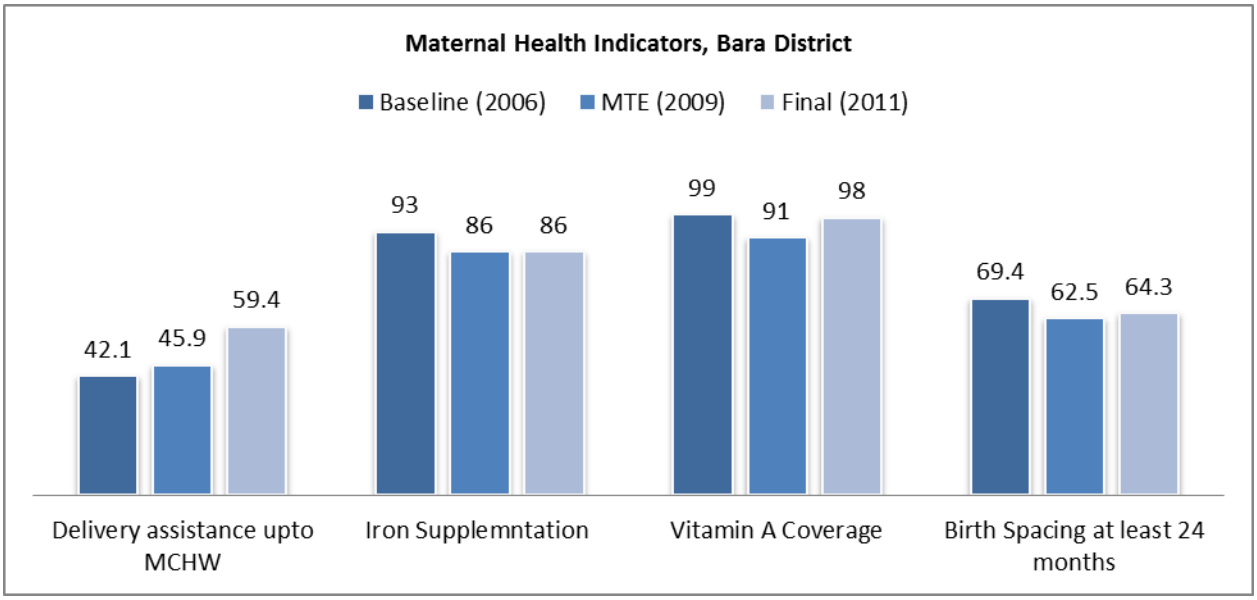


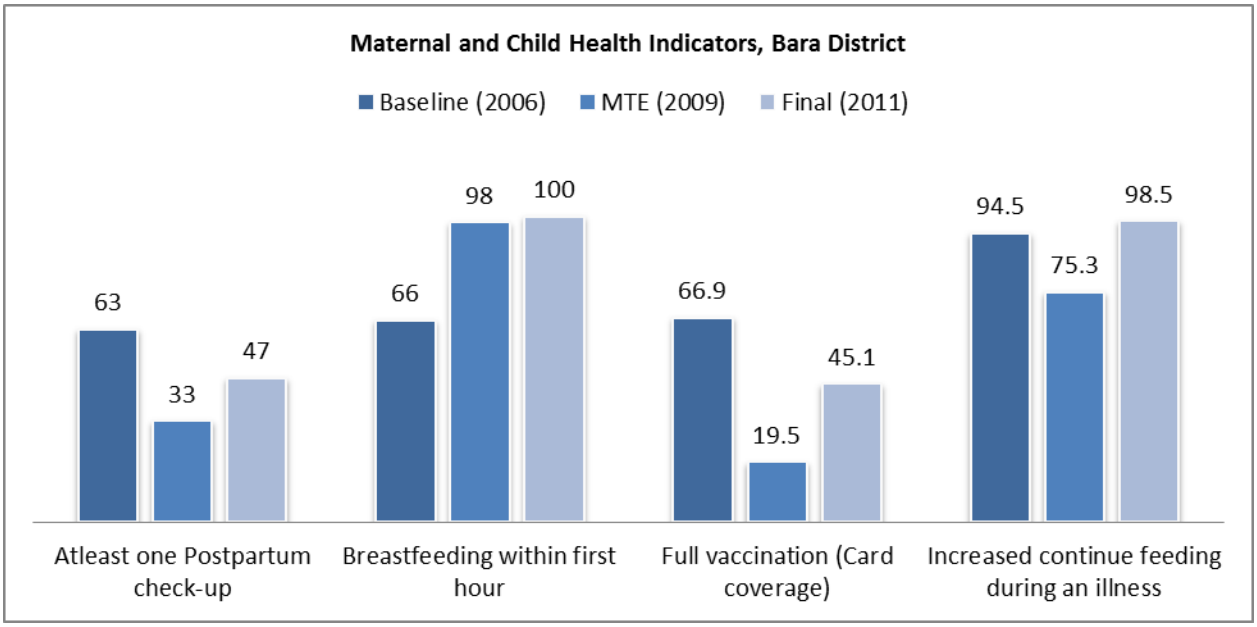



Result 3: Increased Quality of NNH Services, Parsa District
Baseline
Target
Final
36.4
75
77.8
0
55
44.4
0
40
44.4
0
55
44.4
Percent of neonates with PSBI diagnosed by a health worker of FCHV within 48h of onset
Percent of neonates with PSBI referred to a health worker for parenteral antibiotics within 48h of onset
Percent of neonates with PSBI given a first dose of oral antibiotics within 48h of onset for 3-5 days
Percent of neonates with PSBI treated with antibiotics who completed the course of antibiotics


Rapid CATCH Indicators, Parsa District
Baseline
MTE
Final
36.4
47
70
27.9
35.6
61.5
29.4
53.3
68
36
50
31.4
10.5
9.5
4.9
% of children, 0-23m, whose births were attended by skilled personnel
% of children, 0-23m, who received a visit from an appropriate trained health worker within three days of birth
% of children,0-23m, with diarrhea in the last two weeks who received ORS and/or recommended home fluids
% of children, 0-23m, with chest-related cough and fast and/or difficult breathing in the last two weeks who were taken to an appropriate health provider
% of children, 0-23m, who are underweight

Bara District





Although the end-line data for Bara, the control site, implies poor program performance when compared to baseline, it should be noted that this area office experienced problems during political unrest and had to stop functioning, as reflected in the extremely low coverage numbers in MTE; it is still a credit to the program that since mid-term data collection in 2009, the coverage numbers have steadily increased, as seen in final evaluation numbers.

F. Discussion of Results

(i) Contribution towards Objectives

Increased Access to Neonatal Health (NNH) Services in Sunsari and Parsa – the first objective seems to be well substantiated by both the quantitative and qualitative data. As the graphs above demonstrate, the achievements exceeded the set targets and increased significantly from the baseline status.

PWGs have served as a critical entry point for the target groups and beneficiaries to increase access to health education and maternal and newborn health (MNH) care services facilitated by FCHVs, particularly for the marginalized population. Increased availability of trained personnel, increased awareness of beneficiaries at community level and proximity of birthing center in the community appear to have a synergistic effect on increased institutional delivery.

Another crucial factor for availability of SBAs/ANM in the birthing centers is the Government's existing policy that allows HFOMC and VDC to hire required health personnel at community level with their own resources. Incentives paid to FCHVs and pregnant women for institutional delivery have also contributed immensely for increase in institutional delivery.

Increased Demand for NNH Services in Sunsari and Parsa - the second objective of the project also increased a great deal in terms of demand for capacity building and services (refresher training on CB-NCP), for expansion of PWGs to other wards/VDCs in the district, and for SBA training by ANM/newcomers/other health staff. Demand for expansion of birthing centers in sub-health post has increased tremendously.

Increased Quality of NNH Services in Sunsari and Parsa – the third objective was achieved through massive training and orientation programs, a referral system, and refresher trainings. Prompt supply of a CB-NCP kit with essential equipment (color coded thermometer and weighing scale, mucus extractor and resuscitation bag and mask), regular supplies of CB-NCP materials such as reporting and recording format, mother's cards, and sensitization of local health care provider for better care and observation of patient rights, especially of marginalized communities all contributed to this increase in quality.

Strengthened Support for NNM Reduction in Nepal – the fourth objective was primarily achieved through coordination with different MNH stakeholders described in the section above (overview of the project), social recognition of FCHV and pregnant mothers based on performance, and better supervision and monitoring as per CB-NCP guidelines. The Action Plan developed with other stakeholders also contributed in strengthening support for NNM reduction.

(ii) Contextual Factors

The project period was a turbulent period of political transition in Nepal. The historical people's movement of 2006 replaced the Constitutional Monarchy with a Democratic Republic, and the seven-party alliance that led the movement was in the government for a period of two years. The election of constituent assembly was held in 2008 in which the former rebels emerged as the largest party and led the new government. The transition from Monarchy to Republic was conflict ridden, and the "Madhesh" movement in Terai region of low land Nepal erupted at this

time. The interim constitution was amended several times to accommodate demands of the new situation. The government was short lived and had to resign over a row with the Army Chief.

The fluid situation of the transition period further escalated in 2009; thereafter, began to normalize. Frequent turnover and many vacant posts during the leadership transition in the government became a norm, including in the MOHP. For a period, the security situation in Terai deteriorated and the government workers avoided going there because of insecurity. Bara and Parsa districts were relatively more affected than Sunsari.

In spite of adverse situation, LIBON continued to work at the local and district levels in the three districts in the Terai with socially and economically disadvantaged groups. Even when MOHP infrastructure was limited and in poor condition, the MOHP facility staff continued their commitment to reducing maternal and neonatal mortality, positively acknowledging the contribution of the LIBON project supported trainings in enhancing their technical skills in CB-NCP and other MCH related activities (MTE, 2009). They also mentioned that LIBON's ongoing supportive supervision helped to keep the focus on services, health behavior changes needed and other efforts for measurable results. In the final evaluation, when the situation had normalized for about two years, they expressed similar sentiments in all the districts.

(iii)Pregnant Women's Groups

The FGDs among PWG members conducted during the final evaluation in all the districts demonstrated high recall rates of CB-NCP package components and key interventions, and reported good relations and services with providers of all levels, from FCHVs, ANMs and VHWs, and facilities (ORCs, SHPs/HPs and PHCs). The PWs were aware of the Kangaroo care method (skin to skin contact) of protecting newborns from hypothermia. The women regularly monitored their own health seeking behaviors through monthly meetings and social mapping mat used during PWG meetings. By sticking colorful *tikas* (tiny adhesive stickers) for each activity (ANC, iron tablet intake, PNC, tetanus vaccinations, etc.), even the illiterate women were able to follow the time schedule to ensure a healthy pregnancy term.

The PWG members also did not hesitate to complain against a particular health staff in front of his superiors for his rude/unfriendly behavior. To have witnessed such expression from the women in a Muslim community during the FE team field visit is evidence that PWG is empowering women in Sunsari. Similar complaints were also heard in Parsa from health staffs and FCHVs. The PWGs in Bara, which started in 2003, appear to have contributed to making larger mothers groups more active as it empowers pregnant women and create a healthy competition among the peer pregnant women for positive behavior change, on utilization of maternal and child health care services.

(iv) Positive impact of the Government's CB-NCP Program on LIBON's efforts

The "mother's card" (referred to as "Jeewan Suraksha Action Card") has educated mothers about the Birth Preparedness Package (BPP) and danger signs. The card is used by Government in all (75) districts of Nepal. The card is an A4 size pictorial card that is green in color on one side and red in color on the other side. On the green side are the illustrations of antenatal care, birth preparedness plan, post natal care and neonatal care; the red side has illustrations of danger signs during the pregnancy, at birth, after delivery and for neonates (Annex 17).

LIBON project used the mother's cards for self-education and monitoring of the pregnant mothers through the facilitation by FCHVs in the PWG/MG monthly meeting and also in BPP health education programs to the decision makers (mothers-in-law and husbands). It is followed by a public commitment, by pregnant women, decision makers and service providers and FCHVs, to carry out these activities in their own lives. For example pregnant women say "I will do 4 ANC checkups", mothers-in-law say "I will send my daughters-in-law four times for ANC checkup", and health workers say "I will provide four times ANC checkup". The card is distributed to each pregnant woman to be hanged in their room as a reminder. Pregnant women bring the card in the monthly PWG meeting. The card is very useful material for health education and as a reminder of the activities to be carried out. It can be used by illiterate pregnant women too.

Moreover, the increase in institutional deliveries has increased demand for Safe Birth Attendants (SBAs) and birthing centers at the VDC and district level. The proximity of the birthing center to the VDC has a positive impact on the number of institutional deliveries in these areas. VDCs increased support in staffing has been reported as a major factor in promoting community initiated birthing center. In terms of strengthening health systems, the VDCs in general are increasing their support for FCHVs and recruiting of ANMs in health posts. Such initiatives were facilitated by the government policy of allowing Health Facility Management Committee to hire required health professionals by their own resources.

(v) Positive behavior change as a result of CB-NCP and PWGs

The response from all the focus groups and key informants were emphatic in asserting tremendous improvement in the following pregnancy and new born related KPC: ANC and PNC visits; Iron consumption; TT immunization; Recognition of danger signs; BPP mass campaign; Asphyxia management; Institutional delivery; KAP of key decision-makers (specifically, mothers-in-law) in encouraging pregnant women to attend PWGs and improved nutrition during pregnancy/ post-partum period.

Overall, the qualitative data suggests that there was an improvement in health seeking behavior reduction in maternal and neonatal health problems since the beginning of the project; this

impression is consistent with the quantitative data obtained during final evaluation not only of Sunsari and Parsa but also of Bara district (Annex 6).

In addition to these observations in Sunsari, the active participation of the women during the group discussions presented as one indication of the role PWGs have played in empowering them and raising their consciousness of their health rights. They were openly critical about behavior of some health staffs in front of the health authorities. Here, larger mothers groups are very supportive providing them financial loans for birth preparedness. The social behavior mat is an effective self-monitoring mechanism for pregnant women to take charge of their own health throughout their pregnancy and during the post-partum period, particularly among the marginalized populations.

In Parsa, the social distance between marginalized groups and higher classes had noticeably reduced due, as it appears, to PWGs. While the PWG meetings used to be held in segregated groups in the initial periods, the meetings are held now mixing closely together. The women from higher social classes are now coming to the local health facilities (in the past, they preferred private clinics/hospitals). Use of CHX was reported to be near universal. In the past, women applied Dettol, (unidentified) powder, oil, turmeric, etc. on the umbilicus. This accords well with the CHX coverage (79 percent) reported by the quantitative data.

(vi) Health volunteers: FCHVs

During in-depth interviews with FCHVs in Sunsari and Parsa, it was found that they had been trained by the CB-NCP program. They were regularly conducting monthly mothers group / pregnant women group meeting in their community. During the meeting disadvantaged pregnant women, postnatal women and mothers-in-law and adolescent girls also participated. In the meeting they discussed about CB-NCP: especially sign and symptoms of infection of newborn and its management as well as nutrition, proper breastfeeding etc. After the CB-NCP program implementation, there was an increase in institutional delivery. Now initial management of low-birth weight babies and birth asphyxia is taking place in the community itself.

The FCHVs were regularly visiting and supporting women who delivered at home and in case of institutional delivery, jointly visiting with pregnant women to the birthing center. They also made three post natal home visits on 1st, 3rd, and 7th day and weighing newborn baby and finally on 29th day for closing the form. Overall, they were motivated to provide services for saving the lives of women and newborns. Now community people have more trust and they seek FCHVs' advice and suggestions more frequently.

The interviewees also reported that the CB-NCP and BPP health education mass campaign program is increasing the awareness through active participation and mobilization of pregnant women and decision makers. Both groups learn about danger signs during pregnancy, delivery, postnatal and newborn as well as EP, FP, pneumonia, CDD, nutrition and regular check-up of postnatal and newborn baby. They have demanded refresher training for health workers and FCHVs on CBNCP, required regular supplies, ambulance service, expansion of birthing center, exposure visit to exchange learning and sharing, some essentials such as umbrella, torch light and bi-cycles.

(vii) Decision Makers

Mothers-in-law and Husbands are the decision makers for the pregnant women and decide whether they should go or not to go for antenatal checkup, birth at health institution and post natal check-ups of mother and newborns.

During the mid-term evaluation, most of the mothers-in-law reported that they make the final decision on whether or not their daughters-in-law should have ANC checkup and institutional delivery in health facilities as well as post natal check including that of newborns. Thus, mothers-in-law are the gatekeepers who have a decisive role on whether their daughters-in-law utilize maternal and newborn health services. As per the LIBON MTE recommendation, the health education on ANC, natal care, post natal care and newborn care for pregnant women was expanded to decision makers followed by their public commitments. The FE found that the mothers-in-law are regularly attending PWG/MG meetings, are making public commitments for BP plan and are encouraging their daughters-in-law to seek proper care during pregnancy, delivery and post natal period.

The husbands said that they now allow their wives to attend PWGs to learn about maternal and newborn health. They felt that the orientation about CB-NCP and safe motherhood should be given to all who are responsible for taking care of pregnant women. They had observed when home delivery was common, many neonates died. They also pointed out that the behavior of pregnant women has changed. They are visiting clinics for antenatal checkups, consuming iron tablets during pregnancy and after delivery, mothers go to FHCV after delivery for postnatal care and most of the children's births take place in birthing centers.

Many of the husbands learn about BPP through their wives after coming back from mother's group communication sessions. During a final evaluation field visit a husband even fetched a mother's card to present to the evaluators. Many of the husbands were aware of what to do when there is bleeding and abdominal pain, and willing to take their wives to specialized centers such as Narayani Sub-regional Hospital, Birgunj in case of Parsa District. However, they were not aware whether FCHV visited to delivered women after delivery since usually they are usually outside home for the work either in factory or other labor works. In Parsa they were aware of the need to apply chlorhexidine after delivery on the umbilical stump of the newborn.

(viii) DPHO and Health Facility In-charge

The D(P)HO staff in all three districts said that the maternal and newborn health status improved after LIBON project. The ANC, PNC and institutional deliveries all increased. The staff gained the new knowledge and skills of newborn cares. The use of pregnant women group behavioral mapping and mother's cards use is good and needs to be replicated in all wards of districts. The BPP health education for pregnant women and mothers-in-law and father decision makers followed by public commitments is effective.

The services provided by the health care facilities constitute supply side services. The CB-NCP supplies and the essential medicines were regularly available in health institution/birthing center in both Sunsari and Parsa. The FCHVs were also getting their incentives in Sunsari, but in Parsa the FCHVs were not getting the actual amount of money. Sunsari possessed some model ANMs

who came from MCHW background but got the training of an ANM and then SBA training and were available to the service of community any time of need. The MOHP staff, working closely with LIBON staff, has raised awareness levels by health promotions and Outreach Clinics in all the districts which in turn is credited with the increases in facility deliveries.

(ix) Quality Assurance

For assuring quality of service LIBON project had initiated joint DPHO/LIBON monthly review meetings at the Ilaka level to support facility staff and FCHVs in acquiring additional skills and receive direct supportive supervision by D(P)HO and LIBON staff in all the three districts.

(x) Challenges

The unavailability, or high cost of transport when available, appears to be the most serious limitations for institutional delivery. Many women reported sudden labor pain and so have less time to reach to the birthing center. Also the difficulty in recalling the expected date of delivery is not accurate, thus increasing uncertainty regarding the time of delivery. Additionally, the high level of staff turnover within the District MOHP continued to be a vexing problem in all the three districts. The DHO who accompanied the FE team in the field was recently posted, both in Sunsari and Parsa but both were highly motivated to bring a positive change in the district. The need for refresher training was mentioned by all respondents as a need for expansion and for the critical sustainability component.

G. Discussion of Sustainability, Scale-Up, Equity, Global Learning Contributions

(i) Progress towards Sustainable Outcomes

Sustainability in primary health care projects is a contribution to development of conditions enabling individuals, communities, and local organizations to express their potential, improve local functionality, develop mutual relationships of support and accountability, decrease dependency on insecure resources (financial, human, technical, informational), in order for local stakeholders to negotiate their respective roles in the pursuit of health, wellbeing and development beyond project intervention (CSSA FE report p.97)

The LIBON project is an outcome of Child Survival Project that have been expanded and scaled up 1995 onward, addressing sustainable issues involved in the project implementation, carrying services to marginalized children, mothers and communities of Nepal in open social laboratories with joint collaboration of various relevant actors, stakeholders and communities. The shift was from “project thinking” to “development thinking”. The tool to measure sustainability of the project from this perspective- the *CSSA dashboard* - was developed in the Sustainability initiative study in 2000. CSSA is measured as an aggregate of several indexes such as Health

Outcome, Health Services, Organizational Capacity Index, Organizational viability index, Community Capacity Index, Environmental Index.

The changes in these indexes show that in Sunsari there was a steady progress from the baseline of 2008, which became more noticeable in the post-MTE period. The CSSA workshop done in August 2011 suggest highly encouraging trends: Health outcome index increased to 58 percent from 45 percent; Health services index 81 percent from 57 percent; Organizational capacity index 60 percent from 45 percent; Community Capacity index 80 percent from 40 percent; Environmental Index 54 percent from 35 percent. The component number 4 organization viability index only slightly increased to 47 percent from 43 percent (see Annex 6). These assessments suggest that while other indicators are making good progress, in Sunsari, the need is to focus more on organizational viability.

In Parsa there was not much change from the baseline of 2008 to MTE of 2010, except for the indices of Organizational viability and Health services. In the final evaluation it was assessed that Health outcome index increased to 75 percent in 2011, from 54.9 percent in 2008, Health services index increased to 61 percent from 52 percent, Organizational capacity index increased to 72 percent from 47 percent and Organizational viability increased to 47 percent from 16 percent. Parsa need to give more attention to community capacity index, organizational viability index and health services index.

In Bara, except for health service index, all sustainability indexes decreased in the MTE period as compared to the baseline. But in the 18 months period thereafter, all except health outcome index and organizational capacity index have improved dramatically. The health service index increased to 73 percent in 2011 from 63 percent in 2006, and the environmental index increased to 50 percent in 2011 from 32 percent. While Organizational viability and community capacity are maintained as 54 percent and 76 percent in 2011 compared to 51 percent and 67 percent. But achievement of Bara is more noticeable when FE sustainability index are compared with that of MTE, 2009 – the red line in the CSSA dashboard diagram (Annex 6) shows the fast recovery Bara made when situation normalized.

Another important landmark in ensuring sustainability is the development of MNH Action Plan. The project implementation *through* the government health system in coordination with other stakeholders is critical to ensuring sustainability and synergy and avoids duplication of efforts. Since PWG is a low-cost intervention with simple technology that could be carried out by illiterate mothers, its potential for scaling up is well recognized by the government authorities as well. The MNH Action Plan (CSSA July-August 2011) prepared by Plan Nepal, government and other stakeholders recommends several steps for ensuring sustainability. It also quotes the July 2008 MOU between Plan and the MOHP where MOHP agreed to "maintain and sustain all interesting results" achieved by Plan in Bara (Annex 22).

(ii) Contribution to Replication or Scale Up

The Pregnant Women's Group (PWG) approach was developed and refined in Plan's previous two child survival projects in Bara and extended to Sunsari and Parsa through LIBON project. More than 75 percent of the PWGs formed in Bara are operating nearly four years after the Plan CS support stopped. PWGs are not only sustaining themselves by establishing funds to run their meetings but also becoming one compelling reason for regular Mothers groups meetings. Since

the PWG approach is low cost and employs simple technology for self-monitoring of good practices in pregnancy and newborn care, it is a strong candidate for incorporation in CB-NCP and scaling up in other areas.

The use of Chlorhexidine on newborn umbilicus stumps to prevent infection in Parsa is one of four pilot Districts piloting CHX for the MOHP Nepal. The final evaluation of LIBON project shows that it is well accepted in Parsa. This is highly relevant as neonatal sepsis is one of the top causes of neonatal mortality in Nepal. Supplemented when necessary by anti-bacterial (Co-trim and Gentamycin injection), CHX can play a crucial role in prevention of Neonatal sepsis. The CHX program can be scaled up to other districts of Nepal by integrating other programs like CBNCP and its coverage can be increased by supplying it through government existing health system like hospitals, health facilities, birthing centers and from community health volunteers in the monthly pregnant women group meeting. The near universal acceptability of CHX appears to be due to the fact that it fitted into the prevailing culture of applying remedies on the umbilical stump. (See Annex 11).

(iii) Attention to Equity

Attention to equity by social inclusion was one of the five main strategies of LIBON project. From its very inception it targeted the marginalized community and gender. Dalit and other disadvantaged communities and persons in geographic areas are usually located far from health facilities with limited access of health services. The social distance also is substantial. As noted above, the PWG approach lessened the social distance among the various ethnic groups and increased social mixing and cohesiveness, thus empowering the marginalized community and minority ethnic groups.

(iv) The Role of Community Health Workers

FCHVs are the key link and prime mover that provide support and services to the PWG. FCHVs comprise the non-salaried volunteer cadre with responsibility of health promotion in every ward and are selected from within the Mothers Group. They are trained, supported and respected by the MOHP and the community.

FCHV are not government staff: they are volunteers selected from Mothers Groups. The MOHP recently established a performance based incentive scheme in relation to CB-NCP for the FCHV. The plan is to provide stipends to reward their work in MNH care on the basis of their job performance.

To supervise and support the FCHV, there is one MCHW (now called ANM) and one VHW (now AHW) in each health facility: they provide support and supervision to the FCHVs. Over the years FCHV have gradually assumed greater importance in community health approach becoming its mainstay. And they are going to remain as the foundation on which the health care structures are built. The MOHP and all the stakeholders working in the field of MNH recognize the importance of the FCHV, so their continued support after the project end is likely.

With the expansion of government and community supported birthing centers, the importance of ANMs with Skilled Birth Attendant training has attained great importance and prestige in the

eyes of local people. The SBA policy aims to train at least 7000 SBAs by the end of 2015. However this number may increase as the communities are demanding more SBA training to expand birthing centers at their own initiative.

(v) Contributions to Global Learning

CHX is well accepted for its ease of application and minimal side effects. The project as yet cannot evaluate how much reduction happened in neonatal sepsis/PSBI due to its application since it was implemented for just one year and we have no baseline information on PSBI. Studies have shown that immediately cleansing a neonate's umbilicus with 4% chlorhexidine (CHX, or *kawach* in the vernacular) reduces the rate of infection and, in consequence, of neonatal mortality by about 23%. Qualitative interviews with health staff/FCHVs and records of neonatal deaths suggest that neonatal infection might have decreased. Where CHX application is being implemented it is desirable to have a baseline of incidence of neonatal infection.

The Pregnant Women's Group model is a strong candidate for contribution to global learning and adaptation since every community has and will have pregnant women in need of ANC and care of the newborn. However, in those countries where the decision makers are still mothers-in-law or husbands, ensuring their involvement is crucial for participation of their daughters-in law/wives in the PWG.

(vi) Dissemination and Information Use

The PWG approach was documented as a best practice and shared at national and international levels. The PWG video in English and Nepali was produced in 2009 and also by Plan Head Quarter in 2010. The web link of the video is http://plan-international.org/where-we-work/asia/nepal/what-we-do/our-successes/saving-babies-lives. The PWG approach was selected for a panel presentation during the GHC 2009 Annual Conference in a panel entitled "Better Beginnings: Improving Neonatal Outcomes, and for the panel hosted by ICRW at the 2010 Women Deliver Conference in Washington DC. An article describing this approach was published in the journal of Indian Council of Medical Research (Maskey et. al, Jan 2011).

H. CONCLUSIONS AND RECOMMENDATIONS

The LIBON project achieved significant success over the 4-year implementation period amidst a turbulent period of political transition in Nepal. Numerous factors, prominent among them being the following, contributed to the success of this project:

- Effective implementation of CB-NCP activities using the PWG model;
- Active participation of FCHVs in facilitating PWG meetings;
- Strong MOHP partnerships;
- An intensive training and orientation program;
- Strong local support by some VDCs and other stakeholders;
- Community expansion of birthing centers; and

- Regular review meetings.

Presented below are programmatic, technical, and policy level recommendations for future action:

New and Refresher Training for health staff, including FCHVs: During the qualitative final evaluation process, respondents highlighted the need for the expansion of CB-NCP training for municipality FCHVs and newcomers (local hires from VDC, health workers, lab technicians, and new FCHVs). In addition to new trainings, a need for refresher trainings on CB-NCP for all staff, including FCHVs was also highlighted as the current situation only allows for refresher trainings to a limited and random ten percent of FCHVs

Incentives/motivation for FCHVs, ANMs, and other key health staff: The positive role of social recognition awards as incentives to motivate FCHVs, ANMs, and other key health staff was an important finding during the final evaluation process. The in-depth interview process with FCHVs demonstrated that the Government of Nepal's incentive scheme for FCHVs served as a motivator for existing staff. As demonstrated during the Sunsari visits, ensuring the Performance Based Incentive (PBI) of NRs 200-400 for FCHVs for PNC home visits would keep the morale of local volunteers high. Continued incentive schemes combined with increased supervision and support from higher levels such as the district, regional, and central levels would ensure proper assessment of performance based incentive and awards.

Improved delivery of supplies to the community level: There is a need for greater coordination in distribution of key tools from the DHO down to the health posts and FCHVs. This was noted especially in terms of the supply of mother's cards for PWs through the government health system via the FCHVs.

Targeted BCC for decision-makers: During the FGDs with the mothers-in-law, it was found that not all mothers-in law in the community send their daughters-in law for PWG meetings, even though the trend is improving. Also, male involvement was limited during pregnancy and many men consider pregnancy and child bearing as a domain limited only to women. Increasing male involvement may need further focus in future programming.

Respond to demand for birthing centers at the VDC level: The need for a local birthing center at the VDC level was expressed in all three districts. The demand was especially acute in VDCs where there was no nearby birthing center and the distance to the closest hospital was great.

Continued support and proper execution of incentive schemes for pregnant mothers and FCHVs be ensured: In Parsa, an additional issue of improvement was ensuring the incentive for ANC check-up during pregnancy for mothers (NRs 400).

Scale-up PWG approach: Throughout the final evaluation process, it was clear that the PWG model served as a mechanism through which many of the CB-NCP interventions reached the communities. Scaling up this approach to improve safe motherhood and new born care practices in non-PWG districts and particularly among marginalized communities would serve as an effective and low-cost intervention.

Incorporation of the PWG model within CB-NCP: A potentially effective means of scaling up PWGs would be to introduce PWGs as part of CB-NCP; doing so would ensure the maintenance and sustainability of the health outcomes to-date.

Introduction of CHX as a component of PSBI prevention: The CHX operational research in Parsa was the CHX application on umbilical stump be made a component of prevention of PSBI along with Co-trim and Gentamycin injection, by integrating it with CB-NCP

Replicating the effectiveness of group commitments as a strategy in other MNH programs: The health education sessions on MNH services at VDC level followed by group commitments by pregnant women, their mothers-in-law and husbands (decision makers), service providers (health workers and FCHVs) should be replicated to other maternal and newborn health program for better results on utilization the maternal and newborn health care practices.

Annex 1: Nepal LIBON Project Results Highlight—Evidence Building

- **Innovative ideas:**

"Application of chlorhexidine (CHX) on and around newborn's umbilicus stumps"

Current neonatal mortality rate of 33 per 1000 live births in Nepal translates to around 23,000 neonatal deaths per annum. Home delivery is widely prevalent in Nepal since only 36 percent of babies are delivered by a doctor or nurse/midwife, and 28 percent are delivered at health facilities. Therefore, umbilical care in hygienic conditions at home is very rare resulting contribution of high neonatal death. Studies have shown that immediate cleansing of umbilical cord with 4 *per cent* Chlorhexidine (CHX) reduces the cord infection and reduces neonatal mortality by about 23 *per cent.* Plan Nepal with endorsement by government made an operation research in Parsa district after validating efficacy of Chlorhexidine lotion versus aqueous solution. All health workers and female community volunteers were trained and oriented on application Chlorhexidine in the umbilical stump with training package of community based newborn care program. The achievement on application of CHX on umbilical stump was very successful after nearly two years of the project introduction while survey was made on July 2011 with final evaluation of LIBON project among 494 recently delivered women (RDW). The major findings were very remarkable. Ninety eight *per cent* RDW in this district were immunized against tetanus toxoid vaccine. Seventy eight *per cent* of RDW had taken iron/folic acid tablets and more than 60 per cent of the RDW delivered by skilled provider (doctor or nurse or HA or AHW or ANM). Eighty eight percent persons washed their hand before touching of newborns and 94.4% washed their hands before application of CHX. About 97% of the SBA/caretakers applied full tube of CHX in the umbilical stump. About 82.7 *per cent* RDW reported to have their newborns' umbilical cord cut with safe instruments of Clean Delivery Kit (CDK). (Please see the detail report on annex 11)

- **Promising practice:**

  "Publicly group commitments on utilisation of maternal and newborn care services by pregnant women, decision makers and service providers"

  LIBON project added a most promising practice in its project area is health education sessions on Birth Preparedness Package and public commitment of decision makers (mother in laws and husbands), service providers and volunteers though it is of very short span. Following an recommendation from LIBON's Mid-Term Evaluation (MTE) to involve decision makers in PWG health education sessions, the D(P)HOs of Sunsari and Parsa Districts and Plan Nepal disseminated key CB-NCP messages to PWG member husbands and mothers-in-law. The sessions were conducted by MoHP staff (either a District Health Officer, Supervisor, Sub/Health Post or Primary Health Care staff), and sessions were followed by commitment by PWG members, their husbands, mothers-in-law and FCHVs to follow Birth Preparedness Plan (BPP) guidelines developed by government Family Health Division. The program was started from July 2010 (Y3 Q4). At the end of the project 11,877 PWs took participation in this campaign in three districts (Sunsari, Parsa and Bara). Overall, of them 23% were from Dalit; 38% Janjati; and 17% from minority like Muslim and 22% from others. The project used mother's action card in very exemplary way developed by government Family Health Division. As a result, service utilization from pregnant women and mothers increased tremendously in very short period. Government and other supporting agency can use this card taking lessons learned from this project although its documentation is very limited.

- **Best practice:**

"Pregnant Women's Groups (PWG) approach for self monitoring of the utilization of maternal newborn care services even by illiterate women to reduce maternal and newborn deaths"
Endemic discrimination by certain cultural groups like so called higher castes still exists in Nepal. Hiding pregnancy status of women within the family and at community due the social stigma is another cause which has become a major threat to the life of pregnant women from danger sign during that period. To ensure equitable access to services, LIBON formed PWGs where there are less coverage and in areas (wards) where there are relatively disadvantaged and marginalized community within the districts. One of the most important and successful approach of the project is the use of innovative PWGs followed approach of previous child survival projects. It is not so complicated but simple and very effective behavioural change communication sessions among pregnant women members using social and behavioural mapping for their healthy behaviour at community level even in extreme poverty situation. Each PWG comprises 7-15 pregnant women (averaging 8) living within 10 minutes walk of one another in the same village. They meet once a month to discuss on pregnancy, what the danger signs are, how to prepare for delivery and newborn care. The map is updated during monthly meetings and becomes an accountability tool for pregnant women, mother-in-laws and husbands in this group. LIBON Project yielded two new promising practices. The first is equitable outreach to marginalized groups. The second relates to explanations for high levels of PWG sustainability. Till now, 8313 pregnant women have been involved in 1253 PWGs in Plan Nepal working districts (Sunsari, Rautahat, Bara, Parsa, Makawanpur, Banke and Bardiya) of which 63% are from disadvantaged groups (14% Dalit (so called "untouchables"), 27% are Janajati (a deprived group) and 22% are Muslim (a minority religion) and 37% other castes. PWG approach including CB-NCP will be sustainable at community level if it is aligned with local health governance program. The PWG has been documented as a best practice and shared at national and international levels. The PWG approach was selected for a panel presentation during the GHC 2009 Annual Conference in a panel entitled "Better Beginnings: Improving Neonatal Outcomes." The Web link is
http://www.globalhealth.org/conference_2009/presentations/d5_shrestha.pdf

Annex 2: List of Publications and Presentations Related to the Project

Year and Month	Title/ Topic
Nov 1, 2011	Presented “Peer support groups and community volunteers improve newborn care in rural community, Nepal,” at the 2011 Annual Meeting of the American Public Health Association (APHA), Washington, DC, USA
January 2011	Published article on Indian J Med Res 133, January 2011, pp 64-69 “Field test results of the motherhood method to measure maternal mortality”
May 27- May 31, 2009	Presented the article on Pregnant women group participation and reduction of neonatal and maternal mortality rates in 36th Annual International Conference on Global Health, Omni Shoreham Hotel, Washington, DC, USA
2009 (Nov)	Published article on “Pregnant Women’s Groups and the Impact on Newborn's Mortalities in Bara District, Nepal” NEPHA (Nepal Public Health Association) Newsletter, Volume #1 , Issue # 2, Pg 8, November 2009
2009 (Nov)	Published and presented the article on “Pregnant Women’s Groups and the Impact on Newborn's Mortalities in Bara District, Nepal” in the Souvenir of Peri-natal Society of Nepal (PESON)
2009 (Jun)	Published article on Plan Nepal Khabar "Reducing neonatal and infant mortality through women’s participation", Kathmandu, Nepal.
2009 (April)	Published article on Plan Nepal Khabar "Empowerment of pregnant women’s group", Kathmandu, Nepal.
2008 (May)	A report on "Child Survival Sustainability Assessment (CSSA) Framework Report May 2008, Sunsari, Nepal", Kathmandu, Nepal.
2008 (Feb)	A report on "Rapid Health Facility Assessment (R-HFA) Report Feb 2008, Sunsari, Nepal", Kathmandu, Nepal.
2008 (January)	A report on "Lot Quality Assurance Sampling (LQAS) Report January 2008, Sunari and Parsa, Nepal", Kathmandu, Nepal
2008 (January)	Local Innovation for Better Outcomes for Neonates (LIBON) brochure

Annex 3: Nepal LIBON Project – Project Management Evaluation

The external evaluator chose not to address project management issues as a separate annex since all issues related to project implementation (as identified during the final evaluation) were addressed in the main report.

Annex 4: Nepal LIBON Project Workplan

Major Activities	Year 1				Year 2				Year 3				Year 4				Personnel	Comments
	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4		
	Oct – Dec 2007	Jan – Mar 2008	Apr – Jun 2008	Jul – Sep 2008	Oct – Dec 2008	Jan – Mar 2009	Apr – Jun 2009	Jul – Sep 2009	Oct – Dec 2009	Jan – Mar 2010	Apr – Jun 2010	Jul – Sep 2010	Oct – Dec 2010	Jan – Mar 2011	Apr – Jun 2011	Jul – Sep 2011		
Start-up and Administration:																		
Hire and train LIBON Staff	√	√			√												HRM, PC	Completed
Purchase equipment	√	√	√														Admin, PC	Completed
MOUs with IOM, NFHP and MoHP		√	√														CD, PC, HC	Completed
Execution of MOUs with DDC and DHO				√	√												PUM, PC, DLC, HPC, Asst DLC,	Completed
Preparation of DIP		√	√														CMT, PC, HPC, USNO	Completed
DIP sharing with USAID – USA			√														HC, PC, USNO	Completed
Prepare and sign formal agreements with partners (NGO/CBO/DHO/IOM) to implement the LIBON program in Sunsari, Parsa and Bara districts		√	√	√				√				√					CD, PUM, HC, PC, HPC, DLC, Asst DLC	Completed
DIP revision and resubmission			√	√														Completed
Design and preparation of modules on Community Based Newborn Care Package (CB-NCP) jointly Child Health Division (CHD), MoHP		√	√	√	√												HC, PC	Completed

Major Activities	Year 1				Year 2				Year 3				Year 4				Personnel	Comments
	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4		
	Oct – Dec 2007	Jan – Mar 2008	Apr – Jun 2008	Jul – Sep 2008	Oct – Dec 2008	Jan – Mar 2009	Apr – Jun 2009	Jul – Sep 2009	Oct – Dec 2009	Jan – Mar 2010	Apr – Jun 2010	Jul – Sep 2010	Oct – Dec 2010	Jan – Mar 2011	Apr – Jun 2011	Jul – Sep 2011		
Master Training of Trainers (MTOT) on CB-NCP (5 persons each from Sunsari and Parsa) in Kathmandu organized by CHD			√	√	√												HC, PC	Completed
District Training of Trainers (DTOT) on CB-NCP in Sunsari and Parsa districts (*Ilaka* In charge and DHO staff)				√	√	√	√										PC, HPC, DLC, Asst DLC	Completed
Training on CB-NCP at *Ilaka* (sub-district) level in Sunsari and Parsa districts				√	√	√			√				√			√	PC, HPC, DLC, Asst DLC	Completed
Training on CB-NCP at Sub-health post level in Sunsari and Parsa districts							√			√							HPC, DLC, Asst DLC	Completed
Formation of pregnant women group (PWG) linking with local health facility in Sunsari and Parsa districts and strengthening of existing PWG in Bara district			√	√	√	√	√	√	√	√	√	√	√	√	√		HPC, DLC, Asst DLC	260 PWGs and 123 PWGs formed in Sunsari and Parsa district respectively. 82% PWG has followed up and functional out of 430 in Bara.
Pilot Emergency Referral system in one *Ilaka*											√	√	√				HC, PC, DLC, Asst DLC	Not completed

Major Activities	Year 1				Year 2				Year 3				Year 4				Personnel	Comments
	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4		
	Oct – Dec 2007	Jan – Mar 2008	Apr – Jun 2008	Jul – Sep 2008	Oct – Dec 2008	Jan – Mar 2009	Apr – Jun 2009	Jul – Sep 2009	Oct – Dec 2009	Jan – Mar 2010	Apr – Jun 2010	Jul – Sep 2010	Oct – Dec 2010	Jan – Mar 2011	Apr – Jun 2011	Jul – Sep 2011		
Train FCHVs on CB-NCP of interventions in Sunsari and Parsa districts					√	√	√	√	√	√	√						HPC, DLC, Asst DLC	1070 FCHVs trained from Fifty Seven batches in Sunsari and 792 FCHVs trained from Forty Four batches in Parsa. FCHV level training on CB-NCP has been completed in Sunsari and in Parsa districts.
Dissemination of CB-NCP message to community (mother) groups by FCHVs through using BCC methods and materials in Sunsari and Parsa districts						√	√	√	√	√	√	√	√	√	√	√	HPC, DLC, Asst DLC	Completed
Support on BCC (flip chart, key ring with message) material of CB-NCP to FCHVs in Sunsari and Parsa districts					√	√	√	√	√	√							PC, HPC, DLC, Asst DLC	Provided during CB-NCP training
Mass media (radio) BCC messages							√	√	√	√	√	√	√	√	√	√		Completed

Major Activities	Year 1				Year 2				Year 3				Year 4				Personnel	Comments
	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4		
	Oct – Dec 2007	Jan – Mar 2008	Apr – Jun 2008	Jul – Sep 2008	Oct – Dec 2008	Jan – Mar 2009	Apr – Jun 2009	Jul – Sep 2009	Oct – Dec 2009	Jan – Mar 2010	Apr – Jun 2010	Jul – Sep 2010	Oct – Dec 2010	Jan – Mar 2011	Apr – Jun 2011	Jul – Sep 2011		
FCHV participate in monthly monitoring and decision making meeting at the village level in Sunsari and Parsa districts			√	√	√	√	√	√	√	√	√	√	√	√	√	√	HPC, DLC, Asst DLC	Completed
Support implementation of CB-NCP of service (Supportive supervision and monitoring) in Sunsari and Parsa districts						√	√	√	√	√	√	√	√	√	√	√	HC, PC	Completed
Review meeting on CB-NCP at VDC, district , region and national level											√	√	√	√	√	√	PC, HPC, DLC, Asst DLC	Completed
Monthly review meeting in Ilaka (sub-health post and *Ilaka* in-charges) and district (DHO staff and *Ilaka* in-charges) level in Sunsari, Parsa and Bara districts		√	√	√	√	√	√	√	√	√	√	√	√	√	√		HPC, DLC, Asst DLC	Completed
Training in application of LQAS and CSSA for MoHP, IOM, and District level stakeholders in Sunsari, Parsa and Bara districts		√	√	√					√	√			√	√	√	√	HC, PC, M&EO, HPC, DLC, Asst DLC	Completed

Major Activities	Year 1				Year 2				Year 3				Year 4				Personnel	Comments
	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4		
	Oct – Dec 2007	Jan – Mar 2008	Apr – Jun 2008	Jul – Sep 2008	Oct – Dec 2008	Jan – Mar 2009	Apr – Jun 2009	Jul – Sep 2009	Oct – Dec 2009	Jan – Mar 2010	Apr – Jun 2010	Jul – Sep 2010	Oct – Dec 2010	Jan – Mar 2011	Apr – Jun 2011	Jul – Sep 2011		
KPC survey application using LQAS in Sunsari, Parsa and Bara districts		√	√	√					√	√			√	√	√	√	PC, M&EO, HPC, DLC, Asst DLC	LQAS data is used for program monitoring and planning by Plan Nepal and D(P)HOs
RHCCs prepare annual strategic and operational plans in Sunsari, Parsa and Bara districts			√			√				√				√			PC, HPC, DLC, Asst DLC	Completed
Quarterly meeting of RHCCs in Sunsari, Parsa and Bara districts			√	√	√	√	√	√	√	√	√	√	√	√	√		PC, HPC, DLC, Asst DLC	Completed
Publication on Neonatal health in Nepal (in coordination with CARE)					√				√				√			√	HC, PC	Completed
Coordination and sharing meeting with USAID, NFHP, Care, MIRA and others INGOs working on neonatal program	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	HC, PC	Completed
Meeting with District stakeholders in Sunsari, Parsa in regard to municipality approach for community mobilization					√		√				√						PC, LDC, Asst LDC	Completed
Bi-annually steering committee meeting	√		√			√		√			√		√		√		CD, HC, PC	SC met only twice in Year 1, and 2,

Major Activities	Year 1				Year 2				Year 3				Year 4				Personnel	Comments
	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4		
	Oct – Dec 2007	Jan – Mar 2008	Apr – Jun 2008	Jul – Sep 2008	Oct – Dec 2008	Jan – Mar 2009	Apr – Jun 2009	Jul – Sep 2009	Oct – Dec 2009	Jan – Mar 2010	Apr – Jun 2010	Jul – Sep 2010	Oct – Dec 2010	Jan – Mar 2011	Apr – Jun 2011	Jul – Sep 2011		
LIBON staff participate in the neonatal/sub-committee technical group of the Child Health Division		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	HC, PC	Completed
IOM student apprenticeships and internships in LIBON implementation sites				√				√			√	√			√	√	HC, PC	Three MPH students did thesis work in Sunsari and Parsa.
Plan, conduct and share Operations Research study/results on priority NNH topic							√	√	√	√	√	√	√	√	√		HC, PC	The OP research for CHX has been completed.
Presentation if results in international forum															√		HC, PC, HQ backstops	Plan to do on MCHIP meeting on Nov 2-3, 2011
Submit financial and program reports to Plan USA	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	PC, AFA, GA	Completed
Baseline study (LQAS, CSSA, IHFA)		√															HC, PC, M&EO, HPC, DLC, Asst DLC, AFA	Completed
Technical Assistance visits from Plan USA staff		√		√	√			√		√			√			√	HQ backstops	Completed

Major Activities	Year 1				Year 2				Year 3				Year 4				Personnel	Comments
	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4		
	Oct – Dec 2007	Jan – Mar 2008	Apr – Jun 2008	Jul – Sep 2008	Oct – Dec 2008	Jan – Mar 2009	Apr – Jun 2009	Jul – Sep 2009	Oct – Dec 2009	Jan – Mar 2010	Apr – Jun 2010	Jul – Sep 2010	Oct – Dec 2010	Jan – Mar 2011	Apr – Jun 2011	Jul – Sep 2011		
Mid-term evaluation										√							HC, PC, M&EO, HPC, DLC, Asst DLC, AFA	Completed
Final Evaluation																√	HC, PC, M&EO, HPC, DLC, Asst DLC, AFA	Completed
Monthly meeting with USAID funded partners on child survival		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	HC, PC	Completed
Quarterly coordination meeting with USAID, Local Mission	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	HC, PC	Completed
Reporting: Annual, Mid-term, Final Evaluation to USAID					√				√		√		√			√	HC, PC, M&EO, AFA	Completed

Annex 5: Nepal LIBON Project - Rapid CATCH Table

Rapid CATCH table of Sunsari and Parsa districts
Final estimates that are significantly different from the corresponding baseline estimates are highlighted with an "*" symbol.

SN	Indicator	Sunsari			Parsa		
		Baseline	Mid-term Evaluation	Final Evaluation	Baseline	Mid-term Evaluation	Final Evaluation
1	Tetanus Toxoid: % of mothers with children age 0-23 months who received tetanus toxoid 2 plus (TT_2+) vaccinations before the birth of their youngest child	89.8%	93.7%	90.2%	95.1%	96.8%	95.5%
2	Skilled Delivery Assistance: % of children age 0-23 months whose births were attended by skilled personnel	47.4%	70.2%	83.5% *	36.4%	47%	70.0% *
3	Post-Natal Visit to Check on the Newborn: % of children age 0-23 months who received a post-natal visit from an appropriate trained health worker within three days after birth	43.2%	66.3%	78.6% *	27.9%	35.6%	61.5% *
4	Exclusive Breastfeeding: % of children age 0-5 months who were exclusively breastfed during the last 24 hours	67.7%	90.6%	74.7%	80.7%	84.5%	89.2%
5	Infant and Young Child Feeding: Percent of children age 6-23 months fed according to a minimum of appropriate feeding practices	69.6%	77.4%	69.2%	32.5%	75.6%	75.6% *
6	Vitamin A Supplementation: % of children age 6-23 months who received a dose of Vitamin A in the last 6 months: card verified or mother's recall	87.3%	91.3%	96.3% *	70.7%	67.7%	78.9%
7	Measles Vaccination: % of children aged 12-23 months who received measles vaccine according to the vaccination card or mother's recall by the time of the survey	85.9%	89.0%	90.2%	77.6%	81.1%	84.1%
8	Access to Immunization Services: % of children aged 12-23 months who received DTP1 according to the vaccination card or mother's recall by the time of the survey	94.6%	91.2%	95.1%	87.9%	89.6%	95.2%
9	Health Systems Performance Regarding Immunization Services: % of children aged 12-23 months who received DTP3 according to the vaccination card or mother's recall by the time of the survey	88.0%	86.8%	92.7%	80.4%	79.2%	84.1%
10	Treatment of Fever in Malarious Zones: %	44.4%	40.7%	69.4% *	45.3%	56.3%	79.3% *

SN	Indicator	Sunsari			Parsa		
		Baseline	Mid-term Evaluation	Final Evaluation	Baseline	Mid-term Evaluation	Final Evaluation
	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						
11	ORT Use: % of children age 0-23 months with diarrhea in the last two weeks who received Oral Rehydration Solution and/or recommended home fluids	39.3%	63.6%	87.5% *	29.4%	53.5%	68.0% *
12	Appropriate Care Seeking for Pneumonia: % 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	46.0%	87.0%	82.5% *	36.0%	50%	31.4%
13	Point of Use: % of households of children age 0-23 months that treat water effectively	34.7%	56.8%	21.1%	6.1%	6.9%	19.8%
14	Appropriate Hand Washing Practices: % of mothers of children age 0-23 months who live in households with soap at the place for hand washing	73.0%	77.9%	84.6%	57.5%	57.1%	74.9% *
15	ITN Use: % of children age 0-23 months who slept under an insecticide-treated bed net the previous night **(**)**	0%	0%	0%	0%	0%	0.0%
16	Underweight: % of children age 0-23 months who are underweight (-SD for the median weight for age, according to WHO/NCHS reference population)	13.0%	6.3%	8.4%*	10.5%	9.5%	4.9%*

Rapid CATCH table of Bara district

Final estimates that are significantly different from the corresponding baseline estimates are highlighted with an "*" symbol.

SN	Mod#	Indicator	Indicator/ Definition	LQAS Jun'06 (%)	LQAS Dec'09 (%)	LQAS Jun'11 (%)
			SENTINEL MEASURE OF CHILD HEALTH AND WELL-BEING			
1	M1 & M2	Underweight Children	Percentage of Children age 0-23 months that is underweight (-2 SD from the median weight-for-age, according to the World Health Organization (WHO)/National Center for Health Statistics (NCHS)	29	13.2	6.0*
2	M3	Birth Spacing	Percent of children age 0-23 months that was born at least 24 months after the previous surviving child	69.4	62.5	64.3
3	M1	Delivery Assistance	Percent of children age 0-23 months whose birth were attended by skilled health personal upto MCHW	42.1	45.9	59.4*
4	M1	Maternal Tetanus Toxoid (TT)	Percent of mothers with children age 0-23 months that received at least TWO tetanus toxoid injections before the birth of their youngest child.	63.2	14.3	9.8
5	M1	Exclusive Breastfeeding	Percent of children age 0-5 months that was exclusively breastfed during the last 24 hours	100.0	82.9	70.4
6	M1	Complementary Feeding	Percent of children age 6-9 months that received breast milk and complementary foods during the last 24 hours	95.7	91.9	90.2
7	M2	Full Vaccination	Percent of children age 12-23 months that is fully vaccinated (against the five vaccine preventable diseases) before the first birthday	66.9	19.5	45.1
8	M2	Measles	Percent of children age 12-23 months that received a measles vaccine	72.2	21.1	45.1
9	M1 & M2	Bednets	Percentage of children age 0-23 months that slept under an insecticide-treated net (in malaria risk areas) the previous night	1.5	97.7	3.4

SN	Mod#	Indicator	Indicator/ Definition	LQAS Jun'06 (%)	LQAS Dec'09 (%)	LQAS Jun'11 (%)
10	M3	HIV/AIDS	Percent of mothers with children age 0-23 months that cited at least TWO known ways of reducing the risk of HIV infection	51.1	29.3	48.9
11	M2	Hand Washing	Percent of mothers with children age 0-23 months that reported they wash their hands with soap or ash before food preparation and feeding children and after defection and attending to a child who has defecated	63.2	33.1	47.4
			MANAGEMENT/TREATMENT OF ILLNESS			
12	M1 & M2	Danger Signs	Percent of mothers of children aged 0-23 months that knew at least TWO signs of childhood illness that indicate the need for treatment	99.6	93.2	99.6
13	M1 & M2	Sick Child	Percent of sick children age 0-23 months that received increased continued feeding during an illness in the past two weeks	94.5	75.3	98.5
14	M1 & M2	Sick Child	Percent of sick children age 0-23 months that received increased fluids during an illness in the past two weeks	92.7	44.2	93.8

Note:
Indicators indicated (indicator # 13 and 14) are merged in generic Rapid CATCH Tables, but in this instance, the Plan Nepal CS Project collected the information separately to form two separate indicators.

LQAS and CSSA Reports
Sunsari, Parsa and Bara Districts

Local Innovation for Better Outcomes for Neonates Project (LIBON)

Plan Nepal Child Survival Project XXIII

Funded by
United States Agency for International Development
Child Survival and Health Grants Program (CSHGP)
Grant No: GHN-A-00-07-00006-00
Bureau for Global Health
Office of Health, Infectious Disease, and Nutrition

Submitted by:

Hari Bhakta Khoju
Rural Community Development Society

Submitted to
Plan Nepal

September, 2011

ACKNOWLEDGEMENT

I acknowledge and express my gratitude to Plan-Nepal especially to Mr. Donal Keane, Country Director and Mr. Subhakar Baidya, Program Support Manager for offering me to prepare a report on Final Evaluation (FE) of Local Innovation for Better Outcomes for Neonates (LIBON) project specially for learning opportunity about Lot Quality Assurance Sampling (LQAS) and Child Survival Sustainability Assessment (CSSA) methods as a tool for baseline survey, planning, monitoring, reviewing and evaluating the results- both in theory and practice in the field. I appreciate Mr. Dipak Dahal, Monitoring and Evaluation Officer for his endless commitment, enthusiasm and effort in convincing, building capacity and confidence of health Supervisor and Officials to conduct the survey for data collection without being bias to subjective judgment and data fabrication. He is a good 'Guru' in LQAS and CSSA tool explanation and application.

Mr. Parsuram Shrestha, Chief, Community Based-Integrated Management of Childhood Illnesses (CB-IMCI), Child Health Division, Ministry of Health and Population (MoHP), Mr. Indra Prasad Yadav, District Public Health Office (DPHO) Parsa, Dr. Surendra Prasad Chaudhary, District Health Office (DHO) Bara and Dr. Daya Shankar Lal Karna, District Health Office Sunsari have provided information and inputs for report preparation.

Mr. Sher Bahadur Rana, Health Coordinator, Plan Nepal and Mr. Bhagawan Das Shrestha, Project Coordinator-LIBON project, assisted me by providing adequate reading materials, information and accompanying me for field exposures to have direct in-depth field learning situation to prepare this FE report.

I acknowledge and extend my heartfelt thanks to field based staff Mr. Deo Ratna Chaudhary, District LIBON Coordinator (DLC) Bara/Parsa, Mr. Diwakar Mishra, Assistant District LIBON Coordinator (ADLC) Bara, Mr. Krishna Bahadur Achhami, Assistant District LIBON Coordinator Parsa, Ms. Meena Kumari Singh, Admin and Finance Assistant, Bara; and Ms. Srijana Rai, Office Assistant, Parsa for providing and supporting me to learn about LQAS and CSSA field situation.

I anticipate and appreciate especially Ms. Kalawati Changbang, Health Program Coordinator- Sunsari Program Unit (PU) for her lively and tireless efforts to moderate and facilitate workshop cum training sessions along with her colleagues Mr. Hari Dev Shah, Assistant District LIBON Coordinator, Sunsari.

ABBREVIATION

ADLC	Assistant District LIBON Coordinator
AHW	Auxiliary Health Worker (HP, Sub-HP)
ANC	Antenatal Care
ANM	Auxiliary Mid-wives
ARI	Acute Respiratory Infection
BCC	Behavioral Change Communication
BPP	Birth Preparedness Package
CATCH	Core Assessment Tool for Child Health
CB-IMCI	Community Based-Integrated Management for Childhood Illness
CB-NCP	Community Based – Neonatal Care Package
CBO	Community Based Organization
CBS	Central Bureau of Statistics
CDD	Control of Diarrheal Disease
CDO	Chief District Office
CDP	Community Drug Program
CEDAW	Convention on the Elimination of All Forms of Discrimination against Women
CHD	Child Health Division, Ministry of Health and Population
CHW	Community Health Worker
CPR	Contraceptive Prevalence Rate
CRC	Convention on the Rights of the Children
CS	Child Survival
CSSA	Child Survival Sustainability Assessment
DACAW	Decentralized Action for Children and Women
DAG	Disadvantage Group
DDC	District Development Committee
DEO	District Education Office
DHO	District Health Office
DHS	Department of Health Service, MoHP
DLC	District LIBON Coordinator
DPHO	District Public Health Office
EOP	End of Project
EPI	Expanded Program of Immunization
FCHV	Female Community Health Volunteers
FHD	Family Health Division, MoHP
FE	Final Evaluation
GNP	Gross National Product
GoN	Government of Nepal
HA	Health Assistants (HP, SHP)

HDI	Human Development Index
HF	Health Facility
HFMC	Health Facility Management Committee
HH	Household
HIV/AIDS	Human Immunodeficiency Virus/ Acquired Immune Deficiency Syndrome
HMIS	Health Management Information System
HP	Health Post
IEC	Information Education and Communication
ILO	International Labor Organization
IMR	Infant Mortality Rate
INGO	International Non Governmental Organization
INT	Insecticide-treated net
IOM	Institute of Medicine
IPRC	Institutional Promotion and Resource Center
KPC	Knowledge, Practice and Coverage
LBW	Low Birth Weight
LE	Life Expectancy
LIBON	Local Innovation for Better Outcomes for Neonates
LMIS	Logistic Management Information System
LQAS	Lot Quality Assurance Sampling
MCH	Maternal and Child Health
MCHW	Maternal and Child Health Worker (SHP)
MDG	Millennium Development Goal
MFI	Micro Finance Institutional
MG	Mother's Group
MGM	Mother's Group Meeting
MINI	Morang Innovation for Neonatal Intervention
MoAC	Ministry of Agriculture and Cooperative
MoE	Ministry of Education
MoHP	Ministry of Health and Population, Government of Nepal
MoLD	Ministry of Local Development
MTE	Mid-Term Evaluation
NCHS	National Center for Health Statistics
NFHP	Nepal Family Health Program
NGO	Non Governmental Organization
NHRC	National Human Rights Commission
NID	National Immunization Day
NNH	Neonatal Health
NNM	Neonatal Mortality

NPL	National Planning Commission
OR	Operational Research
ORT	Oral Rehydration Treated
PAF	Poverty Alleviation Fund
PCI	Per Capita Income
PHC	Primary Health Center
PNC	Postnatal Care
PSBI	Possible Severe Bacterial Infections
PU	Program Unit
PWG	Pregnant Women Group
RBA	Right Based Approach
RHCC	Reproductive Health Coordination Committee
RHF	Recommended Home Fluid
RHFA	Rapid Health Facility Assessment
RMDC	Rural Microfinance Development Center
SA	Supervision Area
SBA	Skilled Birth Attendant
STD	Sexually Transmitted Disease
TBA	Traditional Birth Attendants
TT	Tetanus Toxoid
UMR	Under 5 Mortality Rate
UNDP	United National Development Program
USAID	United States Agency for International Development
USNO	United Stated National Office (Plan International)
VDC	Village Development Committee
VHDC	Village Health Development Committee
VHW	Village Health Worker (SHP)
WDO	Women Development Organization
WHO	World Health Organization

Table of Contents **Page**

Final Evaluation Report

1. A brief description of Plan Nepal and LIBON Project

1.1 Plan Nepal and LIBON Project:

LIBON is designed to contribute to achieve the MDGs as shown in the table above and the policies, plan and programme of government of Nepal, Ministry of Health and Population.

Plan Nepal has been implementing Child Survival XXII project called "Local Innovation for Better Outcomes for Neonates (LIBON)" in collaboration with the Ministry of Health and Population (MoHP) and Institute of Medicine-IOM, Tribhuvan University in Sunsari and Parsa districts and supports Bara DPHO to maintain the health service status of 2006 Final Evaluation Results. These districts are located in the Eastern and central parts in the Southern Terai belt, the lowland plain areas, along the border of India, starting from September 2007.It is a four year Project to cover up-to 2011 September.

LIBON Project is designed to address the complex issues to reduce under-five child mortality rate that includes neo-natal and maternal mortality. Child and maternal mortality is caused due to lack of knowledge, information and skill to take care of pregnant mothers during their pregnancy and the newborn and under-5 children and mothers during and after delivery.

To address these complex issues LIBON Project proposed following goals, results, strategies, interventions and activities which are in line with MoHP, GON policies and programmes.

Goal: To Sustainable Reduce the Burden of Neonatal Mortality in Nepal

Results:

Result 1: Increased Access to Neonatal Health (NNH) Services in Sunsari and Parsa
Result 2: Increased Demand for NNH Services in Sunsari and Parsa
Result 3: Increased Quality of NNH Services in Sunsari and Parsa
Result 4: Strengthened Support for Neonatal Mortality (NNM) Reduction in Nepal

Strategies:

- Community-based Service Delivery to increase ACCESS to meet Result 1
- Community Mobilization to increase DEMAND to meet Result 2
- Health Systems strengthening to increase QUALITY to meet Result 3
- Stakeholder sharing and Collaboration to increase SUPPORT to meet Result 4
- Social Inclusion to increase EQUITY to meet Result 1

Project location: Bara, Sunsari and Parsa districts with the population of 1.97 million, accounting for 7.34 percent of the country's population. Of this population, 51% (1,003,056) are male and 49% (963,721) are female. The three districts cover 229 VDCs and 39 Illaks- the sub districts.

Target Beneficiaries:

Target Beneficiaries:

S.N	Age distribution with number	Sunsari	Parsa	Bara	Total
1	Infants under 12 months	18945	15771	17761	52477
2	Children 12-23 months	19,430	16,733	18,744	54907
3	Children 0-23 months	38,375	32,504	36,505	107384
4	Children 24-59 months	59,000	51,460	57,432	167892
5	Children 0-59 months	97,375	83,964	93,937	275276
6	Women 15-49 years	142,565	113,440	128,443	384448
	Population of Target Areas	**750,886**	**593,668**	**666,932**	**2,011,486**

Note:- **Estimated Target Population calculation based on 2001 census data, CBS and target for 2065/66.**

2. Result Analysis and Interpretation

Success cases: Parsa collected from Focused Group Discussion among the field staff members. The reasons of good results are:

i. Strong team work
ii. Committed staff and quality CBNCP training
iii. Performance based FCHV incentive
iv. Community based program
v. Established birthing centers
vi. Regular and timely logistic supply
vii. Formation of pregnant women group (PWP), health education (behavioral change communication sessions) in these groups sessions with social and behavioral mapping, and follow up of them.
viii. BPP mass campaign
ix. Frequent joint monitoring support by Plan and project staff
x. Public commitment as an oath taken by pregnant women, husband, parents-in-laws, and health service providers and also in CBNCP training;
xi. Operation research of chlorhexidine application in newborn umbilical stump introduced helped to leverage for the effectiveness of CBNCP.

3. A Description of Lot Quality Assurance Sampling – LQAS

Part Two -- Main Report on LQAS

Lot Quality Assurance Sampling (LQAS)

3.1 Objectives:

General objective: The objective of the Lot Quality Assurance Sampling (LQAS) survey is to document and update the current level of information status about the level of knowledge, practices and coverage of the mothers in health behaviors and practices, health services and outcomes for the survival of new born children and the mothers and pregnant women.

3.1.1 Specific objectives:

The specific objectives of the survey and the assessment are to document and update information status on;

- Current knowledge level of mothers of newborns about child survival issues including major threats to infant, maternal and child health; safe pregnancy practices; and proper newborn care;
- Actual practices of mothers and community health care providers with regard to the child survival intervention area mentioned above including prenatal

visits; delivery by a skilled birth attendant; and immediate breastfeeding within one hour of birth;

3.1.2 Objectives of using LQAS for end line evaluation of LIBON Project;

The objectives of the workshop cum training are to enable participants;

1. To understand the meaning, uses and principles of LQAS
2. To identify interview locations (sampling interval, cumulative population, use of random number)
3. To describe the technique of selecting households, respondents and field practical for numbering and selecting households
4. To explain and apply data collection techniques to be used on survey
5. To tabulate and analyze results-findings
6. To monitor their program by using tabulation and analyzing results

3.2 Method and Process of Data collection and LQAS Survey

Method and process of LQAS training is 100% participatory at equal footing through demonstration of discussion topics with open discussion by citing and visualizing examples for participants to transfer capacity to apply LQAS in their Supervision Areas for indicators based monitoring and evaluation of their achievements. Sitting arrangements are made in a non-discriminatory atmosphere among facilitators, resource persons, officials, old and new participants.

Facilitators' team comprises LIBON Project Coordinator, Monitoring and Evaluation Officer, Health Coordinators from central to district based offices and District LIBON Coordinators-DLCS. They are good Facilitators without any trace of being a prescriptive trainer, teacher or lecturer. Plenary and all discussion sessions are openly shared and discussed at equal footing for instant replies of the queries of participants by Facilitators and capable, resourceful LIBON's previous participants in LQAS capacity building trainings. Capable and resourceful local participants are welcomed and invited to facilitate the difficult and hard situation arising out of discussions during the sessions for easy convincing and confidence building in local language, social and cultural gestures. Method and process is used as refresher for the old trained participants in LQAS and rigorous efforts and exercises are being made by Facilitators to upgrade the capacity of new participants for full confidence so that no problem, confusion and misunderstanding remains during the actual survey. LQAS- information reading and practicing printed materials are distributed to all participants for reference and for practices on each desk and seat of participants.

All most all discussions are made through visual aids with clear-cut explanations by the Facilitator's team members and the previous trained participants spontaneously without overlapping and duplication in explanations. Full sharing and discussions are being made during the sessions regarding survey questionnaires for common

understanding to avoid errors, mistakes misinformation collection - the misuse of resources during the survey.

Method and process of LQAS survey training has three stages by time frame. The first stage is the training of enumerators and supervisors which is of 3 days: day one covers orientation, clarification and explanation on LQAS-what, why and how to use LQAS: day two covers clarification on questionnaires and field testing: day three covers further in-depth practical solutions to the problems faced by the participants during field test along with identifying and determining survey locations, communities, households and respondents through random sapling method. Day three also covered on questionnaire review and role play for further clarification on LQAS survey process as well as preparation for the field data collection. The Monitoring and Evaluation Officer, and the Facilitator team members made hard and participants' friendly efforts to convince and make the participants confident in learning to apply the LQAS tools to collect information during the field survey.

Participants are grouped in a team of 2-3 persons depending upon their number during the workshop with representation from DHO, DPHO, partner NGOs and Plan PU offices of Morang, Sunsari and Parsa districts.

Field survey:

The following 5- 7 days are scheduled for data collection in the actual survey. Facilitators are divided to follow the survey teams closely to provide on-the-spot spontaneous replies, answer and solutions to any problems, questions of the survey team members.

Facilitators follow the survey team members for the first and second day very closely to guide and facilitate the real survey process to avoid mistakes and misunderstanding of the survey team members regarding data collection, selection process of households, families and respondent mothers. Participants and Facilitators have contact mobile numbers of each relevant person for assistance and cooperation; close monitoring, tracing the participants while in the field during the survey through mobile communications for distant, constant and instant guidance and supplies of materials and technical services, facilities to the survey team members from the Facilitators and Management and Logistic team.

Hand tabulation and presentation of findings and sharing by relevant stakeholders;

After completion of data collection, survey team members made hand calculation and tabulation of the data, information collected under the guidance of the Facilitators.

Finding and results are openly shared and discussed in the plenary by each survey team with open comments, feedback by each Supervision Area wise (Ilaka) based on the indicators as comparison of baseline threshold, decision rules, programme average percentage and monitoring targets to the findings and results of present

survey for sharing purpose during the following 3 days hand tabulation and analysis of the collected field data sessions after field survey when and where decision and policy makers of MoHP, regional and central offices, DPHO, DHO, Plan Nepal PUs and LIBON Project participate seriously to know the results and health service and status of each Supervision Areas and the districts.

Plan Nepal - LOBON Project handovers the sessions, floor to MoHP, DHO, DPHO to share and discuss the finding and the results openly in line with CB-NCP and CB-IMCI of MoHP, DPHO, DHO policy, plan, programmes based on the information for decision making for the coming year by formulating follow-up action plan along with corrective measures for improvement, maintenance and sustenance of the health services and results. MoHP, DPHO, DHO and the field supervisors realize their ownership, responsibility and roles to improve health services at community level.

3.3 Concept and Use of LQAS

Introduction:

It is a sampling and analysis method in data collection process. It was originally developed and applied in America in 1920s (Bell Labs) for quality control of industrial production goods in lots or batches as a random samples to assure the pre-determined quality the allowable numbers - the decision rule either to reject or accept the lot depending upon the allowable number based on the production standard and the sample size of the products. If the number of defective goods in a sample exceeds a pre-determined number, then the lot is rejected; otherwise it is accepted. Recently, the industrial monitoring experience using LQAS tool has been transferred for baseline and to monitor the quality of health indicators and to improve supervision of the field area. During mid 1980s, it was introduced and adopted to manage integrated public health programmes in the developing countries like, Costa Rica and other Plan program intervention countries. Plan Nepal has introduced the LQAS since 1998 to conduct baseline survey, monitoring and evaluation of the Child Survival Projects.

It can be used locally in health Supervision Areas (Ilakas) to identify priority areas whether reaching or not reaching the established performance benchmark/threshold for an indicator and to make informed management decisions for sharing information across Supervision Areas. It can be further used to measure coverage at an aggregate level to quantify results for an entire catchments area like the district, region and nation. It is suitable for reporting purpose as well.

3.4 Purpose of LQAS:

As described earlier, it is cost effective and serves the purpose in limited time with minimum confidential errors. The LQAS sampling method has been in use in Plan Nepal Child Survival (CS) Projects since 1998 to collect baseline data, regular monitoring and evaluations both the MTE and Final on project relevant health

indicators, to determine whether the Supervision Areas are above or below average coverage on specific indicators, to determine the indicators that are well performing and those that are not within a given Supervision Area, and to determine the performance status of Supervision Areas within the total project area compared to other areas and the districts.

3.5 Sample Size and Sample Frame

Sample size is the number of responses obtained per Supervision Area for a specific indicator. The total sample size for the catchments area is the aggregated sample size from all supervision areas.

For the purpose of data collection, the three districts are divided into existing DHOs/DPHO Supervision Areas - Ilakas including the municipalities' slums and the periphery where health facilities are still in poor condition to measure the achievements and performance results against indicators based on the decision rules. Parsa district is divided into 13 Supervision Areas (SAs) (12 Ilakas of Parsa DPHO and 1 municipality), Sunsari into 15 SAs (12 Ilakas of Sunsari DHO and 3 municipalities) based on Ilakas of DDCs and DHO/DPHO Supervision Area and Bara district into 7 SAs based on CSXVII Project final evaluation Supervision Area. A sample size of 19 households is selected per SA to minimize α and β errors for the sample size of less than 19 and more work that does not necessarily reduce the margin of error for more greater sample size than 19 i.e. less than 10%. In assessing coverage, all the samples taken from each Supervisory Area have been aggregated in order to obtain a large enough sample size as required to estimate the proportion in each population subgroup. Total sample size for Bara is 133 mothers (19 households x 7 Supervisor Areas=133), for Parsa, 247 mothers (19 households x 13 Supervisory Areas = 247) and for Sunsari, 285 mothers (19 households x 15 Supervisory Areas = 285).

3.6 Threshold and Decision Rule

Coverage benchmark-the baseline threshold for an indicator is a pre-determined level of coverage that the project aims to reach at a specific time period.

Average coverage for an indicator is the number of people in the sample who responded correctly to a question divided by the total number of people responding to that question.

The decision rules indicate whether an individual or an intervention area reached the average coverage/ benchmark-threshold or is above or below the average coverage.

Initial thresholds/benchmarks for assessing the indicators were selected using the average proportion obtained by aggregating the data of all 13 SAs in Parsa and 15 SAs in Sunsari and 7SAs in Bara. The Decision Rule Table is included in the report.

3.7 Questionnaire

Translated copies of different questionnaire modules developed during the baseline survey of Sunsari and Parsa year 2008 and indicators of final evaluation of CSXVII Project Bara year 2006 corresponding to various groups of target beneficiaries of three districts have been discussed and shared among the participants and stakeholders openly for thorough common understating to collect information. Different sets of questionnaires were prepared for Bara district as per the indicators set for final evaluation of CS-XXVII Project. For Sunsari and Parsa, module 1 is set for mothers of children 0-5 months old, to collect information on mothers' knowledge of neonatal indicators and Module 2 questionnaires for mothers of children 0-23 months for Rapid Catch Indicators to assess immunization coverage and breastfeeding status.

3.8 Team Composition and Field Plan

As described above in Method and Process Section, team composition is made from two to three persons representing each organization e.g. DHO/DPHO, municipality, DDC, DEO, DWO, stakeholders, partner NGOs, Plan Nepal PUs and LIBON Project to join the adjoining districts Sunsari, Bara and Parsa and LIBON field based staff in each district depending upon the number of participants in the workshop. After training, field plan is scheduled for 7 or 8 days to collect information during the survey. Groups are formed according to the number of SAs per district. Details of participants, groups and field plans are attached in the annex

3.9 Training of Enumerators and Supervisors

As described above under Methods and Process Section, enumerators and supervisors are comprised of representatives from DHO, DPHO, NGOs-partners, DDC, DEO, DWO, municipality and Plan-Nepal PUs and LIBON field based staff including Family Planning Office and statisticians from concerned offices. Three day in-depth training is conducted for each district on the following topics and time frame as below. The sessions of training are quite rigorous with immediate on-the-spot exercise citing various examples based on the hand book manual provided to each enumerator and supervisor. The first three days are spent on clarification of terminologies and their application procedures and uses while collecting information during the sampling survey, sharing and discussion on questionnaires for common understanding, field testing of the questionnaires, mock survey role playing and preparation for actual survey. Facilitators closely monitored, guided and facilitated the enumerators during the field test in groups. Findings, results of field test of questionnaires are shared openly by each group with feedback and comments. Enumerators and Supervisors realized the ownership of the task for survey as per their jobs and duties.

Major topics discussed, shared and clarified are as below:

- LQAS- What is it?
- LQAS and Supervision Areas
- LQAS decisions at local level
- Advantages of LQAS for local programme management
- LQAS application in CS Projects
- Steps in applying LQAS: Select the intervention or service to assess; Define supervision areas: Define communities within Supervision Areas; Define benchmarks and define the level of acceptable error
- Making decision at the local level
- LQAS table for decision rules
- A few key LQAS concepts; Sample size; Coverage benchmark; Average coverage, Decision rule
- LQAS analysis decisions
- LQAS summary tables
- Supervision Areas and indicators
- Comparing Supervision Areas
- A sample of 19 indicates about the higher and lower performing areas, differentiating knowledge and practices with high and low coverage, setting priorities within the Supervision Area with large differences in coverage
- A sample does not indicate about calculating the value of coverage in a Supervision Area although useful to calculate coverage for an entire programme and setting priorities among Supervision Area with little difference in coverage.
- A sample of 19 provides an acceptable level of error (less than 10%) for making management decisions for practical purpose.
- Data collection using LQAS to randomly select communities, households and the respondent for interview during the survey.
- Steps in identifying locations for interview: Step-1: List communities and their total population size, Step-2: Calculate the cumulative population by adding the consecutive population of the following communities respectively until the last group of population to form cumulative population equal to the total population; Step-3: Calculate the sampling interval by dividing the total cumulative population by 19; Step-4: Choose the random number by pin pointing exactly on the number provided in the random number table; Step-5: Identify the locations/community for 19 interviews after initial random number and the sampling interval.
- LQAS sampling frame for a specific Supervision Area
- Selection of Households and assigned numbers; if a list of complete household is available assign a number to each house. If the community size is about 30 HHs or less, make a household list or a map with the location of each household with the help of a key informant from the community and then assign a number to each house. If the community size is more than 30 HHs sub-divide into 2-5 sections with about the same number of HHs in each

sections then select one section at random and make a house list or map with the location of each household with the help of the key informant and then assign the number of each household. Once all HHs are numbered, pick a random number using random tables and select the first household in the selected community. If more than one household is needed in the selected community, pick another random number to select the second household in the selected community.

- Selecting a respondent and alternate/ additional respondents; if the selected respondent is at the household, interview that person only if she agrees. If she is not at the house, go to the next nearest household from the front entrance to the house and check at the nearest household if the required respondent is available. If the respondent is absent and is 30 minutes away, trace and find the respondent or wait for 30 minute for interview. If she is not available during this time, go to the next nearest household from the front entrance of the previous house to find the required respondent.
- Process for field work survey;1) Meet the community leader or the key informant 2) Draw a community/ social map 3) Sub- divide the community into sections 30HH or fewer households 4)Give each section (each group of 30 or fewer household) a number 5) Select a section using a random number 6) Perform steps-3 through 5 again if the selected section is still too large i.e. more than 30 HHs 7) Assign number to Households in the selected sections 8) Select a starting household using a random table.

3.10 LQAS Findings and result description

Plan Nepal has been applying LQAS tools for participatory database planning, monitoring and evaluation of child survival projects for self-discovery of the level of sustainability of their services, capacity and competence to further promote, maintain and continue quality health services for neonatal child and mothers health programs in its program districts like in Bara, Sunsari and Parsa in joint collaboration with MoHP and its district based health offices, RHCC, Village Health Development Committee (VHDC) and local community organizations and groups. Plan Nepal LIBON Project is committed in its aim and mission to promote neonatal and maternal health improvement in these districts to contribute to and complement to the Plans and programs of MoHP 2017

3.10.1 Parsa District

The preliminary LQAS findings of final evaluation survey, Parsa district held on 3 – 14 July 2011.

1.1 Community Outreach Mechanisms Expanded (Table)
Result 1: Increased Access to NNH Services in Parsa

1.1 Community Outreach Mechanisms Expanded

I. Antenatal KPC Results:

Out of 9 indicators surveyed like

5. Percent of mothers of children aged 0-5 months protected against tetanus by getting second dose of TT vaccine
6. Percent of mothers of children aged 0-5 months with 4 times ante-natal visit who were checked by ANM or AHW or Staff Nurse or HA or doctor
7. Percent of mothers of children aged 0-5 months with 6 times ante-natal visit who were checked by ANM or AHW or Staff Nurse or HA or doctor
8. Percent of mothers of children aged 0-5 months with 4 times ante-natal visit who were checked by MCHW, ANM or AHW or Staff Nurse or HA or doctor
9. Percent of mothers of children aged 0-5 months with 6 times ante-natal visit who were checked by MCHW, ANM or AHW or Staff Nurse or HA or doctor
10. Percent of mothers of children aged 0-5 months receiving iron foliate tablets/caps at least for 4 months during their pregnancy
11. Percent of mothers of children aged 0-5 months receiving iron foliate tablets/caps at least for 6 months during their pregnancy
12. Percent of mothers of children aged 0-5 months suffering from night blindness during their pregnancy and receiving low-dose vitamin A (25,000 IU)*

13. Percent of mothers of children aged 0-5 months receiving a single dose of albendazole (400 mg) after completion of three month of last pregnancy

8 indicators surpassed the end of project – EOP target September 2011 except one KPC no. 12 which is quite below the EOP target i.e. 6.7% out of 35%.

II. Delivery KPC Results:

It covers only 2 indicators like;

15. Percent of mothers of children aged 0-5 months whose birth was attended by a skilled provider (doctor or nurse or HA or AHW or ANM)
16. Percent of mothers of children aged 0-5 months whose birth was attended by a skilled provider (doctor or nurse or HA or AHW or ANM or MCHW) No. 15 above indicator has result of 60% against 45% EOP target where as No 16 has 66% against 50% EOP target.

III. Post Natal KPC Results:

There are 11 indicators in the Postnatal.

23. Percent of mothers with children aged 0-5 months whose newborn children with signs of severe illness were seen by a qualified public or private provider
24. Percent of mothers with children aged 0-5 months (and their newborns) who received a first checkup by a skilled provider (doctor or nurse or HA or AHW or ANM) within the first two days of birth
25. Percent of mothers with children aged 0-5 months (and their newborns) who received a first checkup by a skilled provider (doctor or nurse or HA or AHW or ANM or MCHW) within the first two days of birth
26. Percent of mothers with children aged 0-5 months (and their newborns) who received a second post-natal checkup by a skilled provider (doctor or nurse or HA or AHW or ANM) within 3-7 days after birth
27. Percent of mothers with children aged 0-5 months (and their newborns) who received a second post-natal checkup by a skilled provider (doctor or nurse or HA or AHW or ANM or MCHW) within 3-7 days after birth
28. Percent of newborns whose umbilical stump was first applied with chlorhexidine 4% within 24 hours of birth
29. Percent of mothers of children aged 0-5 months who received vitamin A (200,000 IU) within 45 days after delivery
30. Percent of neonates with PSBI diagnosed by a health worker or FCHV within 48 hours of onset
31. Percent of neonates with PSBI given a first dose of oral antibiotics within 48 hours of onset
32. Percent of neonates with PSBI given a first dose of oral antibiotics within 48 hours of onset for 3 days

33. Percent of neonates with PSBI given a first dose of oral antibiotics within 48 hours of onset for 3 to 5 days

All the indicators surpassed the EOP-Targets except KPC No. 26 which is 5% less than the EOP-Target i.e. 20.6% in the final results against 25% EOP-Target. The results are as high as 98.8% to 26.7% at the lowest level.

2.1 Mothers recognize risks associated with pregnancy, delivery, and neonatal period (Table)

I. Antenatal KPC Results:

Both indicators like 1. Percent of mothers of children aged 0-5 months having a birth preparedness plan already coordinated with their closest health worker during their pregnancy; 2. Percent of mothers of children aged 0-5 months who know at least two danger signs during pregnancy surpassed the EOP-Target form 64% to 96% against EOP-Targets 40% and 70%.

II. Delivery KPC Results:

This indicator # 14, percent of mothers of children aged 0-5 months who know at least two danger signs during delivery has a result of 93% against 45% as EOP-Target.

III. Postnatal KPC Results:

All five indicators below surpassed EOP-Target up to 97.6%.

18. Percent of mothers of children aged 0-5 months who know at least two danger signs after delivery
19. Percent of mothers of children aged 0-5 months who know at least two danger signs among newborns

20***. Percent of mothers of children aged 0-5 months who know how to apply chlorhexidine on the umbilical stump

21. Percent of newborns who were breast-fed within one hour of birth

22*. Percent of newborns immediately after birth, who were dried off, exposed to a heating source (including kangaroo care) and avoided bathing for 24 hours

3.1 NNH monitoring and planning systems strengthened (Table)

I. Antenatal KPC Results:

Both the indicators 3, percent of mothers of children aged 0-5 months who were counseled on at least 1 counseling point during antenatal check-up and 4, percent of mothers of children aged 0-5 months who were counseled on at least 3 counseling points during antenatal check-up surpassed the EOP-Target up to 98.7% against 80% and 90.7% against 50%.

II. Delivery KPC Results:

Like Antenatal, both indicators surpassed the EOP-Target up to 97.2% against 85% and 81.8% against 60%. The indicators are as under;

17. Percent of birth attendants who washed their hands with soap before assisting in the procedure

22. Percent of newborns immediately after birth, who were dried off, exposed to a heating source (including kangaroo care) and avoided bathing for 24 hours

III. Postnatal KPC Results:

Indicators;

28. Percent of neonates with PSBI referred to a health worker for parenteral antibiotics within 48 hours of onset

29. Percent of neonates treated with antibiotics due to PSBI who completed the course of antibiotics

31. Percent of children of mothers aged 0-5 months who were fed colostrums

33*. Percent of neonates with possible severe bacterial infections (PSBI) diagnosed by a health worker or FCHV within 48 hours of onset

36. Percent of neonates with PSBI given a first dose of oral antibiotics within 48 hours of onset for 3 to 5 days

Out of 5 postnatal indicators; 3 indicators like 31, 33* and 36 surpassed the EOP-Target and the remaining like 28 and 29 achieved below 10% than EOP-Target i.e. 44.4% against 55%

IV. Indicator Percent of Mothers of 1. Percent of mothers of children aged 0-5 months having eclampsia during pregnancy decreased to 26.3% in the final evaluation from 47.8% in the MTE and the other indicator 2. Percent of mothers of children aged 0-5 months receiving calcium tablets/caps at least for 3 months (90 tablets) during their pregnancy increased to 38.9% in the Final Evaluation from 21.1% in the MTE. There is reverse proportion of calcium supplementation and reduction of pre eclampsia.

Rapid CATCH Baseline Indicator Values:

Indicator values:

1. Tetanus Toxoid: % of mothers with children age 0-23 months who received at least 2 tetanus toxoid vaccinations before the birth of their youngest child
2. Skilled Delivery Assistance: % of children age 0-23 months whose births were attended by skilled personnel
3. Post-Natal Visit to Check on the Newborn: % of children age 0-23 months who received a post-natal visit from an appropriate trained health worker within three days after birth
4. Exclusive Breastfeeding: % of children age 0-5 months who were exclusively breastfed during the last 24 hours
5. Infant and Young Child Feeding: Percent of children age 6-23 months fed according to a minimum of appropriate feeding practices
6. Vitamin A Supplementation: % of children age 6-23 months who received a dose of Vitamin A in the last 6 months: card verified or mother's recall
7. Measles Vaccination: % of children aged 12-23 months who received measles vaccine according to the vaccination card or mother's recall by the time of the survey

7a. Measles Vaccination: % of children aged 12-23 months who received measles vaccine according to the vaccination card by the time of the survey (Card coverage)

8. Access to Immunization Services: % of children aged 12-23 months who received DTP1 according to the vaccination card or mother's recall by the time of the survey

8a. Access to Immunization Services: % of children aged 12-23 months who received DTP1 according to the vaccination card by the time of survey (Card Coverage)

9. Health Systems Performance Regarding Immunization Services: % of children aged 12-23 months who received DTP3 according to the vaccination card or mother's recall by the time of the survey

9a. Health Systems Performance Regarding Immunization Services: % of children aged 12-23 months who received DTP3 according to the vaccination card by the time of the survey (Card Coverage)

10. Treatment of Fever in Malarious Zones: % 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
11. ORT Use: % of children age 0-23 months with diarrhea in the last two weeks who received Oral Rehydration Solution and/or recommended home fluids

12. Appropriate Care Seeking for Pneumonia: % 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
13. Point of Use: % of households of children age 0-23 months that treat water effectively
14. Appropriate Hand Washing Practices: % of mothers of children age 0-23 months who live in households with soap at the place for hand washing
15. ITN Use: % of children age 0-23 months who slept under an insecticide-treated bed net the previous night
16. Underweight: % of children age 0-23 months who are underweight (-SD for the median weight for age, according to WHO/NCHS reference population)

Out of 19 indicators presented above in the table; only 2 indicators 8a and 9a have around 1% less result than MTE result. Rest of the indicators has above MTE level.

1.1 Community Outreach Mechanisms Expanded (Table)
Result 1: Increased Access to NNH Services in Parsa

1.1 Community Outreach Mechanisms Expanded

SN KPC	Project Objective	Indicator	Baseline (Feb 08)	Mid-term (Feb 2010)	Final Evaluation Jul 2011	EOP target Sep. 2011
	Antenatal					
5	To maintain or decrease the incidence of maternal and neonatal tetanus	Percent of mothers of children aged 0-5 months protected against tetanus by getting second dose of TT vaccine	88.7%	88.3%	**98.0%**	Maintain
6	To increase the percent of pregnant women receiving adequate antenatal care	Percent of mothers of children aged 0-5 months with 4 times ante-natal visit who were checked by ANM or AHW or Staff Nurse or HA or doctor	24.7%	39.3%	**62.3%**	55%
7	To increase the percent of pregnant women receiving adequate antenatal care	Percent of mothers of children aged 0-5 months with 6 times ante-natal visit who were checked by ANM or AHW or Staff Nurse or HA or doctor	6.5%	13.8%	**14.6%**	35%
8	To increase the percent of pregnant women receiving adequate antenatal care	Percent of mothers of children aged 0-5 months with 4 times ante-natal visit who were checked by MCHW, ANM or AHW or Staff Nurse or HA or doctor	30.0%	44.1%	**81.4%**	55%
9	To increase the percent of pregnant women receiving adequate antenatal care	Percent of mothers of children aged 0-5 months with 6 times ante-natal visit who were checked by MCHW, ANM or AHW or Staff Nurse or HA or doctor	6.9%	14.2%	**25.9%**	40%
10	To decrease the percent of women and newborns with iron deficiency anemia	Percent of mothers of children aged 0-5 months receiving iron foliate tablets/caps at least for 4 months during their pregnancy	44.1%	50.2%	**90.7%**	70%

SN KPC	Project Objective	Indicator	Baseline (Feb 08)	Mid-term (Feb 2010)	Final Evaluation Jul 2011	EOP target Sep. 2011
11	To decrease the percent of women and newborns with iron deficiency anemia	Percent of mothers of children aged 0-5 months receiving iron foliate tablets/caps at least for 6 months during their pregnancy	25.9%	32.0%	**78.1%**	60%
12	To increase the percent of pregnant women experiencing night blindness who receive treatment	Percent of mothers of children aged 0-5 months suffering from night blindness during their pregnancy and receiving low-dose vitamin A (25,000 IU)*	0%	15.6%	**6.7%**	35%
13	To decrease percent of pregnant women suffering from helminthes during pregnancy	Percent of mothers of children aged 0-5 months receiving a single dose of albendazole (400 mg) after completion of three month of last pregnancy	37.7%	41.3%	**87.9%**	65%
	Delivery					
15	To increase percent of women accessing skilled delivery care	Percent of mothers of children aged 0-5 months whose birth was attended by a skilled provider (doctor or nurse or HA or AHW or ANM)	38.5%	46.6%	**60.3%**	45%
16	To increase percent of women accessing skilled delivery care	Percent of mothers of children aged 0-5 months whose birth was attended by a skilled provider (doctor or nurse or HA or AHW or ANM or MCHW)	41.3%	49.4%	**66.4%**	50%
	Postnatal					
23	To maintain or increase percent of sick newborns receiving care	Percent of mothers with children aged 0-5 months whose newborn children with signs of severe illness were seen by a qualified public or private provider	93.5%	98%	**98.8%**	maintain

SN KPC	Project Objective	Indicator	Baseline (Feb 08)	Mid-term (Feb 2010)	Final Evaluation Jul 2011	EOP target Sep. 2011
24	To increase percent of newborns receiving a check up from a skilled provider within two days of birth	Percent of mothers with children aged 0-5 months (and their newborns) who received a first checkup by a skilled provider (doctor or nurse or HA or AHW or ANM) within the first two days of birth	23.9%	31.2%	**54.3%**	50%
25	To increase percent of newborns receiving a check from a skilled provider up within two days of birth	Percent of mothers with children aged 0-5 months (and their newborns) who received a first checkup by a skilled provider (doctor or nurse or HA or AHW or ANM or MCHW) within the first two days of birth	25.9%	34%	**61.9%**	50%
26	To increase percent of newborns receiving a second check up from a skilled provider within 3-7 days of birth	Percent of mothers with children aged 0-5 months (and their newborns) who received a second post-natal checkup by a skilled provider (doctor or nurse or HA or AHW or ANM) within 3-7 days after birth	1.2%	0%	**20.6%**	25%
27	To increase percent of newborns receiving a second check up from a skilled provider within 3-7 days of birth	Percent of mothers with children aged 0-5 months (and their newborns) who received a second post-natal checkup by a skilled provider (doctor or nurse or HA or AHW or ANM or MCHW) within 3-7 days after birth	1.2%	0%	**26.7%**	25%
30 ***	To prevent infection among newborns	Percent of newborns whose umbilical stump was first applied with chlorhexidine 4% within 24 hours of birth	0%	2%	**78.9%**	40%
32	To decrease percent women and children with Vitamin A deficiency	Percent of mothers of children aged 0-5 months who received vitamin A (200,000 IU) within 45 days after delivery	47.8%	42.9%	**81.8%**	75%

SN KPC	Project Objective	Indicator	Baseline (Feb 08)	Mid-term (Feb 2010)	Final Evaluation Jul 2011	EOP target Sep. 2011
33 *	To increase treatment of infection among neonates	Percent of neonates with PSBI diagnosed by a health worker or FCHV within 48 hours of onset	36.4%	52.9%	**77.8%**	75%
34	To increase treatment of infection among neonates	Percent of neonates with PSBI given a first dose of oral antibiotics within 48 hours of onset	0%	5.9%	**55.6%**	40%
35	To increase treatment of infection among neonates	Percent of neonates with PSBI given a first dose of oral antibiotics within 48 hours of onset for 3 days	0%	0.0%	**44.4%**	45%
36 *	To increase treatment of infection among neonates	Percent of neonates with PSBI given a first dose of oral antibiotics within 48 hours of onset for 3 to 5 days	0%	17.6%	**44.4%**	40%
	Cross Cutting – Social Inclusion					
	To increase access to health information and services among DAGs**	Percent of DAG members participating in PWGs	0%	28%		
	To increase participation of DAG and representation of the needs of DAG in Health Facility Management Committees / VDC level	Percent of HFMC with participation of DAG members		NA		

2.1 Mothers recognize risks associated with pregnancy, delivery, and neonatal period (Table)

SN KPC	Project Objective	Indicator	Baseline (Feb 08)	Mid-term (Feb 2010)	Final Evaluation Jul 2011	EOP target Sept. 2011
	Antenatal					
1	To increase care seeking for skilled delivery care	Percent of mothers of children aged 0-5 months having a birth preparedness plan already coordinated with their closest health worker during their pregnancy	11.3%	*33.2%*	**64.8%**	40%
2	To increase care seeking during pregnancy	Percent of mothers of children aged 0-5 months who know at least two danger signs during pregnancy	51.0%	*91.5%*	**96.0%**	70%
	Delivery					
14	To increase care seeking for emergency intra-partum services	Percent of mothers of children aged 0-5 months who know at least two danger signs during delivery	27.1%	*71.7%*	**93.5%**	45%
	Postnatal					
18	To increase care seeking during postpartum period	Percent of mothers of children aged 0-5 months who know at least two danger signs after delivery	27.5%	*70.4%*	**96.8%**	40%
19	To increase care seeking during newborn period	Percent of mothers of children aged 0-5 months who know at least two danger signs among newborns	75.7%	*91.9%*	**97.6%**	85%
20	To increase preventive measures taken against newborn infection	Percent of mothers of children aged 0-5 months who know how to apply chlorhexidine on the umbilical stump	0%	*1.6%*	**75.7%**	55%
21	To increase preventive measures taken against newborn morbidity	Percent of newborns who were breast-fed within one hour of birth	17.4%	*35.6%*	**75.3%**	50%
22*	To decrease risk of hypothermia	Percent of newborns immediately after birth, who were dried off, exposed to a heating source (including kangaroo care) and avoided bathing for 24 hours	29.6%	*57.1%*	**85.4%**	60%

3.1 **NNH monitoring and planning systems strengthened (Table)**

SN KPC	Project Objective	Indicator	Baseline (Feb 08)	Mid-term (Feb 2010)	Final-term (Jul 2011)	EOP target Sept. 2011
	Antenatal					
3	To increase effectiveness of antenatal care	Percent of mothers of children aged 0-5 months who were counseled on at least 1 counseling point during antenatal check-up	69.2%	76.5%	**98.4%**	80%
4	To increase effectiveness of antenatal care	Percent of mothers of children aged 0-5 months who were counseled on at least 3 counseling points during antenatal check-up	17.0%	*56.7%*	**90.7%**	50%
	Delivery					
17	To decrease risk of infection during delivery	Percent of birth attendants who washed their hands with soap before assisting in the procedure	75.7%	73.7%	**97.2%**	85%
22 *	To decrease risk of hypothermia	Percent of newborns immediately after birth, who were dried off, exposed to a heating source (including kangaroo care) and avoided bathing for 24 hours	29.6%	57.1%	**81.8%**	60%
	Postnatal					
28	To increase care seeking for newborn infection	Percent of neonates with PSBI referred to a health worker for parenteral antibiotics within 48 hours of onset	0%	*11.8%*	**44.4%**	55%
29	To decrease newborn morbidity and mortality associated with infection	Percent of neonates treated with antibiotics due to PSBI who completed the course of antibiotics	0%	*0.0%*	**44.4%**	55%
31	To increase preventive measures taken against newborn morbidity	Percent of children of mothers aged 0-5 months who were fed colostrums	84.6%	*85.4%*	**98.4%**	95%

SN KPC	Project Objective	Indicator	Baseline (Feb 08)	Mid-term (Feb 2010)	Final-term (Jul 2011)	EOP target Sept. 2011
33 *	To increase treatment of infection among neonates	Percent of neonates with possible severe bacterial infections (PSBI) diagnosed by a health worker or FCHV within 48 hours of onset	36.4%	*52.9%*	**77.8%**	75%
36 *	To increase treatment of infection among neonates	Percent of neonates with PSBI given a first dose of oral antibiotics within 48 hours of onset for 3 to 5 days	0%	*17.6%*	**44.4%**	40%

**Indicators 22, 33 and 36 contribute to multiple results*
**** The GoN approves chlorhexidine for inclusion in LIBON in Parsa district for pilot programming.*

KPC	Indicator	MTE (Mar 2010)	FE (Jul 2011)
1	Percent of mothers of children aged 0-5 months having eclampsia during pregnancy	**47.8%**	**26.3%**
2	Percent of mothers of children aged 0-5 months receiving calcium tablets/caps at least for 3 months *(90 tablets)* during their pregnancy	**21.1%**	**38.9%**

Result 4: Strengthened support for NNM reduction in Nepal

4.1 Data generated and utilized to inform national level policy

SN KPC	Project Objective	Indicator	Baseline Sunsari (Jan 08)	Mid-term Jan 2010	Final Evaluation Jul 2011	Remarks
1	To increase knowledge and interest in NNH intervention processes and outcomes	Number of NNH-focused newsletters published and distributed by LIBON at national level	0	3	1	National Level
2	To increase capacity of MOHP at national level to monitor, assess and refine NNH interventions	Number of MOHP units (health facilities) receiving technical assistance from the MOHP in KPC/LQAS	0	40	45	
3	To generate knowledge and interest in NNH interventions for policy and program application	Number of IOM students with field rotations and internships at LIBON sites.	0	0	3	
4	To share knowledge and in regard to NNH interventions for policy and program application	Number of papers disseminated and/or presentations made based on LIBON project (authored by LIBON stakeholders: MoHP, IOM students, and Plan Nepal)	0	2	1	National Level

**Indicators 22, 33 and 36 contribute to multiple results*
***DAG are defined in Section 2 and based on the GoN definition and coding system*

Rapid CATCH Baseline Indicator Values (Table)

SN	Indicator	Baseline (Feb 08)	Mid-term (Feb 2010)	Final Evaluation Jul 2011
1	Tetanus Toxoid: % of mothers with children age 0-23 months who received at least 2 tetanus toxoid vaccinations before the birth of their youngest child	95.1%	96.8%	**95.5%**
2	Skilled Delivery Assistance: % of children age 0-23 months whose births were attended by skilled personnel	36.4%	47%	**70.0%**
3	Post-Natal Visit to Check on the Newborn: % of children age 0-23 months who received a post-natal visit from an appropriate trained health worker within three days after birth	27.9%	35.6%	**61.5%**
4	Exclusive Breastfeeding: % of children age 0-5 months who were exclusively breastfed during the last 24 hours	80.7%	84.5%	**89.2%**
5	Infant and Young Child Feeding: Percent of children age 6-23 months fed according to a minimum of appropriate feeding practices	32.5%	75.6%	**75.6%**
6	Vitamin A Supplementation: % of children age 6-23 months who received a dose of Vitamin A in the last 6 months: card verified or mother's recall	70.7%	67.7%	**78.9%**
7	Measles Vaccination: % of children aged 12-23 months who received measles vaccine according to the vaccination card or mother's recall by the time of the survey	77.6%	81.1%	**84.1%**
7a	Measles Vaccination: % of children aged 12-23 months who received measles vaccine according to the vaccination card by the time of the survey (Card coverage)	10.3%	19.8%	**17.5%**
8	Access to Immunization Services: % of children aged 12-23 months who received DTP1 according to the vaccination card or mother's recall by the time of the survey	87.9%	89.6%	**95.2%**
8a	Access to Immunization Services: % of children aged 12-23 months who received DTP1 according to the vaccination card by the time of survey (Card Coverage)	18.7%	23.6%	**22.2%**
9	Health Systems Performance Regarding Immunization Services: % of children aged 12-23 months who received DTP3 according to the vaccination card or mother's recall by the time of the	80.4%	79.2%	**84.1%**

SN	Indicator	Baseline (Feb 08)	Mid-term (Feb 2010)	Final Evaluation Jul 2011
	survey			
9a	Health Systems Performance Regarding Immunization Services: % of children aged 12-23 months who received DTP3 according to the vaccination card by the time of the survey (Card Coverage)	15.9%	21.7%	**20.6%**
10	Treatment of Fever in Malarious Zones: % 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	45.3%	56.3%	**79.3%**
11	ORT Use: % of children age 0-23 months with diarrhea in the last two weeks who received Oral Rehydration Solution and/or recommended home fluids	29.4%	53.5%	**68.0%**
12	Appropriate Care Seeking for Pneumonia: % 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	36.0%	50%	**31.4%**
13	Point of Use: % of households of children age 0-23 months that treat water effectively	6.1%	6.9%	**19.8%**
14	Appropriate Hand Washing Practices: % of mothers of children age 0-23 months who live in households with soap at the place for hand washing	57.5%	57.1%	**74.9%**
15	ITN Use: % of children age 0-23 months who slept under an insecticide-treated bed net the previous night	0%	0%	**0.0%**
16	Underweight: % of children age 0-23 months who are underweight (-SD for the median weight for age, according to WHO/NCHS reference population)	10.5%	9.5%	**4.9%**

General information of under 5 months and compare with baseline and MTE of Parsa districts (Table)

SN	Indicator	Baseline (Feb'08) %	MTE (Feb'10) %	Final Evaluation Jul 2011
A	% of mother with children age 0-23 months who child birth below 19 years age	18.2%	11.7%	**13.4%**
B	% of mother with children age 0-23 months who child birth between 20 and 34 years age	78.5%	81.8%	**82.2%**
C	% of mother with children age 0-23 months who child birth above 35 years age	3.2%	6.5%	**4.5%**
D	% of illiterate mother	72.5%	77.7%	**66.4%**
E	% of mother education is informal education	2.0%	1.6%	**3.6%**
F	% of mother education is Primary Level (1-5 class)	9.7%	5.7%	**14.6%**
G	% of mother education is Secondary level (6-10 class)	13.4%	11.3%	**13.0%**
H	% of mother education is Higher Secondary (10+2 class)	1.2%	3.2%	**1.6%**
I	% of mother education is University Degree	1.2%	0.4%	**0.8%**
J	% of mother occupation is Agriculture	16.2%	19.0%	**28.3%**
K	% of mother occupation is Service	2.0%	2.4%	**1.2%**
L	% of mother occupation is Business	2.8%	2.8%	**0.8%**
M	% of mother occupation is Labor	4.5%	4.9%	**1.6%**
N	% of mother occupation is Housewife	73.7%	69.6%	**68.0%**
O	% of mother occupation is Others	0.8%	1.2%	**0.0%**
P	% of mother with male child	48.6%	55.9%	**58.7%**
Q	% of mother with female child	51.4%	44.1%	**41.3%**

General information of under 23 months and compare with baseline and MTE of Parsa districts (Table)

SN	Indicator	Baseline (Feb'08) %	MTE (Feb'10) %	Final Evaluation Jul 2011
A	% of mother with children age 0-23 months who child birth below 19 years age	15.8%	*8.5%*	**10.9%**
B	% of mother with children age 0-23 months who child birth between 20 and 34 years age	79.8%	*87%*	**84.2%**
C	% of mother with children age 0-23 months who child birth above 35 years age	4.5%	*4.5%*	**4.9%**
D	% of illiterate mother	73.3%	*75.3%*	**65.6%**
E	% of mother education is informal education	4.5%	*2.0%*	**4.0%**
F	% of mother education is Primary Level (1-5 class)	11.3%	*7.7%*	**12.1%**
G	% of mother education is Secondary level (6-10 class)	9.3%	*10.9%*	**15.8%**
H	% of mother education is Higher Secondary (10+2 class)	0.8%	*3.6%*	**2.0%**
I	% of mother education is University Degree	0.8%	*0.4%*	**0.4%**
J	% of mother occupation is Agriculture	14.6%	*15.%*	**26.7%**
K	% of mother occupation is Service	1.2%	*3.2%*	**0.8%**
L	% of mother occupation is Business	1.2%	*2%*	**1.2%**
M	% of mother occupation is Labor	4.9%	*4.9%*	**3.6%**
N	% of mother occupation is Housewife	78.1%	*74.9%*	**67.6%**
O	% of male child birth	50.6%	*53.8%*	**60.3%**
P	% of female child birth	49.4%	*46.2%*	**39.7%**
Q	% of child age less than equal 5 months	36.4%	*48.6%*	**63.6%**
R	% of child age between 6 and 23 months	63.6%	*51.4%*	**36.4%**
S	% of child age between 11 and 23 months	43.3%	*42.9%*	**25.5%**

2.10.1(a) Analysis of data interpretation on both Ilaka and indicators – Parsa

Table 1: Number of *Mothers with children 0-5 months* with inadequate knowledge/practices according to LQAS thresholds (Parsa) in Jul 2011

** Program Average %: Decision Rule – FE (Jul'11)	100 %:	75.3 %: 13	91.5% : 16	98.4% :	0.4%:	62.3% : 10	81.4%: 14	98.4% :	98%:	78.1% : 13	87.9%: 15	64.8 %: 10	46.2% : 7	81.8% : 14	54.3% : 8	61.9% : 10	20.6%: 2	26.7%: 3	78.9% : 13	75.7%: 13	81.8 %: 14	97.6% :	98.8%:	96%:	93.5%: 16	96.8%:	
*Monitoring %: Decision Rules (Jul'11)	95%: 16	50%: 7	65%: 10	90%: 14	NA	45%: 6	50%: 7	80%: 13	90%: 15	50%: 7	60%: 9	40% : 5	45%: 6	60%: 9	45%: 6	40%: 5	25%: 2	30%: 3	55%: 8	55%: 8	60%: 9	95%: 16	95%: 16	85%: 14	75%: 12	75%: 12	
** Program Average %: Decision Rule – MTE (Feb'10)	99.2 %: 16	35.6 %: 5	63.6% : 10	85.4% : 15	0.0%: NA	39.3% : 5	44.1%: 6	76.5% : 13	88.3% : 15	32.0% : 4	41.3%: 6	33.2 %: 4	35.6% : 5	57.1% : 9	31.2% : 4	34.0% : 4	0.0%: NA	0.0%: NA	2.0%: 1	1.6%: 1	42.9 %: 6	91.9% : 16	98.0%: NA	83.8%: 14	71.7%: 12	70.4%: 12	
** Program Average %: Decision Rule - Baseline (LQAS-Jan'08)	99.2 %: 16	17.3 %: 1	51.0% : 8	83.6% : 14	2.4%: 1	24.2% : 2	29.2%: 3	69.3% : 11	85.9% : 15	25.0% : 2	36.2%: 5	10.9 %: 1	28.2% : 3	28.1% : 3	22.6% : 2	24.4% : 2	1.1%: 1	1.18%: 1	0.0%: 1	0.0%: 1	44.2 %:6	69.8% : 11	85.9%: 15	46.7%: 7	24.7%: 2	25.0%: 2	
Field Area (Parsa district)	Breastfeeding	Breastfeeding within 1 hour	Breastfeeding within 8 hours	Colostrums feeding	Low dose Vitamin "A" to newborn within 48 hrs after birth	ANC check up 4 or more time upto ANM	ANC check up 4 or more time upto MCHW	Counseled during ANC at least 1	TT +2 coverage	Iron tablet during pregnancy 6 months	Albendazole during pregnancy after 3 months	Birth preparedness	Delivery at health institute	Kangaroo care, dried off, heating source	First PNC check-up within 2 days upto ANM	First PNC check-up within 2 days upto MCHW	Second PNC check-up within 3 to 7 days upto ANM	Second PNC check-up within 3 to 7 days upto MCHW	Apply Chlorhexidine on Umbilical stump	Apply Chlorhexidine on Umbilical stump within 24 hrs	Vitamin A after delivery	Know danger sign indicate newborn sick at least 2	Know danger sign of newborn need to seek for treatment at least 1	Know danger sign during pregnancy at least 2	Know danger sign during delivery at least 2	Know danger sign after delivery at least 2	**Total substandard intervention**
Indicator no.	***1***	***2***	***3***	***4***	***5***	***6***	***7***	***8***	***9***	***10***	***11***	***12***	***13***	***14***	***15***	***16***	***17***	***18***	***19***	***20***	***21***	***22***	***23***	***24***	***25***	***26***	
1: Thori	**19**	**10#**	**17**	**19**	**NA**	**12**	**15**	**18**	**19**	**15**	**17**	**12**	**6#**	**17**	**12**	**12**	**0#***	**0#***	**11#***	**11#***	**17**	**19**	**19**	**18**	**18**	**19**	**6**
2: Sedhawa	**19**	**15**	**19**	**19**	**NA**	**13**	**19**	**19**	**19**	**16**	**19**	**18**	**7**	**17**	**11**	**14**	**8**	**11**	**18**	**18**	**18**	**19**	**19**	**19**	**15#**	**19**	**1**
3: Nichuta	**19**	**17**	**17**	**19**	**NA**	**11**	**13#**	**18**	**19**	**16**	**14#**	**9#**	**10**	**13#**	**10**	**11**	**5**	**5**	**12#***	**11#***	**16**	**15#***	**17**	**15#**	**14#**	**14#**	**10**
4: Bagahi	**19**	**13**	**16**	**16**	**NA**	**7#**	**10#**	**18**	**18**	**11#**	**16**	**6#**	**11**	**13#**	**4#***	**5#**	**0#***	**1#***	**14**	**14**	**11#***	**18**	**18**	**17**	**17**	**17**	**10**
5: Bageshwori	**19**	**14**	**17**	**19**	**NA**	**7#**	**12#**	**18**	**19**	**11**	**13#**	**9#**	**8**	**17**	**11**	**11**	**3**	**4**	**15**	**14**	**15**	**18**	**19**	**17**	**18**	**19**	**4**
6: Bisrampur	**19**	**12#**	**15#**	**19**	**NA**	**12**	**17**	**19**	**19**	**14**	**16**	**14**	**13**	**15**	**6#**	**11**	**3**	**6**	**16**	**15**	**15**	**19**	**19**	**19**	**19**	**19**	**3**
7: Bhikhampur	**19**	**14**	**18**	**19**	**NA**	**12**	**18**	**19**	**19**	**16**	**17**	**12**	**10**	**14**	**11**	**13**	**1#***	**3**	**16**	**16**	**17**	**19**	**19**	**19**	**19**	**19**	**1**
8: Langadi	**19**	**18**	**18**	**18**	**NA**	**13**	**16**	**19**	**18**	**19**	**19**	**12**	**6#**	**17**	**13**	**14**	**2**	**3**	**18**	**18**	**18**	**19**	**19**	**19**	**16**	**19**	**1**
9: Pokhariya	**19**	**15**	**18**	**19**	**NA**	**15**	**15**	**19**	**18**	**15**	**17**	**15**	**9**	**16**	**10**	**11**	**5**	**6**	**14**	**14**	**17**	**19**	**19**	**18**	**19**	**18**	
10: Pakaha	**19**	**14**	**16**	**19**	**NA**	**12**	**18**	**19**	**19**	**18**	**19**	**14**	**12**	**12#**	**9**	**12**	**5**	**6**	**15**	**14**	**15**	**19**	**19**	**19**	**19**	**19**	**1**
11: Sirsiya	**19**	**13**	**19**	**19**	**NA**	**10**	**16**	**19**	**18**	**14**	**18**	**12**	**13**	**15**	**7#**	**8#**	**4**	**6**	**14**	**14**	**14**	**19**	**19**	**19**	**19**	**19**	**2**
12: Birgunj	**19**	**15**	**17**	**19**	**NA**	**15**	**17**	**19**	**19**	**13**	**16**	**15**	**6#**	**18**	**12**	**13**	**5**	**5**	**15**	**14**	**14**	**19**	**19**	**19**	**19**	**19**	**1**

** Program Average %: Decision Rule – FE (Jul'11)	100 %:	75.3 %: 13	91.5% : 16	98.4% :	0.4%:	62.3% : 10	81.4%: 14	98.4% :	98%:	78.1% : 13	87.9%: 15	64.8 %: 10	46.2% : 7	81.8% : 14	54.3% : 8	61.9% : 10	20.6%: 2	26.7%: 3	78.9% : 13	75.7%: 13	81.8 %: 14	97.6% :	98.8%:	96%:	93.5%: 16	96.8%:	
*Monitoring %: Decision Rules (Jul'11)	95%: 16	50%: 7	65%: 10	90%: 14	NA	45%: 6	50%: 7	80%: 13	90%: 15	50%: 7	60%: 9	40% : 5	45%: 6	60%: 9	45%: 6	40%: 5	25%: 2	30%: 3	55%: 8	55%: 8	60%: 9	95%: 16	95%: 16	85%: 14	75%: 12	75%: 12	
** Program Average %: Decision Rule – MTE (Feb'10)	99.2 %: 16	35.6 %: 5	63.6% : 10	85.4% : 15	0.0%: NA	39.3% : 5	44.1%: 6	76.5% : 13	88.3% : 15	32.0% : 4	41.3%: 6	33.2 %: 4	35.6% : 5	57.1% : 9	31.2% : 4	34.0% : 4	0.0%: NA	0.0%: NA	2.0%: 1	1.6%: 1	42.9 %: 6	91.9% : 16	98.0%: NA	83.8%: 14	71.7%: 12	70.4%: 12	
** Program Average %: Decision Rule - Baseline (LQAS-Jan'08)	99.2 %: 16	17.3 %: 1	51.0% : 8	83.6% : 14	2.4%: 1	24.2% : 2	29.2%: 3	69.3% : 11	85.9% : 15	25.0% : 2	36.2%: 5	10.9 %: 1	28.2% : 3	28.1% : 3	22.6% : 2	24.4% : 2	1.1%: 1	1.18%: 1	0.0%: 1	0.0%: 1	44.2 %:6	69.8% : 11	85.9%: 15	46.7%: 7	24.7%: 2	25.0%: 2	
Field Area (Parsa district)	Breastfeeding	Breastfeeding within 1 hour	Breastfeeding within 8 hours	Colostrums feeding	Low dose Vitamin "A" to newborn within 48 hrs after birth	ANC check up 4 or more time upto ANM	ANC check up 4 or more time upto MCHW	Counseled during ANC at least 1	TT +2 coverage	Iron tablet during pregnancy 6 months	Albendazole during pregnancy after 3 months	Birth preparedness	Delivery at health institute	Kangaroo care, dried off, heating source	First PNC check-up within 2 days upto ANM	First PNC check-up within 2 days upto MCHW	Second PNC check-up within 3 to 7 days upto ANM	Second PNC check-up within 3 to 7 days upto MCHW	Apply Chlorhexidine on Umbilical stump	Apply Chlorhexidine on Umbilical stump within 24 hrs	Vitamin A after delivery	Know danger sign indicate newborn sick at least 2	Know danger sign of newborn need to seek for treatment at least 1	Know danger sign during pregnancy at least 2	Know danger sign during delivery at least 2	Know danger sign after delivery at least 2	**Total substandard intervention**
13: Birgunj NP	**19**	**16**	**19**	**19**	**NA**	**15**	**15**	**19**	**18**	**15**	**16**	**12**	**3#**	**18**	**18**	**18**	**10**	**10**	**17**	**14**	**15**	**19**	**19**	**19**	**19**	**19**	**1**
Total substandard		**2**	**1**			**2**	**3**			**1**	**2**	**3**	**4**	**3**	**3**	**2**	**3**	**2**	**2**	**2**	**1**	**1**		**1**	**2**	**1**	

* Decision rule based on Monitoring/Coverage Target; ** Decision rule based on Program Average Coverage.
- Number with hash (#) is below program average coverage; - Number with asterisk (*) is below monitoring/coverage target; - Number with asterisk and circle is below program average coverage and monitoring/coverage target.

Ilaka wise description:

Two Ilakas namely Ilaka no. 3 Nichuta and 4 Bagahi have 10 indicators below programme average, Ilaka no. 1 Thori has 6 indicators and Ilaka No. 5 Bageshwori and 6 Bisrampur have 4 and 3 indicators below programme average. Ilaka no. 11 Sirsiya has 2 indicators below program average, while the rest except Ilaka no. 9 Pokhariya have 1 indicator below program average.

Indicator wise Description:

- Indicator no. 13 Delivery at health institute has 4 Ilakas below programme average like Ilaka no. 1 Thori, no. 8. Langadi, no. 12 Birgunj, no. 13 Birgunj NP.
- Indicator no. 7 ANC check up 4 or more time up to MCHW has 3 Ilakas i.e. no. 3. Nichuta, no. 4 Babahi and no. 5 Bageshwori below programme average.
- Indicator no. 12 Birth preparedness has 3 Ilaka below programme average decision rule like no. 3 Nichuta, no. 4, Babahi and no. 5 Bageshwori.
- Indicator no. 14 Kangaroo Care has 3 Ilakas below programme average decision rule like no. 3 Nichuta, no. 4, Babahi and no. 10 Pakaha.
- Indicator no. First PNC check-up within 2 days upto ANM has 3 Ilakas below programme average decision rule like no. Babahi, no. 6 Bisrampur, no. 11 Sirsiya.
- Indicator no. 17 Second PNC check-up within 3 to 7 days upto ANM has 3 Ilakas below programme average decision rule like no. 1. Thori, no. 3 Nichuta and no. 7 Bhikhampur.

There are 5 indicators which are no. 1 Breast feeding, no. 4 Colostrums feeding, no. 8 Counseled during ANC at least 1, no. 9 TT +2 coverage, no 23 Know danger sign of newborn need to seek for treatment at least 1 which are above programme average decision rule in all the Ilakas.

Remaining indicators have either 1 or 2 Ilakas with below programme decision rule.

Table 2: Number of *Mothers with children 0-23 months* with inadequate knowledge/practices according to LQAS thresholds (Parsa district) in July 2011

** Program Average %: Decision Rule – FE (Jul'11)	95.5%: 11	70%: 10	61.5%: 9	19.8%: 1	74.9%: 12	95.1%: 15	
*Monitoring %: Decision Rules (Jul'11)	95%: 16	60%: 9	50%: 7	20%: 1	75%: 12	90%: 15	
** Program Average %: Decision Rule – MTE (Feb'10)	93.1%: 16	47.0%: 7	35.6%: 5	6.9%: 1	57.1%: 9	88.3%: 15	
** Program Average %: Decision Rule - Baseline (LQAS-Jan'08)	95.1%: 16	36.3%: 5	27.7%: 3	6.0%: 1	57.5%: 9	87.4%: 15	
Field Area (Parsa district)	**TT +2 coverage**	**Skill delivery attendant**	**PNC visit for newborn from an appropriate trained health worker with 3 days**	**Family used treat water with effectively**	**Mother live in HH with soap at the place for hand washing**	**Normal weight**	**Total substandard intervention**
1: Thori	19	15	14	4	11#*	19	**1**
2: Sedhawa	19	15	14	1	15	19	
3: Nichuta	19	12	12	0#*	9#*	18	**2**
4: Bagahi	17	10	6#*	5	15	19	**1**
5: Bageshwori	16	15	13	1	10#*	18	**1**
6: Bisrampur	19	7#*	6#*	5	14	18	**2**
7: Bhikhampur	19	13	12	6	18	18	
8: Langadi	18	15	8#	0#*	17	16	**2**
9: Pokhariya	17	12	13	8	12	19	
10: Pakaha	19	11	10	6	14	19	
11: Sirsiya	18	15	12	3	17	19	
12: Birgunj	19	15	15	4	15	17	
13: Birgunj NP	17	18	17	6	18	16	
Total substandard		**1**	**2**	**2**	**3**		

* Decision rule based on Monitoring/Coverage Target; ** Decision rule based on Program Average Coverage.
- Number with hash (#) is below program average coverage; - Number with asterisk (*) is below monitoring/coverage target; - Number with asterisk and circle is below program average coverage and monitoring/coverage target.

Ilaka wise programme average coverage decision rule description:

- Ilaka no. 3 Nichta has two indicators no. 4 Family used treat water with effectively and no. 5 Mother live in HH with soap at the place for hand washing below programme average decision rule.
- Ilaka no. 6 Bisrampur has 2 indicators no. 2 Skill delivery attendant and no. 3 PNC visit for newborn from an appropriate trained health worker with 3 days below programme average decision rule.
- Ilaka no. 8 Langadi has 2 indicators no. 3 PNC visit for newborn from an appropriate trained health worker with 3 days and no. 4 Family used treat water with effectively below programme average decision rule.
- Ilakas 2 Sedhuwa, no. 7 Bhikhampur, no. 9 Pokharia, no. 10 Pakaha, no. 11 Sirsiya, no. 12 Birgunj andno. 12 Birgunj NP all have poor program average decision rule.
- Ilaka no. 1 Thori has1 indicator no. 5 Mother live in HH with soap at the place for hand washing, Ilaka no. 4 Bagahi have all 1 indicator below program average decision rule.

3.10.2 Sunsari District:

The preliminary LQAS findings of final evaluation survey, Sunsari district on 27 May and 9 June 2011

DHO Sunsari and Plan Nepal

1.1 Community Outreach Mechanisms Expanded
Result 1: Increased Access to NNH Services in Sursari

I. Antenatal KPC Results:

Out of 8 indicators survey like;

5. Percent of mothers of children aged 0-5 months protected against tetanus by getting second dose of TT vaccine
6. Percent of mothers of children aged 0-5 months with 4 times ante-natal visit who were checked by ANM or AHW or Staff Nurse or HA or doctor
7. Percent of mothers of children aged 0-5 months with 6 times ante-natal visit who were checked by ANM or AHW or Staff Nurse or HA or doctor
8. Percent of mothers of children aged 0-5 months with 4 times ante-natal visit who were checked by MCHW, ANM or AHW or Staff Nurse or HA or doctor
9. Percent of mothers of children aged 0-5 months with 6 times ante-natal visit who were checked by MCHW, ANM or AHW or Staff Nurse or HA or doctor
10. Percent of mothers of children aged 0-5 months receiving iron foliate tablets/caps at least for 4 months *(120 tablets)* during their pregnancy
11. Percent of mothers of children aged 0-5 months receiving iron foliate tablets/caps at least for 6 months *(180 tablets)* during their pregnancy

12*. Percent of mothers of children aged 0-5 months suffering from night blindness during their pregnancy and receiving low-dose vitamin A (25,000 IU) (*)

13. Percent of mothers of children aged 0-5 months receiving a single dose of albendazole (400 mg) after completion of three month of last pregnancy

All 7 indicators have surpassed the EOP-Targets except indicator no. 13 which is 10% less than the EOP-Target i.e. 75.4% in the final against 85% EOT-Target. The results range from 45.6% against 35% EOP-Target in no. 7 to 93% against 80% EOP-Target in no. 10.

II. Delivery KPC Results:

The 2 Indicators viz. 15. Percent of mothers of children aged 0-5 months whose birth was attended by a skilled provider (doctor or nurse or HA or AHW or ANM) and 16. Percent of mothers of children aged 0-5 months whose birth was attended by a skilled provider (doctor or nurse or HA or AHW or ANM or MCHW) have both 82.5% results against 55% in no. 15 and 60% in no. 16 EOP-Target.

III. Postnatal KPC Results:

There are 11 indicators which are as under;

23. Percent of mothers with children aged 0-5 months whose newborn children with signs of severe illness were seen (visited) by a qualified public or private provider
24. Percent of mothers with children aged 0-5 months (and their newborns) who received a first checkup by a skilled provider (doctor or nurse or HA or AHW or ANM) within the first two days of birth
25. Percent of mothers with children aged 0-5 months (and their newborns) who received a first checkup by a skilled provider (doctor or nurse or HA or AHW or ANM or MCHW) within the first two days of birth
26. Percent of mothers with children aged 0-5 months (and their newborns) who received a second post-natal checkup by a skilled provider (doctor or nurse or HA or AHW or ANM) within 3-7 days after birth
27. Percent of mothers with children aged 0-5 months (and their newborns) who received a second post-natal checkup by a skilled provider (doctor or nurse or HA or AHW or ANM or MCHW) within 3-7 days after birth

30***. Percent of newborns whose umbilical stump was first applied with chlorhexidine 4% within 24 hours of birth (***)

32. Percent of mothers of children aged 0-5 months who received vitamin A (200,000 IU) within 45 days after delivery

33*. Percent of neonates with PSBI diagnosed by a health worker or FCHV (Merge) within 48 hours of onset 60%

34. Percent of neonates with PSBI given a first dose of oral antibiotics (Cotrim) within 48 hours of onset
35. Percent of neonates with PSBI given a first dose of oral antibiotics (Cotrim) within 48 hours of onset for 3 days

36*. Percent of neonates with PSBI given a first dose of oral antibiotics (Cotrim) within 48 hours of onset for 3 to 5 days

7 indicators surpassed the EOP-Target except 4 which are no 23 – 94.4% against 97.2% in the MTE; no 26 – 15.8% against 25% the EOP-Target; no. 27 – 20% aginst 25%; no. 33 – 84.2% against 90% the EOP-Target. The range of results raise from 70% to 94% in the final evaluation.

Result 2: Increased Demand for NNH Services in Sunsari

2.1 Mothers recognize risks associated with pregnancy, delivery, and neonatal period

I. Antenatal KPC Results:

Both indicators which are Percent of mothers of children aged 0-5 months having a birth preparedness plan already coordinated with their closest health worker during their pregnancy; Percent of mothers of children aged 0-5 months who know at least two danger signs during pregnancy have surpassed the EOP-Target i.e. 69.8% against 55% in no. 1 and 91.6% against 70% EOP-Target in no. 2.

II. Delivery KPC Results:

Indicator no. 14 Percent of mothers of children aged 0-5 months who know at least two danger signs during delivery surpassed the EOP-Target i.e. 82.1% against 45% EOP-Target.

III. Postnatal KPC Results:

All indicators surpassed the EOP-Target i.e. 86.7% against 40 in no. 18; 94.4% against 85% in no. 19; 83.5% against 65% in no. 21 and 88.4 against 65% EOP-Target in no. 23. Indicators are as under;

18. Percent of mothers of children aged 0-5 months who know at least two danger signs after delivery
19. Percent of mothers of children aged 0-5 months who know at least two danger signs among newborns
20***. Percent of mothers of children aged 0-5 months who know how to apply chlorhexidine on the umbilical stump (***)
21. Percent of newborns who were breast-fed within one hour of birth
22*. Percent of newborns immediately after birth, who were dried off, exposed to a heating source (including kangaroo care) and avoided bathing for (within) 24 hours

Result - 3: Increased Quality of NNH Services in Sunsari

3.1 **NNH monitoring and planning systems strengthened**

I. Antenatal KPC Results:

Two indicators like; 3. Percent of mothers of children aged 0-5 months who were counseled on at least 1 counseling point during antenatal check-up; 4. Percent of mothers of children aged 0-5 months who were counseled on at least 3 counseling points during antenatal check-up Surpassed the EOP-Target i.e. 93.7 against 80% in no. 3 and 85.3% against 55 EOP-Target in no. 4

II. Delivery KPC Results:

Two indicators like

17. Percent of birth attendants who washed their hands with soap before assisting in the procedure; 22*. Percent of newborns immediately after birth, who were dried off, exposed to a heating source (including kangaroo care) and avoided bathing for 24 hours surpassed the EOP-Target i.e. 96.8% against 85% in no. 17 and 88.4% against 68% EOP-Target in no. 22*.

III. Postnatal KPC Results:

There are 5 indicators;

28. Percent of neonates with PSBI referred to a health worker for parenteral antibiotics within 48 hours of onset
29. Percent of neonates treated with antibiotics due to PSBI who completed the course of antibiotics
31*. Percent of children of mothers aged 0-5 months who were fed colostrums
33*. Percent of neonates with possible severe bacterial infections (PSBI) diagnosed by a health worker or FCHV within 48 hours of onset
36*. Percent of neonates with PSBI given a first dose of oral antibiotics within 48 hours of onset for 3 to 5 days:

4 indicators have surpassed the EOP-Target for example; 57.9% against 55% in no. 28 and no. 29; 9.5% against 95 EOP-Target in no. 31; 84.2% against 90% in no. 33* and 73.7% against 65% EOP-Target in no. 36*.

Draft findings of Final Evaluation through LQAS method of 0-5 months child of Sunsari district on May-Jun 2011

Result 1: Increased Access to NNH Services in Sunsari

1. Community Outreach Mechanisms Expanded

SN KPC	Objective	Indicator	Baseline (Jan 08)	Mid-term Jan 2010	FE (Jun 2011)	EOP target Sep. 2011
	Antenatal					
5	To maintain or decrease the incidence of maternal and neonatal tetanus	Percent of mothers of children aged 0-5 months protected against tetanus by getting second dose of TT vaccine	83.5%	90.2%	***94.0%***	Maintain
6	To increase the percent of pregnant women receiving adequate antenatal care	Percent of mothers of children aged 0-5 months with 4 times ante-natal visit who were checked by ANM or AHW or Staff Nurse or HA or doctor	29.1%	53.3%	***74.0%***	55%
7	To increase the percent of pregnant women receiving adequate antenatal care	Percent of mothers of children aged 0-5 months with 6 times ante-natal visit who were checked by ANM or AHW or Staff Nurse or HA or doctor	8.8%	21.8%	***45.6%***	35%
8	To increase the percent of pregnant women receiving adequate antenatal care	Percent of mothers of children aged 0-5 months with 4 times ante-natal visit who were checked by MCHW, ANM or AHW or Staff Nurse or HA or doctor	43.5%	69.1%	***86.3%***	65%
9	To increase the percent of pregnant women receiving adequate antenatal care	Percent of mothers of children aged 0-5 months with 6 times ante-natal visit who were checked by MCHW, ANM or AHW or Staff Nurse or HA or doctor	13.7%	26.3%	***53.3%***	40%
10	To decrease the percent of women and newborns with iron deficiency anemia	Percent of mothers of children aged 0-5 months receiving iron foliate tablets/caps at least for 4 months *(120 tablets)* during their pregnancy	63.2%	85.6%	***93.0%***	80%
11	To decrease the percent of women and newborns with iron deficiency anemia	Percent of mothers of children aged 0-5 months receiving iron foliate tablets/caps at least for 6 months *(180 tablets)* during their pregnancy	47.7%	75.1%	***85.6%***	75%

SN KPC	Objective	Indicator	Baseline (Jan 08)	Mid-term Jan 2010	FE (Jun 2011)	EOP target Sep. 2011
12*	To increase the percent of pregnant women experiencing night blindness who receive treatment	Percent of mothers of children aged 0-5 months suffering from night blindness during their pregnancy and receiving low-dose vitamin A (25,000 IU) (*)	10.3%	14.3%		45%
13	To decrease percent of pregnant women suffering from helminthes during pregnancy	Percent of mothers of children aged 0-5 months receiving a single dose of albendazole (400 mg) after completion of three month of last pregnancy	62.8%	80.7%	***75.4%***	85%
	Delivery					
15	To increase percent of women accessing skilled delivery care	Percent of mothers of children aged 0-5 months whose birth was attended by a skilled provider (doctor or nurse or HA or AHW or ANM)	45.3%	67.7%	***82.5%***	55%
16	To increase percent of women accessing skilled delivery care	Percent of mothers of children aged 0-5 months whose birth was attended by a skilled provider (doctor or nurse or HA or AHW or ANM or MCHW)	46.7%	69.1%	***82.5%***	60%
	Postnatal					
23	To maintain or increase percent of sick newborns receiving care	Percent of mothers with children aged 0-5 months whose newborn children with signs of severe illness were seen (visited) by a qualified public or private provider	89.1%	97.2%	***94.4%***	Maintain
24	To increase percent of newborns receiving a check up from a skilled provider within two days of birth	Percent of mothers with children aged 0-5 months (and their newborns) who received a first checkup by a skilled provider (doctor or nurse or HA or AHW or ANM) within the first two days of birth	29.5%	60.0%	***73.7%***	55%
25	To increase percent of newborns receiving a check from a skilled provider up within two days of birth	Percent of mothers with children aged 0-5 months (and their newborns) who received a first checkup by a skilled provider (doctor or nurse or HA or AHW or ANM or MCHW) within the first two days of birth	30.9%	61.1%	***76.1%***	60%
26	To increase percent of	Percent of mothers with children aged 0-5 months	0.7%	2.5%	***15.8%***	25%

SN KPC	Objective	Indicator	Baseline (Jan 08)	Mid-term Jan 2010	FE (Jun 2011)	EOP target Sep. 2011
	newborns receiving a second check up from a skilled provider within 3-7 days of birth	(and their newborns) who received a second post-natal checkup by a skilled provider (doctor or nurse or HA or AHW or ANM) within 3-7 days after birth				
27	To increase percent of newborns receiving a second check up from a skilled provider within 3-7 days of birth	Percent of mothers with children aged 0-5 months (and their newborns) who received a second post-natal checkup by a skilled provider (doctor or nurse or HA or AHW or ANM or MCHW) within 3-7 days after birth	0.7%	2.5%	***20.0%***	25%
30 ***	To prevent infection among newborns	Percent of newborns whose umbilical stump was first applied with chlorhexidine 4% within 24 hours of birth (***)	0%	1.1%		40%
32	To decrease percent women and children with Vitamin A deficiency	Percent of mothers of children aged 0-5 months who received vitamin A (200,000 IU) within 45 days after delivery	60.4%	75.1%	***86.3%***	80%
33*	To increase treatment of infection among neonates	Percent of neonates with PSBI diagnosed by a health worker or FCHV (Merge) within 48 hours of onset 60%	69.2%	80.0%	***84.2%***	90%
34	To increase treatment of infection among neonates	Percent of neonates with PSBI given a first dose of oral antibiotics (Cotrim) within 48 hours of onset	17.9%	10.0%	***73.7%***	60%
35	To increase treatment of infection among neonates	Percent of neonates with PSBI given a first dose of oral antibiotics (Cotrim) within 48 hours of onset for 3 days	2.6%	35.0%	***73.7%***	50%
36*	To increase treatment of infection among neonates	Percent of neonates with PSBI given a first dose of oral antibiotics (Cotrim) within 48 hours of onset for 3 to 5 days	17.9%	15.0%	***73.7%***	65%
	Cross Cutting – Social Inclusion					

SN KPC	Objective	Indicator	Baseline (Jan 08)	Mid-term Jan 2010	FE (Jun 2011)	EOP target Sep. 2011
	To increase access to health information and services among DAGs**	Percent of DAG members participating in PWGs	0%	23%		
	To increase participation of DAG and representation of the needs of DAG in Health Facility Management Committees / VDC level	Percent of HFMC with participation of DAG members	NA	NA		

Result 2: Increased Demand for NNH Services in Sunsari

2.1 Mothers recognize risks associated with pregnancy, delivery, and neonatal period

SN KPC	Objective	Indicator	Baseline (Jan 08)	Mid-term (Jan 2010)	FE (Jun 2011)	EOP target Sept. 2011
	Antenatal					
1	To increase care seeking for skilled delivery care	Percent of mothers of children aged 0-5 months having a birth preparedness plan already coordinated with their closest health worker during their pregnancy	25.6%	57.5%	***69.8%***	55%
2	To increase care seeking during pregnancy	Percent of mothers of children aged 0-5 months who know at least two danger signs during pregnancy	46.7%	79.6%	***91.6%***	70%
	Delivery					
14	To increase care seeking for emergency intra-	Percent of mothers of children aged 0-5 months who know at least two danger signs during delivery	17.2%	67.7%	***82.1%***	45%

SN KP C	Objective	Indicator	Baseline (Jan 08)	Mid-term (Jan 2010)	FE (Jun 2011)	EOP target Sept. 2011
	partum services					
	Postnatal					
18	To increase care seeking during postpartum period	Percent of mothers of children aged 0-5 months who know at least two danger signs after delivery	20.4%	73.3%	***86.7%***	40%
19	To increase care seeking during newborn period	Percent of mothers of children aged 0-5 months who know at least two danger signs among newborns	62.8%	90.5%	***94.4%***	85%
20 ***	To increase preventive measures taken against newborn infection	Percent of mothers of children aged 0-5 months who know how to apply chlorhexidine on the umbilical stump **(***)**	0%	1.1%		55%
21	To increase preventive measures taken against newborn morbidity	Percent of newborns who were breast-fed within one hour of birth	33.0%	67.7%	***83.5%***	65%
22*	To decrease risk of hypothermia	Percent of newborns immediately after birth, who were dried off, exposed to a heating source (including kangaroo care) and avoided bathing for (within) 24 hours	36.8%	74.7%	***88.4%***	65%

Result 3: Increased Quality of NNH Services in Sunsari
***3.1* NNH monitoring and planning systems strengthened**

SN KPC	Objective	Indicator	Baseline (Jan 08)	Mid-term Jan 2010	FE (Jun 2011)	EoP target Sept. 2011
	Antenatal					
3	To increase effectiveness of antenatal care	Percent of mothers of children aged 0-5 months who were counseled on at least 1 counseling point during antenatal check-up	71.6%	87.4%	***93.7%***	80%
4	To increase effectiveness of antenatal care	Percent of mothers of children aged 0-5 months who were counseled on at least 3 counseling points during antenatal check-up	33.0%	77.5%	***85.3%***	55%
	Delivery					
17	To decrease risk of infection during delivery	Percent of birth attendants who washed their hands with soap before assisting in the procedure	74.7%	87.7%	***96.8%***	85%
22*	To decrease risk of hypothermia	Percent of newborns immediately after birth, who were dried off, exposed to a heating source (including kangaroo care) and avoided bathing for 24 hours	36.8%	74.7%	***88.4%***	68%
	Postnatal					
28	To increase care seeking for newborn infection	Percent of neonates with PSBI referred to a health worker for parenteral antibiotics within 48 hours of onset	2.6%	5.0%	***57.9%***	55%
29	To decrease newborn morbidity and mortality associated with infection	Percent of neonates treated with antibiotics due to PSBI who completed the course of antibiotics	0%	0.4%	***57.9%***	55%

SNKPC	Objective	Indicator	Baseline (Jan 08)	Mid-term Jan 2010	FE (Jun 2011)	EoP target Sept. 2011
31	To increase preventive measures taken against newborn morbidity	Percent of children of mothers aged 0-5 months who were fed colostrums	84.6%	95.1%	***97.5%***	95%
33*	To increase treatment of infection among neonates	Percent of neonates with possible severe bacterial infections (PSBI) diagnosed by a health worker or FCHV within 48 hours of onset	69.2%	80.0%	***84.2%***	90%
36*	To increase treatment of infection among neonates:	Percent of neonates with PSBI given a first dose of oral antibiotics within 48 hours of onset for 3 to 5 days:	17.9%	15.0%	***73.7%***	65%

**Indicators 22, 33 and 36 contribute to multiple results*

Note:

(*) No low-dose vitamin A (25,000 IU) program in Sunsari district

(***) No chlorhexidine program in Sunsari district.

KPC	Indicator	MTE (Mar 2010)	FE (Jun 2011)
1	Percent of mothers of children aged 0-5 months having eclampsia during pregnancy	29.5%	22.8%
2	Percent of mothers of children aged 0-5 months receiving calcium tablets/caps at least for 3 months (90 tablets) during their pregnancy	24.6%	65.6%

After MTE, calcium tablet was distributed to pregnant women via pregnant women group (1 gm per day minimum for 90 days suppl

DHO Sunsari and Plan Nepal

Rapid CATCH FE Indicator: Findings of Sunsari district on May-Jun 2011 through LQAS method of under 2 years

SN	Indicator	Baseline (Jan-Feb 08)	Mid-term (Jan 2010)	Final-term (Jun 2011)
1	Tetanus Toxoid: % of mothers with children age 0-23 months who received tetanus toxoid 2 plus (TT_2+) vaccinations before the birth of their youngest child	89.8%	93.7%	***90.2%***
2	Skilled Delivery Assistance: % of children age 0-23 months whose births were attended by skilled personnel	47.4%	70.2%	***83.5%***
3	Post-Natal Visit to Check on the Newborn: % of children age 0-23 months who received a post-natal visit from an appropriate trained health worker within three days after birth	43.2%	66.3%	***78.6%***
4	Exclusive Breastfeeding: % of children age 0-5 months who were exclusively breastfed during the last 24 hours	67.7%	90.6%	***74.7%***
5	Infant and Young Child Feeding: Percent of children age 6-23 months fed according to a minimum of appropriate feeding practices	69.6%	77.4%	***69.2%***
6	Vitamin A Supplementation: % of children age 6-23 months who received a dose of Vitamin A in the last 6 months: card verified or mother's recall	87.3%	91.3%	***96.3%***
7	Measles Vaccination: % of children aged 12-23 months who received measles vaccine according to the vaccination card or mother's recall by the time of the survey	85.9%	89.0%	***90.2%***
7a	Measles Vaccination: % of children aged 12-23 months who received measles vaccine according to the vaccination card by the time of the survey (card coverage)	21.7%	40.7%	***41.5%***
8	Access to Immunization Services: % of children aged 12-23 months who received DTP1 according to the vaccination card or mother's recall by the time of the survey	94.6%	91.2%	***95.1%***
8a	Access to Immunization Services: % of children aged 12-23 months who received	31.5%	44.0%	***47.6%***

SN	Indicator	Baseline (Jan-Feb 08)	Mid-term (Jan 2010)	Final-term (Jun 2011)
	DTP1 according to the vaccination card by the time of survey (card coverage)			
9	Health Systems Performance Regarding Immunization Services: % of children aged 12-23 months who received DTP3 according to the vaccination card or mother's recall by the time of the survey	88.0%	86.8%	***92.7%***
9a	Health Systems Performance Regarding Immunization Services: % of children aged 12-23 months who received DTP3 according to the vaccination card by the time of the survey (Card Coverage)	30.4%	42.9%	***47.6%***
10	Treatment of Fever in Malarious Zones: % 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	44.4%	40.7%	***69.4%***
11	ORT Use: % of children age 0-23 months with diarrhea in the last two weeks who received Oral Rehydration Solution and/or recommended home fluids	39.3%	63.6%	***87.5%***
12	Appropriate Care Seeking for Pneumonia: % 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	46.0%	87.0%	***82.5%***
13	Point of Use: % of households of children age 0-23 months that treat water effectively	34.7%	56.8%	***21.1%***
14	Appropriate Hand Washing Practices: % of mothers of children age 0-23 months who live in households with soap at the place for hand washing	73.0%	77.9%	***84.6%***
15	ITN Use: % of children age 0-23 months who slept under an insecticide-treated bed net the previous night **(**)**	0%		
16	Underweight: % of children age 0-23 months who are underweight (+_ 3SD for the median weight for age, according to WHO/NCHS reference population)	13.0%	6.3%	***8.4%***

Note: (**) No program for insecticide treated bed net in Sunsari

Sunsari DHO and Plan Nepal

Draft findings through hand tabulation Jun 2011

General information of under 6 months and compare with baseline, MTE and FE of Sunsari district

SN	Indicator	Baseline (Jan'08) %	MTE (Jan'10) %	FE (Jun'11) %
A	% of mother with children age 0-5 months who child birth below 19 years age	10.2%	13.7%	***14.7%***
B	% of mother with children age 0-5 months who child birth between 20 and 34 years age	86.3%	83.5%	***83.5%***
C	% of mother with children age 0-5 months who child birth above 35 years age	3.5%	2.8%	***1.8%***
D	% of illiterate mother	52.3%	41.0%	***34.7%***
E	% of mother education is informal education	4.9%	7.4%	***5.6%***
F	% of mother education is Primary Level (1-5 class)	11.9%	8.4%	***13.3%***
G	% of mother education is Secondary level (6-10 class)	24.9%	34.7%	***33.7%***
H	% of mother education is Higher Secondary (10+2 class)	5.3%	8.1%	***9.1%***
I	% of mother education is University Degree	0.7%	1.4%	***3.5%***
J	% of mother occupation is Agriculture	16.8%	13.3%	***15.1%***
K	% of mother occupation is Service	1.8%	3.9%	***2.8%***
L	% of mother occupation is Business	4.2%	2.1%	***3.9%***
M	% of mother occupation is Labor	10.2%	9.1%	***6.7%***
N	% of mother's as housewives	66.7%	71.2%	***71.2%***
O	% of mother occupation is Others	0.4%	0.4%	***0.4%***
P	% of mother with male child	56.8%	54.0%	***49.1%***
Q	% of mother with female child	43.2%	46.0%	***50.9%***

General information of under 24 months and compare with baseline, MTE and FE of Sunsari district

SN	Indicator	Baseline (Jan'08) %	MTE (Jan'10) %	FE (Jun'11) %
A	% of mother with children age 0-23 months who child birth below 19 years age	8.1%	11.6%	***10.9%***
B	% of mother with children age 0-23 months who child birth between 20 and 34 years age	87.4%	83.9%	***87.4%***
C	% of mother with children age 0-23 months who child birth above 35 years age	4.6%	4.6%	***1.8%***
D	% of illiterate mother	51.2%	41.1%	***34.4%***
E	% of mother education is informal education	4.9%	6.0%	***5.6%***
F	% of mother education is Primary Level (1-5 class)	13.0%	8.4%	***14.4%***
G	% of mother education is Secondary level (6-10 class)	24.6%	35.4%	***33.3%***
H	% of mother education is Higher Secondary (10+2 class)	5.3%	7.4%	***9.8%***
I	% of mother education is University Degree	1.1%	1.8%	***2.5%***
J	% of mother occupation is Agriculture	19.3%	13.3%	***12.6%***
K	% of mother occupation is Service	1.1%	2.8%	***2.5%***
L	% of mother occupation is Business	4.2%	1.1%	***3.9%***
M	% of mother occupation is Labor	12.3%	7.7%	***3.5%***
N	% of mother occupation is Housewife	63.2%	74.4%	***77.2%***
O	% of mother with male child	56.5%	55.4%	***48.4%***
P	% of mother with female child	43.5%	44.6%	***51.6%***
Q	% of child age less than equal 5 months	44.6%	60.4%	***62.5%***
R	% of child age between 6 and 23 months	55.4%	39.6%	***37.5%***
S	% of child age between 11 and 23 months	32.3%	29.1%	***28.8%***

2.10.2 (a) Draft Table 1: Number of *Mothers with children 0-5 months* with inadequate knowledge/practices according to LQAS thresholds (Sunsari) in May-Jun 2011

Field Area (Sunsari district)	Breastfeeding	Breastfeeding within 1 hour	Breastfeeding within 8 hrs	Colostrums feeding	ANC check up 4 or more time upto ANM	ANC check up 4 or more time upto MCHW	Counseled during ANC at least 1	TT 2 coverage	Iron tablet during pregnancy 6 months	Albendazole during pregnancy after 3 months	Birth preparedness	Delivery at health institute	Kangaroo care, dried off, heating source	First PNC check-up within 2 days up to ANM	First PNC check-up within 2 days up to MCHW	Second PNC check-up within 3 to 7 days up to ANM	Second PNC check-up within 3 to 7 days up to MCHW	Vitamin A after delivery	Know danger sign indicate newborn sick at least 2	Know danger sign of newborn need to seek for treatment at least 1	Know danger sign during pregnancy at least 2	Know danger sign during delivery at least 2	Know danger sign after delivery at least 2	Total substandard intervention
*Monitoring %: Decision Rules (May-Jun'11)	99%	80%: 13	90%: 15	90%: 15	55%: 8	70%: 11	90%: 15	90%: 15	75%: 12	80%: 13	60%: 9	60%: 9	75%:12	65%: 10	65%: 10	20%:1	20%"1	75%: 12	90%:15	95%:16	80%:13	70%:11	75%:12	
** Program Average %: Decision Rule – FE (May-Jun'11)	99.6%	83.5%: 14	99.3%	97.5%	74.0%: 12	86.3%: 15	95.4%	94.0%: 16	85.6%: 15	90.5%: 16	69.8%: 11	77.9%: 13	88.4%: 15	73.7%: 12	76.1% : 13	15.8%: 1	20.0%: 1	86.3%: 15	94.4%: 16	98.6%	91.6%: 16	82.1%: 14	86.7%: 15	
** Program Average %: Decision Rule – MTE (Jan'10)	99.6%: 16	69.5%: 11	89.8%: 15	95.1%: 16	53.3%: 8	69.1%: 11	87.7%: 15	90.2%: 16	75.1%: 12	80.7%: 14	57.5%: 9	57.2%: 9	74.7%: 12	60%: 9	61.1%: 10	2.5%: 1	2.5%: 1	75.1%: 12	90.5%: 16	97.2%: 16	80%: 13	67.7%: 11	73.3%: 14	
** Program Average %: Decision Rule – Baseline (Jan'08)	98.2%: 16	33.0%: 4	71.9%: 12	84.6%: 14	29.1%: 3	43.5%: 6	71.6%: 12	83.5%: 14	47.7%: 7	62.8%: 10	25.6%: 3	35.8%: 5	36.8%: 5	29.5%: 3	30.9%: 4	0.7%: 1	0.7%: 1	60.4%:10	62.8%: 10	89.1%: 15	46.7%: 7	17.2%: 1	20.4%: 2	
1: Itahari	19	13#	19	19	15	15	19	19	16	14#	13	17	17	17	17	2	2	17	17	19	16	11#	11#*	4
2: Chatara	19	15	19	19	17	18	18	18	15	18	18	13	15	16	16	6	6	17	19	19	19	19	19	0
3: Madhuwan	19	19	19	19	11#	15	19	18	19	19	17	12#	16	6	11#	4	11	17	19	19	19	19	19	3
4: Harinagara	19	17	19	19	12	17	18	19	16	19	12	14	15	12	12#	0#*	1	18	18	19	18	18	18	2
5: Satterjhora	19	18	19	18	9#	11#	17	19	18	19	14	11#	15	10#	10	1	1	18	18	18	18	18	18	4
6: Inaruwa	19	11#*	19	19	7#	18	19	19	19	18	13	15	18	15	15	8	10	18	18	19	19	19	19	2
7: Prakaspur	19	16	19	18	17	18	19	19	17	19	18	11#	14#	12	12#	1	1	17	17	19	16	16	16	3

8: Bakalauri	19	16	19	18	17	17	19	19	12#	19	12	16	17	13	13	1	1	17	19	19	19	18	19	**1**
9: Madhelee	19	18	19	19	16	16	18	18	18	18	11	17	19	16	16	0#*	0#*	18	17	18	19	15	14#	**3**
10: Sitagunj	19	16	19	17	14	17	18	17	16	17	12	15	19	14	14	1	2	17	17	18	14	12#	14#*	**2**
11: Dewagunj	19	18	19	18	9#	14#	18	19	19	18	18	14	18	15	17	3	3	19	19	19	19	19	19	**2**
12: Bhutaha	19	18	18	19	15	18	19	19	16	15#	14	15	17	13	13	7	8	19	19	19	19	19	19	**1**
13: Itahari NP	19	15	19	19	19	19	19	16	14#	17	10#	19	17	19	19	3	3	13#	18	19	17	7#*	13#	**5**
14: Dharan NP	18	13#	18	19	15	15	16	12#*	14#	13#	5#*	18	19	17	17	3	3	11#*	16	19	12#*	6#*	11#*	**9**
15: Inaruwa NP	19	15	19	18	18	18	16	17	15	15	12	15	16	15	15	5	5	10#*	18	18	17	18	18	**1**
Total		**3**			**4**	**2**		**1**	**3**	**3**	**2**	**3**	**1**	**1**	**3**	**2**	**1**	**3**			**1**	**4**	**5**	

Ilaka wise result description:

- Ilaka no. 14 Dharan NP has 9 indicators below program average coverage.
- Ilaka no. 13 Itari NP has 5 indicators below program average coverage.
- Ilaka no. 5 Saterjhora has 4 indicators below program average coverage.
- Ilaka no. 3 Madhuban has 3 indicatros below program average coverage.
- Ilaka no. 7 Prakashpur has 3 indicators below program average coverage.
- Ilaka no. 9 Madheli has 3 indicatros below program average coverage.

The rest of the Ilakas except Ilaka no. 2 Chatara having all indicators above program average coverage, have 1 to 2 indicatros below program average coverage.

Indicators wise result description:

- **Indicator no. 23** Know danger sign after delivery at least 2 has 5 Ilakas like Ilaka no. Itahari, no. 9 Maheli, no. 10 Shia Gunj, no. 13 Itahari NP, no. 14 Dharan NP with below programme average coverage.
- Indicator no. 22 Know danger sign during delivery at least 2 has 4 Ilakas like Ilaka no. 1 Itahari, no. 10 Sitagunj, no. 13. Itahari NP, no. 14 Dharan NP with below programme average coverage.
- Indicator no. 2 Breastfeeding within 8 hrs; no. 9 Iron tablet during pregnancy 6 months; no. 10 Albendazole during pregnancy after 3 months; no. 12 Delivery at health institute; no. 15 First PNC check-up within 2 days up to MCHW and no. 18 Vitamin A after delivery – all have 3 Ilakas each below programme average coverage.
- Indicator no. 1. Breastfeeding; no. 3 Breastfeeding within 8 hrs; no. 4 Colostrums feeding; no. 7 Counseled during ANC at least 1; no. 19 Know danger sign indicate newborn sick at least 2; no. 20 Know danger sign of newborn need to seek for treatment at least 1 have all Ilakas above programme average coverage.
- Rest of the indicators have 1 to 2 Ilakas with below programme average coverage.

Table 2: Number of *Mothers with children 0-23 months* with inadequate knowledge/practices according to LQAS thresholds (Sunsari district) in May-Jun 2011

*Monitoring %: Decision Rules (May-Jun'11)	95%: 16	80%:13	75%:12	45%:6	80%:13	90%:15	
** Program Average %: Decision Rule –	90.2%: 16	83.5%: 14	78.6%: 13	21.1%: 2	84.6%: 14	91.6%: 16	
** Program Average %: Decision Rule - MTE (LQAS-Jan'10)	89.8%: 15	70.9%: 12	67.7%: 11	61.4%: 10	79.6%: 13	95.8%: 16	
** Program Average %: Decision Rule - Baseline (LQAS-Jan'08)	89.8%: 15	47.4%: 7	43.2%: 6	34.7%: 5	73.0%: 12	87.0%: 15	
Field Area (Sunsari district)	TT +2 coverage	Skill delivery attendant	PNC visit for newborn from an appropriate trained health worker with 3 days	Family used treat water with effectively	Mother live in HH with soap at the place for hand washing	Normal weight	Total substandard intervention
1: Itahari	17	18	17	10	18	18	
2: Chatara	19	16	16	9	18	19	
3: Madhuwan	19	16	11#*	0#*	18	11#*	3
4: Harinagara	19	15	13	3*	16	18	
5: Satterjhora	19	14	13	5*	14	18	
6: Inaruwa	17	14	15	1#*	19	17	1
7: Prakaspur	18	12#*	13	0#*	10#*	17	3
8: Bakalauri	17	16	16	2*	13#	18	1
9: Madhelee	13#*	16	9#*	4*	15	19	2
10: Sitagunj	10#*	17	17	3*	13#	17	2
11: Dewagunj	19	17	17	1#*	18	19	1
12: Bhutaha	19	16	16	1#*	17	17	1
13: Itahari NP	16	16	16	8	17	18	
14: Dharan NP	17	19	19	12	19	18	
15: Inaruwa NP	18	16	16	1#*	16	17	1
Total	2	1	2	6	3	1	

Ilaka wise programme average coverage decision rule description:

- Ilaka no. 3 Madhuban has 3 indicators no. 3 PNC visit for newborn from an appropriate trained health worker with 3 days; no. 4 Family used treat water with effectively and no. 6 Normal weight below programme average decision rule.
- Ilaka no. 7 Prakashpur has 3 indicators namely no. 2 Skill delivery attendant; no. 4 Family used treat water with effectively and no. 5 Mother live in HH with soap at the place for hand washing below program average decision rule.
- Ilaka no. 9 Madheli has 2 indicators like no. 1 TT +2 coverage and no. 3 PNC visit for newborn from an appropriate trained health worker with 3 days below programme average decision rule
- Ilaka no. 10 Sitagunj has 2 indicators like no. 1 TT +2 coverage and no. 5 Mother live in HH with soap at the place for hand washing below programme average decision rule.
- Ilakas no. 1 Itahari, no. 2 Chatara, no. 4 Harinagara, no. 5 Satterjhora, no. 13 Itahari NP, no. 14 Dharan NP have all programme averge decision rule
- The rest of the Ilakas have 1 indicator below programme average decision rule.

Ilaka-wise Recommendations for improvement in poor indicator(s) data based on finding during LQAS survey on May-June 2011-Sunsari District

Ilaka# 15- Inaruwa **Date: 26-2-068**

M#	Indicators	Reason	Recommended strategy	Activities
1	Counseling during ANC at least	Lack of awareness on importance and utilization of ANC service in local health facility.	Awareness raising is necessary to pregnant mothers. Strengthen health facility with skilled manpower.	Mother group formation for counseling and information sharing. Use of local FM radio and newspaper for awareness raising.
1	Iron tablet during pregnancy 6 months.	Lack of information knowledge for taking iron tablet. Shortage of tablets.	Availability of iron tablets in health facility. Health education on the importance of using iron tablets.	Regular supply of iron tablets. BCC is needed to pregnant mothers. BCC?
1	Albendazole during pregnancy after 3 months.	Lack of awareness and shortage of the time.	Health education program about utilization of Albendazole. Availability of Albendazole.	Regular supply. Increase BCC activities.
1	Vitamin 'A' after delivery.	Lack of awareness and shortage of vitamin "A' tablet.	Health education about utilization of vitamin 'A'.	Regular supply. Increase BCC activities about vitamin A and extend Nutrition education.
2	Insecticide treated bed net the previous night.	Not available in the market. No supply from the central office.	Increase the supply of insecticide net in Sunsari district.	Free distribution and supply in the market.

Ilaka-wise Recommendations for improvement in poor indicator(s) data based on finding during LQAS survey on May-June 2011-Sunsari District

Ilaka# 14-Dharan Date: 9-June-2011

M#	Indicators	Reason	Recommended strategy	Activities
1	Breast feeding within 1 hour.	Complicated pregnancy c/s Complication in babies. Inadequate knowledge.	Health workers: re-enforcement by training. Education: inclusion of staffs in teaching hospital. Information to public via mass media. Mobilization of FCHVs.	Provide trainings to health workers and monitoring, evaluation of their perfomance. Training to FCHVs.
2	TT2 coverage	Recall bias? Primi mothers? Skipping of MNT.?	Re-campaigning Re-emergence of MNT programme Effective recording/reporting.	Ensure TT injection during pregnancy by health workers. Awareness raising among mothers and parents.
3	Iron tablet during pregnancy	Mother's negligence or ignorance. Poor Health care and weak counseling.	Updating of knowledge among health workers. Antenatal visit: increment. Effective recording/reporting.	Training to and Evaluation of health workers. Awareness raising among mothers by mass media. Mobilization of FCHVs.
4	Albendazole during pregnancy after 3 months.	Lack of knowledge and awareness among mothers. Health workers' weak counseling. Belief of miscarriage due to albendazole.	IEC: strengthening of IEC (effective) Promotion of antenatal care. Training of health workers, FCHVs.	Use of mass medias, to provide information regarding albendazole to remove misconception. Counseling to mothers. Essential drugs available in teaching hospital.
5	Birth preparedness	People believe that hospital facilities are nearby. Lack of counseling by health professionals.	Effective IEC method. Reinforcement of health workers. Mobilization of FCHVs.	Training FCHVs. Recruitment or posting of counselors. Provide adequate number of staff a/c to patients flow.

		Health professionals are overburdened. Lack of time Lack of knowledge on BPP.		
6	Vitamin A after delivery	Low socio-economic status of people. Lack of strategy for vitamin A	Strategy for vitamin A and after delivery. Record card of maternal services.	Record keeping of each and every service. Vitamin A distribution after institutional delivery. Mobilization of FCHVs for vitamin A distribution.
7	Know danger sign of newborn.	Lack of knowledge and awareness and the efficiency of mass media, or information materials.	Effective IEC. Health professional training.	Counseling to mothers. Training and Effective design, distribution of information materials. Inclusion of material or reproductive health in curriculum of secondary school level.?
8	Danger signs during pregnancy	Lack of knowledge and awareness and the efficiency of mass media, information materials.	Information, EC methods. Does DEO or Ministry agrees?	Counseling to mothers. Training and Effective design, distribution of information material. Inclusion of materials or reproductive health in curriculum of secondary school level.
9	Danger signs after delivery.	Lack of knowledge and awareness and the efficiency of mass media, information material.	Information, EC methods.	Counseling to mothers Training, Effective design, and distribution of information material. Inclusion of material or

				reproductive health in curriculum of secondary school level.

Ilaka-wise Recommendations for improvement in poor indicator(s) data based on finding during LQAS survey on May-June 2011-Sunsari District

Ilaka# 13-Itahari NP Date: 26-02-2068

M#	Indicators	Reason	Recommended strategy	Activities
1	Breast feeding within 1 hour	Poor knowledge Operative procedure and Attitude of staff.	Mass awareness Training to all level of health workers Encourage for institutional delivery	Training to all level of health workers and FCHVs; Routinely monitoring and evaluation; Proper counseling during prenatal and postnatal period to mothers.
2	TT2 coverage	Lack of counseling for next dose of TT Negligence by women and Improper recording.	Public awareness for compulsory ANC visit at nearest health facility.	BCC? Reinforce mothers to receive next dose of TT
3	Birth preparedness	Unawareness and lack of counseling	Mass awareness; Reinforce health worker and FCHVs for proper counseling for BPP Timely/ proper delivery of health services; Use of behavior mapping in all VDCs.	BCC; Proper counseling to pregnant women and family during ANC visit; Monthly PWGs meetings
4	Vitamin A after delivery	Home delivery Lack of PNC visit	Encourage for institutional delivery; Reinforce FCHVs and HWs	Proper counseling to PWGs; Monitoring and evaluation of FCHVs and HWs performance.
5	Knowledge of danger sign during delivery at	Lack of proper counseling; Lack of	Public awareness through mass media	BCC; Proper counseling to

	least (2)	education; Attitude of HWs		PWGs and family during ANC visit
6	Knowledge of danger signs after delivery at least 2.	Lack of proper counseling; Lack of education; Attitude of HWs	Public awareness through mass media	Develop positive attitude; how? Refresher training to HWs and FCHVs.

Ilaka-wise Recommendations for improvement in poor indicator(s) data based on finding during LQAS survey on May-June 2011-Sunsari District

Ilaka# 11-Dewanganj Date: 9th June 2011

M#	Indicators	Reason	Recommended strategy	Activities
1	ANC check-up 4 or more times up to ANM.	Lack of health worker (ANM); Lack of health education Border area? Present political situation?	Coordination with DHO/DPHO to depute ANM; Provide health education regularly Advise clients at own institution? Coordination with HMC & institution.	Advice to DHO at district monthly meeting; Health education to mother groups; Coordination with HMC and clients.
1	ANC check-up 4 or more times up to MCHW.	Lack of health worker (ANM); Lack of health education Border area? Present political situation?	Coordination with DHO/DPHO for ANM Provide health education regularly Advice to client at own institution? Coordination with HMC & institution.	Advice to DHO at district monthly meeting. Health education to mother groups. Coordination with HMC and client.
1	1st pregnancy check-up within 2 days up to ANM.	Lack of health worker (ANM) Lack of health education Border area Present political situation	Coordination with DHO/DPHO for ANM Provide health education regular Advice to client at own institution Coordination with HMC & institution.	Advice with DHO at district monthly meeting. Health education for mother groups. Coordination with HMC and client.
2	Family use treat water with effectively.	Poverty Poor health education	Continue health education program.	Mothers group meeting; School health education for school age children.
2 ?	Insecticide treated bed net at night	Poverty Poor health education	Continue health education program.	Mothers group meeting School health

	?			education for school age children.
		Recommendation activities not complying		

Ilaka-wise Recommendations for improvement in poor indicator(s) data based on finding during LQAS survey on May-June 2011-Sunsari District

Ilaka#10-Sitagunj Date: 26-02-2068

M#	Indicators	Reason	Recommended strategy	Activities
1	Know danger sign during pregnancy at lest 2.	Poor/weak Health education.	Health education provision for VDC and ward.	Training to FCHV and health worker.
1	Know danger sign during delivery at last 2	Poor/weak Health education.	Health education provision for VDC and ward.	FCHV and health worker ANM and birthing center
2	TT+2 coverage Family used treat water and effectively	Data verification and source. Awareness. Health education	Re-data analysis. Health education promotion of VDC and ward.	Immunization clinic; VHW/MCHW and health post incharge.
2	Mother live in HG with soap at the place for hand washing	Poor/weak Health education Mother group meeting	Health education promotion for VDC and ward Increasing the mother groups meetings.	FCHV and health worker training; Review orientation/ health education during mother groups meetings

Ilaka-wise Recommendations for improvement in poor indicator(s) data based on finding during LQAS survey on May-June 2011-Sunsari District

Ilaka# 9-Madheli Date: 9th June 2011

M#	Indicators	Reason	Recommended strategy	Activities
1	TT+2 coverage	Survey and data tabulation?	Pregnant mothers to be focused on Immunization program	Reinforce program by increasing supervision in health centers.
1	PNC visit for newborn from an appropriate trained health worker within 3 days.	Due to low PNC visit	Motivate antenatal mothers for the check up of new born babies.	Activate FCHVs; Make ORC effective; and Effective supervision
1	Family used treat water and effectively	Data survey and tabulation?	Health education	Motivate mothers towards ORC and health centers
1	Mother live in HH and soap at the place for hand washing	Data survey and tabulation?	Health education	Motivate mothers towards ORC and health centers
2	Second PNC check up within 3-7 days up to ANM	Lack of motivation in mothers	Motivate mothers for the 1st PNC Motivate FCHVs for the 2nd PNC	Health education in FCHVs meeting and ORC
2	Second PNC check up within 3-7 days up to MCHW	Lack of motivation in mothers	Motivate mothers for the 1st PNC Motivate FCHVs for the 2nd PNC	Make ORC effective.

Ilaka-wise Recommendations for improvement in poor indicator(s) data based on finding during LQAS survey on May-June 2011-Sunsari District

Ilaka# 8 - Baklauri Date:

M#	Indicators	Reason	Recommended strategy	Activities
1	Iron tablet during pregnancy (6 months)	Shortage of iron tablet in DHO; pregnant mothers used to take iron tablet buying from the market.	Continue the FCHVs monthly meeting regularly; Prioritize the counseling parts and DAG communities; Increase counseling in ORC, MGM	Continue supply of iron tablets Financial support for the FCHVs monthly meeting.
1	First PNC check up within 2 days up to ANM	Lack of home visit for check up; Mothers unable to visit health posts for postnatal check ups	Increase home visit by ANM for postnatal check up; Increase counseling part during review meeting in MGM Focus more in dalit community	Increase ANM's supervision and PNC check up; Financial support for the meetings. Programs focused to Dalit community.
1	1st PNC check up within 2 days up to ANC	No post of MCHW in health centers.?	-	-
1	2nd PNC check up within 3-7 days up to ANM	Lack of ANM mobilization with in 2 days visit.	ANM should be mobilized for PNC check up. Focus on counseling part during monthly meeting.	Financial support for the necessary arrangements.
1	2nd PNC check up with in 3-7 days to MCHW	No post of MCHW in health centers.?	-	-
2	Family used treat water with effectively	Use river water for drinking	Health education; Water should be purified/filtered before drinking.	Provide health education.
2	Insecticide treated bed net the previous night	No distribution of bed net in the district	Request for supply	Distribute after supply

Ilaka-wise Recommendations for improvement in poor indicator(s) data based on finding during LQAS survey on May-June 2011-Sunsari District

Ilaka# 7-Prakashpur Date: 9th June 2011

M#	Indicators	Reason	Recommended strategy	Activities
1	Delivery at health institute	Lack of skilled person at health institutes and heath facility staffs.	Fulfill the skilled person at health institute from higher level or office.	Advocate/pressurize to depute staff.
2	TT+2 coverage	Lack of awareness; Mother groups meeting not conducted regularly.	Conduct Mothers group monthly meetings regularly; Conduct PWG meetings regularly BPP counseling	EPI clinic Strengthen Conduct Mother group meetings regularly.
2	Skilled delivery attendant	Lack of skilled manpower and adequate birthing center	Fulfill the skilled person Promote increase the birthing centers	Encourage pregnant mothers for HI delivery Plan for birthing centers
2	Family used treat water with effectively	Use of hand pump water	Raise awareness to take treated water	Conduct awareness programs
2	Mother live in HH with soap at the place for hand washing	Lack of knowledge of cleaning with soap.	Mother group meeting will be conducted regularly. Health education on the use of soap	Conduct mother group meeting regularly. Promote awareness programs

Ilaka-wise Recommendations for improvement in poor indicator(s) data based on finding during LQAS survey on May-June 2011-Sunsari District

Ilaka# 5-Satterjhora Date: 9th June 2011

M#	Indicators	Reason	Recommended strategy	Activities
1	1st ANC check up within 2 days up to MCHW	By tradition they do not visit newly born baby's mother within 2 days	Mobilization of health workers up to MCHW	ORC should be continued by ANM/MCHW Educate all the related mothers in MGM
1	ANC check up 4 or more times up to MCHW	Lack of knowledge and awareness	They should be informed about the importance of all ANC visit.	Discussion will be done in ORC. FCHV will be involved for upgrading awareness of concerning mothers.
1	Delivery at health institution	Far from birthing centers Lack of transportation appropriately	Birthing center should be established in PHC Satterjhora Manage for emergency transportation.	Discussion will be done in local level Staff will be updated Ambulance number will be provided to the concerning mother and their relatives.
1	First PNC check up within 2 days up to ANM	Lack of ANM mobilization within 2 days visit.	ANM should be mobilized for PNC check up.	Health education in community level by FCHV Health education for all pregnant mothers and their guardians with the importance of PNC visit.
2	TT+2 coverage	Lack of knowledge of mothers about TT+2 vaccination	Inform all mothers about the importance of TT+2 vaccination	Talk about TT+2 in mother's group meeting during ANC check up and ORC. Regular vaccination and supply vaccination materials.
2	Family used treat water with effectively	Misconcept of mothers about the deep tube well water as potable.	Treat water for safe drinking.	Teach them about boiling water for 30 minutes for safe drinking purpose. Use chemicals for purifying.
2	Mother live in HH with soap at the place for hand washing	Poverty Illiteracy Lack of knowledge of importance of hand washing with soap.	Educate them about the importance of hand washing with soap.	Health education program in all related place

2	Insecticide treated bed net the previous night	No risk malaria area No distribution of ITBN		

Ilaka-wise Recommendations for improvement in poor indicator(s) data based on finding during LQAS survey on May-June 2011-Sunsari District

Ilaka# 4-Harinagara Date: 9th June 2011

M#	Indicators	Reason	Recommended strategy	Activities
1	Breast feeding within 1 hour is low.	Lack of education PHC, ORC, MGM not effective Lack of health education in focal group.	Continue MGM Inform about ANC check up during PHC, ORC	Awareness about the health education to pregnant mothers during MGM, ORC
1	1st PNC check up within 2 days up to ANM	Lack of education	Provide health education through different means. Continue PHC, ORC, MGM regularly and effectively.	Inform about the importance of PNC and other health education during MGM, PHC and ORC.
1	1st PNC check up within 2 days up to MCHW	PHC, ORC, MGM not effective	Provide health education through different means. Continue PHC, ORC, MGM regularly and effectively.	Inform about the importance of PNC and other health education during MGM, PHC and ORC
2	Breast feeding within 1 hour is low.	Lack of education and its importance about the colostrums. PHC, ORC, MGM not effective Lack of health education in focal group.	Continue MGM Inform about ANC check up during PHC, ORC	Awareness raising and health education to pregnant mothers during MGM, ORC on the importance of breast feeding
2	1st PNC check up within 2 days up to ANM	Lack of Information	Provide health education through different means. Continue PHC, ORC, MGM regularly and effectively.	Inform about the importance of PNC and other health education during MGM, PHC and ORC.
2	1st PNC check up within 2 days up to MCHW	PHC, ORC, MGM not effective	Provide health education through different means. Continue PHC, ORC, MGM regularly and effectively.	Inform about the importance of PNC and other health education during MGM, PHC and ORC.

Ilaka-wise Recommendations for improvement in poor indicator(s) data based on finding during LQAS survey on May-June 2011-Sunsari District

Ilaka# 3-Madhuwan Date: 9th June 2011

M#	Indicators	Reason	Recommended strategy	Activities
1	Delivery at health institute	Lack of skilled person and helping person hands	Vacancy should be fulfilled promptly	Concerned offices should fulfill the staff to increase institutional delivery. BPP counseling.
1	Second PNC check up within 3-7 days up to ANM	Lack of awareness and nursing staff	Vacancy should be fulfilled promptly	Concerned offices should fulfill the staff to increase PWC check up PWG meeting continue
1	Second PNC check up within 3-7 days up to MCHW	Lack of staff in sub health post as MCHW	Vacancy should be fulfilled promptly	Increase BPP counseling in PWG
2	PNC visit for new born from on appropriate and trained health workers within 3 days.	Lacking of interest from staff side.	Incentive for encouragement	Staff meeting Conversation ANC/PNC clinic should be regular BPP counseling to pregnant mother.
2	Family used treat water with effectively	Concept of pipe water n clean and no pathogenic	Create awareness through health education	Activate to treat water
2	Insecticide treated bed net the previous night	Not available Poverty No knowledge	Supply from government side Health education	Provide knowledge for the need to use the net
2	Normal wt.	Lacking of at least 4 times ANC visit and having no health education about nutrition.	Increase at least 4 ANC visit with having nutrition education. Strengthen nutrition program	Continue ANC clinic regularly Health education about nutrition program in each ward per month.

Ilaka-wise Recommendations for improvement in poor indicator(s) data based on finding during LQAS survey on May-June 2011-Sunsari District

Ilaka# 2-Chatara Date: 9th June 2011

M#	Indicators	Reason	Recommended strategy	Activities
1	PNC 1st visit and 2nd visit		Institutional delivery and home visit of PNC mother from health activity staff within 7 days	BPP counseling to pregnant mother in each ward Joint supportive supervision to FCHVs Regular meeting of pregnant mother groups Check up in PNC in ORC for ANM staff Increase FCHV's home visit for ANC of mothers and newborn baby.
2	Used insecticide treated bed net the previous night		This intervention is not implemented in Sunsari district.	

Ilaka-wise Recommendations for improvement in poor indicator(s) data based on finding during LQAS survey on May-June 2011-Sunsari District

Ilaka# 1-Itahari Date: 9th June 2011

M#	Indicators	Reason	Recommended strategy	Activities
1	ANC check up to 4 or more then up to MCHW	Lack of knowledge of importance of ANC check up Traditional attitude.	Refresher for FCHVs Awareness program for mothers group/ pregnant mother Encourage FCHVs	Monitoring and supervision of HW and FCHV at least 15 % FCHV. Compulsory meeting of mother group
1	Know the danger sign indicate newborn seek at least 2	Lack of knowledge of new born seek reason at least 2	Refresher for FCHVs Awareness program for mothers group/ pregnant mother Encourage FCHV	Monitoring and supervision for HW and FCHV at least 15 % FCHV. Compulsory meeting of mother group
	Knowledge of danger sign during pregnancy	Lack of knowledge danger sign during pregnancy	Refresher for FCHV Awareness program for mothers group/ pregnant mother Encourage FCHV	Monitoring and supervision for HW and FCHV at least 15 % FCHV. Compulsory meeting of mother group
	Knowledge of danger sign after pregnancy	Lack of knowledge of danger after pregnancy.	Refresher for FCHV Awareness program for mothers group/ pregnant mother Encourage FCHV	Monitoring and supervision for HW and FCHV at least 15 % FCHV. Compulsory meeting of mother group
2	TT+2 coverage	Lack of knowledge of tetanus +2 vaccine in pregnancy	Appropriate record: Maintain cards Public awareness	Maintain record of TT+2 Educate to maintain cards
2	Insecticide treated net	Lack of distribution of insecticide treated net	Provide insecticide treated net for household.	Carry on to provide such insecticide treated nets.

Ilaka-wise Recommendations for improvement in poor indicator(s) data based on finding during LQAS survey on May-June 2011-Sunsari District

Ilaka# 12-Bhutaha Date: 9th June 2011

M#	Indicators	Reason	Recommended strategy	Activities
1	Kangaroo care dried off	Lack of supervision No presence of health workers in MGM	Supervision of VHW and HW HW should be compulsorily present during MGM. Increase awareness	Inform about ANC during MGM
	Know danger sign of new born need to seek for pregnant at least	Lack of health education and ANC check up Lack of FCHVs awareness program	Provide health education and ANC check ups Increase counseling by FCHVs/MCHWs	Counseling by the health workers and FCHVs
	Know danger sign after delivery at least 2	Lack of counseling Lack of education about importance of ANC	Increase awareness and counseling about health education	Counseling by the health workers and FCHVs
2	Family use treat water with effective	Use of tube well in most community Use of tube well water deep upto 40-50 ft .	Drink boiled water	Counsel about safe drinking water during MGM and PWG meeting.
	Insecticide treated bed net the previous night	No such program in the district		Awareness raising on the program.

3.10.3 Bara District:

District Health Office, Bara and Plan Nepal
Child and maternal health related survey of Bara district through Lot Quality Assurance Sampling (LQAS) on Jun-Jul 2011

Comparison of coverage proportion for key indicators collected between period ***(Jun 2006, Dec 2009*** **and Jun-Jul 2011) in Bara district**

1. **BREAST FEEDING AND CHILD NUTRITION INDICATORS like** 1. Percent of children aged 0-11 months who are breastfed with in the first hour after birth; 2. Percent of infants aged 0-5 months who were fed breastfed milk only in the last 24 hours; 3. Percent of infant aged 6-9 months who received breast milk and solid foods in the last 24 hours; 4. Percent of children aged 12-23 months who are still breast feeding; 5. Percent of children aged 12-23 months who received a vitamin A does in the last six months have a range of above 70% to 100% coverage in the final evaluation 20011 in comparison to 66% to 100% coverage in 2006 and 83% to 98% coverage in 2009, except indicator no. 2 and 3 which have shown less coverage percentage ranging from 2% to 13% than 2009 and 6% to 30% in 2006.

2. **CHILDHOOD IMMUNIZATION INDICATORS** 6. Percent of Children aged 12-23 months who have a Vaccination Card; 7. Percent of children aged 12-23 months who received DPT 1; 8. Percent of children aged 12-23 months who received measles vaccine; 9. Percent of drop out- rates between DPT1 and DPT 3; 10. Percent of children aged 12-23 months who received BCG, DPT3, OPV3 and measles vaccines before the first birthday; 11. Percent of children aged 12-23 months who received OPV 3 have a range of 45% coverage which is lesser than the coverage of 2006 and higher than of 2009 (The reason is provided in a separate description included along with this report.

3. **SICK CHILD: Indicator 12** Percent of mothers of children aged 0-23 months who know at least **THREE** signs of childhood illness that indicate the need for treatment has 98% coverage same as 2006 and higher than that of 2009 i.e. 75%.

4. **DIARRHEA INDICATORS: All most all indicators viz.** 13. Percent of children aged 0-23 months with diarrhea in the last two weeks; 14. Percent of children aged 0-23 months with diarrhea in the last two weeks who received oral rehydration solution (ORS) and/ or recommended home fluids (RHF); 15. Percent of children aged 0-23 who received breastfed same amount or more during diarrhea in last two weeks.; 16. Percent of children aged 0-23 months with diarrhea in the last two weeks who were offered the same amount or more drink / fluid during the illness; 17. Percent of children aged 0-23 months with diarrhea in the last two weeks who were offered the same amount or more food during the

illness; 18. Percent of Children aged 0-23 months with diarrhea in the last two weeks whose mothers Sought outside advice or treatment for the illness; 19. Percent of mothers who can correctly prepare ORS; 20. Percent of mothers who usually wash their hands with soap or ash before food preparation.; 21. Percent of mothers who usually wash their hands with soap or ash before food preparation, before feeding children, after defecation, and after attending to a child who has defecated; Except no. 19 which has 89% coverage compared to 2006 – 84% and 209 – 61% have less percentage of coverage than in 2006 and 2009. The reason may be seasonal variation, because during winter such cases are mostly lower than in summer/rainy season. Both the surveys of 2006 and 2009 were conducted during December and January while the final was conducting during June and July – the peak season for diarrhea cases.

5. **ARI IDICATOR: The coverage is less 44% compared to 2006 (80%) and 2009 61%. This is a good sign of improvement. The indicator is no. 22** Percent of Children aged 0-23 months with cough and fast / difficult breathing in the last two weeks who were taken to a health facility or received treatment.

6. **PRENATAL CARE INDICATORS: Explanation provided for unavailability of card during final evaluation in survey period, as the mothers do not need to maintain them after 12 moths of their children; which included in CSSA Bara success case report.**

   Indicator no. 25 Percent of mothers who had at least **ONE** prenatal visit prior to the birth of her youngest child less than 12 months of age has significant coverage of 91% compared to 78% of 2006 and 40% of 2009 while indicator no. 26 Percent of mothers who received /brought iron supplements while pregnant with the youngest child less than 12 months of age has 86% coverage compared to 93% in 2006 and 86% in 2009. The reason may be unavailability of iron tables in health facility and the poor mothers many not have access to private clinics.

7. **PLACE OF DELIVERY AND DELIVERY ATTENDED: All the six indicators numbering 27 to 32 have rise, fall and rising trend in the coverage like rise in 2006, fall in 2009 and again rise in 2011. However, the coverage size is not so much variant compared to 2006 and 2009, with slight variation from 2% to 10% less coverage in comparison to 2% to 17% higher coverage than 2006 and 2009. Indicators are as under:**

   27. Percent of children aged 0-11 months whose delivery was attended by a skilled health personal upto TBA level

   28. Percent of children aged 0-11 months whose delivery was attended by a skilled health personal upto MCHW level

   29. Percent of children aged 0-11 months whose delivery involved use of a clean birth kit or whose cord was cut with a new razor

30. Percent of children aged 0-11 months whose delivery involved use of a clean birth kit
31. Percent of children aged 0-11 months who were immediately breastfed with the mother immediately after birth.
32. Percent of children aged 0-11 months who were placed with the mother immediately after birth

8. **POSTPARTUM CARE with indicator 33** Percent of mother who had at least **ONE** postpartum check-up has 47% coverage higher than 2009 – 33% and lower than 2006 – 63%. Indicator no. 34 Percent of mothers able to report at least **TWO** known maternal danger signs during the postpartum period and no. 36 Percent of mothers able to report at least **TWO** known neonatal danger signs have 100% coverage from 98% in 2006 and 92% in 2009, while indicator no. 38 Percent of mothers who received at least 1 month iron tablets during the first two months after delivery has decreased to 65% from 2006 – 75% and increased than 2009 – 49%. The reason may be unavailability of iron tablets and poor access for poor mothers.

9. **CHILD SPACING: Out of 4 child spacing indicators, 3 indicators have lesser coverage like no. 39** Percent of non pregnant mothers who desire no more children in the next two years or are not sure, who are using a modern method of child spacing has 48% in 2011 from 2006 – 66% and higher than 2009 – 41%; indicator no. 40 Percent of mothers who report at least one place where she can obtain a method of child spacing has 95% in 2011 coverage than 2006 – 100% and no. 41 Percent of children aged 0-23 months who were born at least 24 months after the previous surviving child has 64% in 2011 than 2006 – 69% and 2009 – 63%, while no. 42. Percent of children aged 0-23 months who were born at least 36 months after the previous surviving child has 14% in 2011 in comparison to 14% in 2006 and 20% in 2009.

10. **KNOWLEDGE OF DANGER SIGNS DURING PREGNANCY, POSTNATAL AND NEW BORN CHILD:** All the 6 indicators have above 95% to 100% coverage in comparison to 2006 and 2009 where the coverage dropped to 53% to 78% in 2009, except no 47, which remains only 6% less in 2009 from 98% in 2006. **The indicators are as under;**

43. Percent of mothers (15-49 years) who know at least **TWO** danger signs/symptoms during pregnancy
44. Percent of mothers (15-49 years) who know at least **THREE** danger signs/symptoms during pregnancy

45. Percent of mothers who knows at least **TWO** danger signs/ symptoms of after delivery
46. Percent of mothers who knows at least **THREE** danger signs/ symptoms of after delivery
47. Percent of mothers who know at least **TWO** danger sign of new born
48. Percent of mothers who know at least **THREE** danger sign of new born

11. **DANGER SIGNS OF PNEUMONIA AND DIARRHEA: Two indicators in danger signs of Pneumonia and** diarrhea have 93% to 95% coverage in comparison to 98% and 92% in no. 49 and no. 50 in 2006 and 68% and 44% in no 49 and no 50 in 2009.

    The indicators are 49. Percent of mothers who know at least **THREE** danger signs/ symptoms of pneumonia; 50. Percent of mothers who know at least **THREE** danger sign of diarrhea / dysentery

12. **KNOWLEDGE ON HIV/AIDS/STD: Two indicators no. 51 and 52 (** 51. percent of mothers who knows at least **ONE** HIV/AIDS and STD transmission (MOT); 52. Percent of mothers who knows at least **ONE** HIV/AIDS and STD prevention (MOT)) have 62% coverage in both the indicators in comparison to 68% and 69% in 2006 and 40% each in 2009.

Comparison of coverage proportion for key indicators collected between period *(Jun 2006, Dec 2009* and Jun-Jul 2011) in Bara district

SN	Mod#	Indicator	Indicator/ Definition	LQAS **Jun'06 (%)**	Confidence Interval ± **(CI)**	LQAS Dec'09 (%)	**CI±**	LQAS Jun-Jul'11 (%)	**CI±**
			BREAST FEEDING AND CHILD NUTRITION INDICATORS						
1	M1	Breastfeeding Initiation	Percent of children aged 0-11 months who are breastfed with in the first hour after birth	**66**	**8.04**	**98**	**2.07**	**100**	
2	M1	Exclusive Breast feeding Rate	Percent of infants aged 0-5 months who were fed breastfed milk only in the last 24 hours	**100**		**83**	**8.47**	**70**	**12.18**
3	M1	Complementary Feeding Rate	Percent of infant aged 6-9 months who received breast milk and solid foods in the last 24 hours	**96**	**4.81**	**92**	**8.80**	**90**	**7.47**
4	M2	Continued breastfeeding	Percent of children aged 12-23 months who are still breast feeding	**85**	**12.23**	**88**	**5.53**	**89**	**5.22**
5	M2	Vitamin "A" Coverage	Percent of children aged 12-23 months who received a vitamin A does in the last six months	**99**	**1.47**	**91**	**4.87**	**98**	**2.07**
			CHILDHOOD IMMUNIZATION INDICATORS						
6	M2	Possession of vaccination Card	Percent of Children aged 12-23 months who have a Vaccination Card	**74**	**7.41**	**25**	**7.34**	**45**	**8.46**
7	M2	EPI Access	Percent of children aged 12-23 months who received DPT 1	**71**	**7.68**	**23**	**7.10**	**45**	**8.46**
8	M2	RAPID Catch Indicator: Measles Vaccination Coverage	Percent of children aged 12-23 months who received measles vaccine	**72**	**7.62**	**21**	**6.93**	**45**	**8.46**
9	M2	Droup Out Rate	Percent of drop out- rates between DPT1 and DPT 3	**3**	**3.38**	**6**	**8.14**		

SN	Mod#	Indicator	Indicator/ Definition	LQAS **Jun'06 (%)**	Confidence Interval ± **(CI)**	LQAS Dec'09 (%)	**CI±**	LQAS Jun-Jul'11 (%)	**CI±**
10	M2	Rapid Catch Indicator EPI Coverage	Percent of children aged 12-23 months who received BCG, DPT3, OPV3 and measles vaccines before the first birthday	**67**	**8.00**	**20**	**6.74**	**45**	**8.46**
11	M2	EPI Coverage II (Liberal Criteriaon)	Percent of children aged 12-23 months who received OPV 3	**72**	**7.62**	**22**	**7.02**	**45**	**8.46**
			SICK CHILD						
12	M1 & M2	Maternal Knowledge of child danger sign	Percent of mothers of children aged 0-23 months who know at least **THREE** signs of childhood illness that indicate the need for treatment	**98**	**1.78**	**75**	**5.22**	**98**	**1.46**
			DIARRHEA INDICATORS						
13	M1 & M2	Diarrhea prevalence	Percent of children aged 0-23 months with diarrhea in the last two weeks	**21**	**4.87**	**29**	**5.45**	**24**	**5.16**
14	M1 & M2	ORT use during a Diarrhea Episode	Percent of children aged 0-23 months with diarrhea in the last two weeks who received oral rehydration solution (ORS) and/ or recommended home fluids (RHF)	**60**	**12.95**	**23**	**9.45**	**49**	**12.15**
15	M1 & M2	Increased breastfeed During a Diarrhea Episode	Percent of children aged 0-23 who received breastfed same amount or more during diarrhea in last two weeks.	**95**	**6.00**	**75**	**9.63**	**98**	**2.99**
16	M1 & M2	Increased drink during a diarrhea Episode	Percent of children aged 0-23 months with diarrhea in the last two weeks who were offered the same amount or more drink / fluid during the illness	**93**	**6.86**	**44**	**11.09**	**94**	**5.84**
17	M1 & M2	Increased food during a diarrhea Episode	Percent of children aged 0-23 months with diarrhea in the last two weeks who were offered the same amount or more food during the illness	**95**	**6.00**	**39**	**10.89**	**86**	**8.40**

SN	Mod#	Indicator	Indicator/ Definition	LQAS **Jun'06 (%)**	Confidence Interval ± **(CI)**	LQAS Dec'09 (%)	**CI±**	LQAS Jun-Jul'11 (%)	**CI±**
18	M1 & M2	Care–seeking for Diarrhea	Percent of Children aged 0-23 months with diarrhea in the last two weeks whose mothers Sought outside advice or treatment for the illness	**91**	**7.60**	**71**	**10.09**	**83**	**9.12**
19	M2	Maternal Competency in ORS Preparation	Percent of mothers who can correctly prepare ORS	**84**	**6.20**	**61**	**8.29**	**89**	**5.38**
20	M2	Maternal Hand Washing before Food Preparation	Percent of mothers who usually wash their hands with soap or ash before food preparation.	**92**	**4.68**	**67**	**8.00**	**85**	**6.07**
21	M2	Maternal Hand Washing before Food Preparation before feeding /after attending to a child who has defecated	Percent of mothers who usually wash their hands with soap or ash before food preparation, before feeding children, after defecation, and after attending to a child who has defecated.	**78**	**7.02**	**31**	**7.85**	**62**	**8.26**
			ARI IDICATOR						
22	M1 & M2	ARI Care -seeking	Percent of Children aged 0-23 months with cough and fast / difficult breathing in the last two weeks who were taken to a health facility or received treatment.	**80**	**14.31**	**61**	**9.63**	**44**	**11.48**
			PRENATAL CARE INDICATORS						
23	M1	Maternal Health Card Presentation	Percent of mothers with a maternal card (Card-confirmed) for the youngest child less than 12 months of age	**65**	**8.12**	**17**	**6.31**	**10**	**5.05**
24	M1	Tetanus Toxoid Coverage	Percent of mothers who received at least **TWO** tetanus toxoid injections (Card confirmed) before the birth of the youngest child less than 12 months of age.	**63**	**8.20**	**14**	**5.95**	**10**	**5.05**
25	M1	Prenatal Care Coverage	Percent of mothers who had at least **ONE** prenatal visit prior to the birth of her youngest child less than 12 months of age	**78**	**7.02**	**40**	**8.32**	**91**	**4.87**

SN	Mod#	Indicator	Indicator/ Definition	LQAS **Jun'06 (%)**	Confidence Interval ± **(CI)**	LQAS Dec'09 (%)	**CI±**	LQAS Jun-Jul'11 (%)	**CI±**
26	M1	Iron Supplementation Coverage	Percent of mothers who received /brought iron supplements while pregnant with the youngest child less than 12 months of age.	**93**	**4.27**	**86**	**5.95**	**86**	**5.95**
			PLACE OF DELIVERY AND DELIVERY ATTENDED						
27	M1	Delivery by skilled Health Personnel	Percent of children aged 0-11 months whose delivery was attended by a skilled health personal upto TBA level	**77**	**7.19**	**54**	**8.47**	**75**	**7.34**
28	M1	Delivery by skilled Health Personnel	Percent of children aged 0-11 months whose delivery was attended by a skilled health personal upto MCHW level	**42**	**8.39**	**46**	**8.47**	**59**	**8.35**
29	M1	Clean Cord Care	Percent of children aged 0-11 months whose delivery involved use of a clean birth kit or whose cord was cut with a new razor			**98**	**2.07**	**100**	
30	M1	Clean Cord Care	Percent of children aged 0-11 months whose delivery involved use of a clean birth kit	**75**	**7.34**	**45**	**8.46**	**65**	**8.12**
31	M1	Immediate Breast Feeding	Percent of children aged 0-11 months who were immediately breastfed with the mother immediately after birth.			**41**	**8.35**	**58**	**8.39**
32	M1	Placement at Birth	Percent of children aged 0-11 months who were placed with the mother immediately after birth	**82**	**6.54**	**75**	**7.34**	**86**	**5.95**
			POSTPARTUM CARE						
33	M1	Postpartum Contact	Percent of mother who had at least **ONE** postpartum check-up	**63**	**8.20**	**33**	**8.00**	**47**	**8.49**

SN	Mod#	Indicator	Indicator/ Definition	LQAS **Jun'06 (%)**	Confidence Interval ± **(CI)**	LQAS Dec'09 (%)	**CI±**	LQAS Jun-Jul'11 (%)	**CI±**
34	M1	Knowledge of maternal Danger Signs	Percent of mothers able to report at least **TWO** known maternal danger signs during the postpartum period			**77**	**7.10**	**100**	
35	M1	Knowledge of Neonatal Danger Signs	Percent of mothers able to report at least **THREE** known neonatal danger signs	**98**	**2.07**	**77**	**7.19**	**99**	**1.47**
36	M1	Knowledge of Neonatal Danger Signs	Percent of mothers able to report at least **TWO** known neonatal danger signs	**98**	**2.07**	**92**	**4.68**	**100**	
37	M1	Maternal Vitamin A supplementation	Percent of mothers who received a Vitamin A dose during the first six weeks after delivery	**80**	**6.74**	**67**	**8.00**	**89**	**5.38**
38	M1	Maternal iron supplementation	Percent of mothers who received at least 1 month iron tablets during the first two months after delivery	**75**	**7.34**	**49**	**8.50**	**65**	**8.08**
			CHILD SPACING						
39	M3	Contraceptive Use Among Mothers Who Want to limit or space births	Percent of non pregnant mothers who desire no more children in the next two years or are not sure, who are using a modern method of child spacing	**66**	**8.04**	**41**	**8.37**	**48**	**8.49**
40	M3	Knowledge of source of Child spacing methods	Percent of mothers who report at least one place where she can obtain a method of child spacing	**100**		**97**	**2.90**	**95**	**3.53**
41	M3	Adequate birth interval between surviving children	Percent of children aged 0-23 months who were born at least 24 months after the previous surviving child	**69**	**12.90**	**63**	**12.68**	**64**	**12.55**
42	M3	Adequate Birth interval Between youngest Surviving Children (Less Stringent Criteria)	Percent of children aged 0-23 months who were born at least 36 months after the previous surviving child	**14**	**9.80**	**20**	**10.41**	**14**	**9.17**
			KNOWLEDGE OF DANGER SIGNS DURING PREGNANCY, POSTNATAL AND NEW BORN CHILD						

SN	Mod#	Indicator	Indicator/ Definition	LQAS **Jun'06 (%)**	Confidence Interval ± **(CI)**	LQAS Dec'09 (%)	**CI±**	LQAS Jun-Jul'11 (%)	**CI±**
43	M1	Danger signs/ symptoms during pregnancy	Percent of mothers (15-49 years) who know at least **TWO** danger signs/symptoms during pregnancy	**100**		**78**	**7.02**	**100**	
44	M1	Danger signs/ symptoms during pregnancy	Percent of mothers (15-49 years) who know at least **THREE** danger signs/symptoms during pregnancy	**99**	**1.47**	**60**	**8.32**	**100**	
45	M1	Danger signs after delivery	Percent of mothers who knows at least **TWO** danger signs/ symptoms of after delivery	**98**	**2.07**	**77**	**7.10**	**100**	
46	M1	Danger signs after delivery	Percent of mothers who knows at least **THREE** danger signs/ symptoms of after delivery	**95**	**3.80**	**53**	**8.48**	**95**	**3.80**
47	M1	Danger signs of new born	Percent of mothers who know at least **TWO** danger sign of new born	**98**	**2.07**	**92**	**4.68**	**100**	
48	M1	Danger signs of new born	Percent of mothers who know at least **THREE** danger sign of new born	**98**	**2.07**	**77**	**7.19**	**99**	**1.47**
			DANGER SIGNS OF PNEUMONIA AND DIARRHEA						
49	M2	Danger signs/ symptoms of pneumonia	Percent of mothers who know at least **THREE** danger signs/ symptoms of pneumonia	**98**	**2.52**	**68**	**7.90**	**93**	**4.27**
50	M2	Danger signs / symptoms of diarrhea/ dysentery	Percent of mothers who know at least **THREE** danger sign of diarrhea / dysentery	**92**	**4.48**	**44**	**8.43**	**95**	**3.80**
			KNOWLEDGE ON HIV/AIDS/STD						
51	M3	Knowledge about HIV/AIDS and STD transmission	Percent of mothers who knows at least **ONE** HIV/AIDS and STD transmission (MOT)	**68**	**7.95**	**40**	**8.32**	**62**	**8.26**
52	M3	Knowledge about HIV/AIDS and STD Prevention	Percent of mothers who knows at least **ONE** HIV/AIDS and STD prevention (MOT)	**69**	**7.85**	**40**	**8.32**	**62**	**8.26**

Table 6: Rapid Core Assessment Tool for Child Health (CATCH) of *Jun 2006 and Dec 2009*

SN	Mod#	Indicator	Indicator/ Definition	LQAS **Jun'06 (%)**	Confidence Interval ± **(CI)**	LQAS Dec'09 (%)	**CI±**	LQAS Jun-Jul'11 (%)	**CI±**
			SENTINEL MEASURE OF CHILD HEALTH AND WELL-BEING						
1	M1 & M2	Underweight Children	Percentage of Children age 0-23 months that is underweight (-2 SD from the median weight-for-age, according to the World Health Organization (WHO)/National Center for Health Statistics (NCHS)	**29**	**5.45**	**13.2**	**4.06**	**6.0**	**2.86**
2	M3	Birth Spacing	Percent of children age 0-23 months that was born at least 24 months after the previous surviving child	**69.4**	**12.90**	**62.5**	**12.68**	**64.3**	**12.55**
3	M1	Delivery Assistance	Percent of children age 0-23 months whose birth were attended by skilled health personal upto MCHW	**42.1**	**8.39**	**45.9**	**8.47**	**59.4**	**8.35**
4	M1	Maternal Tetanus Toxoid (TT)	Percent of mothers with children age 0-23 months that received at least **TWO** tetanus toxoid injections before the birth of their youngest child.	**63.2**	**8.20**	**14.3**	**5.95**	**9.8**	**5.05**
5	M1	Exclusive Breastfeeding	Percent of children age 0-5 months that was exclusively breastfed during the last 24 hours	**100.0**		**82.9**	**8.47**	**70.4**	**12.18**
6	M1	Complementory Feeding	Percent of children age 6-9 months that received breast milk and complementary foods during the last 24 hours	**95.7**	**4.81**	**91.9**	**8.80**	**90.2**	**7.47**

SN	Mod#	Indicator	Indicator/ Definition	LQAS **Jun'06 (%)**	Confidence Interval ± **(CI)**	LQAS Dec'09 (%)	**CI±**	LQAS Jun-Jul'11 (%)	**CI±**
7	M2	Full Vaccination	Percent of children age 12-23 months that is fully vaccinated (against the five vaccine preventable diseases) before the first birthday	**66.9**	**8.00**	**19.5**	**6.74**	**45.1**	**8.46**
8	M2	Measles	Percent of children age 12-23 months that received a measles vaccine	**72.2**	**7.62**	**21.1**	**6.93**	**45.1**	**8.46**
9	M1 & M2	Bednets	Percentage of children age 0-23 months that slept under an insecticide-treated net (in malaria risk areas) the previous night	**1.5**	**1.46**	**97.7**	**2.52**	**3.4**	**2.17**
10	M3	HIV/AIDS	Percent of mothers with children age 0-23 months that cited at least **TWO** known ways of reducing the risk of HIV infection	**51.1**	**8.50**	**29.3**	**7.74**	**48.9**	**8.50**
11	M2	Hand Washing	Percent of mothers with children age 0-23 months that reported they wash their hands with soap or ash before food preparation and feeding children and after defection and attending to a child who has defecated	**63.2**	**8.20**	**33.1**	**8.00**	**47.4**	**8.49**
			MANAGEMENT/TREATMENT OF ILLNESS						
12	M1 & M2	Danger Signs	Percent of mothers of children aged 0-23 months that knew at least **TWO** signs of childhood illness that indicate the need for treatment	**99.6**	**0.74**	**93.2**	**3.02**	**99.6**	**0.74**
13	M1 & M2	Sick Child	Percent of sick children age 0-23 months that received increased continued feeding during an illness in the past two weeks	**94.5**	**6.00**	**75.3**	**9.63**	**98.5**	**2.99**

SN	Mod#	Indicator	Indicator/ Definition	LQAS **Jun'06 (%)**	Confidence Interval ± **(CI)**	LQAS Dec'09 (%)	**CI±**	LQAS Jun-Jul'11 (%)	**CI±**
14	M1 & M2	Sick Child	Percent of sick children age 0-23 months that received increased fluids during an illness in the past two weeks	**92.7**	**6.86**	**44.2**	**11.09**	**93.8**	**5.84**

Note:
Indicators indicated (indicator # 13 and 14) are merged in generic RAPID CATCH but the Plan Nepal; CS Project in the same indicators has been collecting information separately.

2.10.3(a) **Table-1:** Number of Mothers with children 0-11 months with inadequate knowledge or with practices according to LQAS thresholds and decision rules [benchmark percentage (based on monitoring targets) of Jun'06, Dec'09 and Jun-Jul 2011 LQAS; and details figures/numbers presented against program average and monitoring targets for the eighth LQAS].

***Threshold: Decision Rules (LQAS-Jun'06)**	70%:11		95%:16	85%:14	90%:15	50%:7	50%:7	50%:7	70%:11	60%:9	80%:13	70%:11	60%:9	40%:5	60%:9	95%:16	85%:14	95%:16	70%:11	70%11	80%:13	85%:14	85%:14	95%:16		
** **Program Average %: Decision Rule (LQAS-Jun'06)**	66%:11		94%:16	78%:13	79%:13	43%:6	39%:5	34%:4	64%:10	62%:10	76%:13	70%:11	65%:10	63%:10	53%:8	93%:16	77%:13	100%:	56%:9	63%:10	80%:14	75%:12	82%:14	98%:		
***Threshold: Decision Rules (LQAS-Dec'09)**	66%:11		94%:16	78%:13	79%:13	43%:6	39%:5	34%:4	64%:10	62%:10	76%:13	70%:11	65%:10	63%:10	53%:8	93%:16	77%:13	100%:	56%:9	63%:10	80%:14	75%:12	82%:14	98%:		
** **Program Average %: Decision Rule (LQAS-Dec'09)**	97%:16	41%: 6	86%: 15	78%: 13	78%: 13	21%: 2	25%: 2	17%: 2	42%: 6	28%: 3	51%: 8	41%: 6	17%: 1	77%: 13	38%: 5	86%: 15	46%: 7	98%: 16	45%: 6	33%: 4	67%: 11	49%: 7	75%: 12	77%: 13	53%: 8	
***Threshold: Decision Rules (LQASJun-Jul'11)**	66%:11	50%: 7	94%:16	78%:13	79%:13	43%:6	39%:5	34%:4	64%:10	62%:10	76%:13	70%:11	65%:10	63%:10	53%:8	93%:16	77%:13	100%:	56%:9	63%:10	80%:14	75%:12	82%:14	98%:	70%: 11	
** **Program Average %:Decision Rule (LQASJun-Jul'11)**	100%:	57.9%:9	98.5%:	90%:15	90%:15	61%:10	46%:7	37%:5	64%:10	58%:9	62%:10	49%:7	10%:	94%:16	71%:12	88%:15	60%:9	100%:	65%:10	48%:7	89%:15	66%:12	86%:15	100%:	95%:16	
						Quality of Counseling																			
Field Area	Breastfeeding Initiation	Breastfeeding within One hour	Colostrums feeding	Prenatal Care upto MCHW	Prenatal Care upto TBA	Delivery Preparation	Breastfeeding	Child Spacing	EPI	Danger signs of pregnancy	Nutrition	Next Visit	Possession of TT Card	TT Coverage	Prenatal Visit (4 visit)	Iron supplementation prenatal iron Coverage	Delivery by skilled Health Personnel upto MCHW	Clean cord cut (CHDK + New Razer)	Clean cord cut (CHDK)	Postpartum Contact	Maternal Vitamin A supplementation	Maternal iron postnatal supplementation	Placement at Birth	Knowledge of Neonatal Danger Signs (Any three)	Knowledge of Postnatal Danger Signs (Any three)	**Total substandard intervention**
1: Simara and Nijgudh PHCs	19	14	19	16	16	7#	1#*	1#*	12	9*	12*	6#*	0#*	16	14	16	18	19	18	7*	18	15	18	19	14#	**6**
2: Rampurwa and Haraiya HPs	19	15	19	18	18	15	12	15	14	14	16	14	3*	19	19	18	14	19	16	14	19	17	19	19	19	
3: Bhodaha & Rampur HPs	19	9	19	17	17	10	7	3#*	8#*	11	9#*	9*	1*	18	12	17	11*	19	14	12	16	11#*	16	19	19	**4**
4: Parsauni and Phetaha HPs	19	6#*	19	18	18	12	4#*	1#*	9#*	8#*	13	12	2*	17	12	19	9*	19	13	3#*	14#	8#*	19	19	19	**8**
5: Ganjabhawanipur PHC and	19	13	18	17	17	9#	14	12	17	11	10*	7*	2*	19	14	14#*	11*	19	10	11	19	10#*	13#*	19	18	**4**

Bariyarpur HP																									
6: Chiutaha and Gadahal HPs	19	13	18	19	19	18	18	15	18	17	15	11	4*	19	16	19	12*	19	12	14	19	19	19	19	19	
7: Simrahganj, Kabahigoat HPs and Hardia PHC	19	7#	19	14#	14#	10	5#	2#*	6#*	6#*	7#*	5#*	1*	17	7#*	13#*	4#*	19	3#*	2#*	13#*	7#*	10#*	18	18	**17**
Total substandard SA		**2**		**1**	**1**	**2**	**3**	**4**	**3**	**2**	**2**	**2**	**1**		**1**	**2**	**1**		**1**	**2**	**2**	**4**	**2**		**1**	

Decision rule based on Monitoring/Coverage Target; Decision rule based on Program Average Coverage.
- Number with hash (#) is below program average coverage; - Number with asterisk (*) is below monitoring/coverage target; - Number with asterisk and circle is below program average coverage and monitoring/coverage target.

Table 1: Field area Ilaka wise coverage description

1. Ilaka no. 7 Simrahganj, Kabahigoat HPs and Hardia PHC has 17 indicators with inadequate knowledge or practices according to LQAS thresholds and decision rules. List of indicators out of 25 indicators are;

2	4	5	7	8	9	10	11	12	15	16	17	19	20	21	22	23	23
Breastfeeding within One hour	Prenatal Care upto MCHW	Prenatal Care upto TBA	Breastfeeding	Child Spacing	EPI	Danger signs of pregnancy	Nutrition	Next Visit	Prenatal Visit (4 visit)	Iron supplementation prenatal iron Coverage	Delivery by skilled Health Personnel upto MCHW	Clean cord cut (CHDK)	Postpartum Contact	Maternal Vitamin A supplementation	Maternal iron postnatal supplementation	Placement at Birth	Knowledge of Neonatal Danger Signs (Any three)

2. Ilaka no. 4 Parsauni and Phetaha HPs has 8 indicators with inadequate knowledge or practice according to LQAS thresholds and decision rules. List of indicators out of 26 are;

2	7	8	9	10	20	21	22
Breastfeeding within One hour	Breastfeeding	Child Spacing	EPI	Danger signs of pregnancy	Postpartum Contact	Maternal Vitamin A supplementation	Maternal iron postnatal supplementation

3. Ilaka no. 1 Simara and NIjgudh PHCs has 6 indicators with indicators with inadequate knowledge or practices according to LQAS thresholds and decision rules. List of indicators are;

6	7	8	12	13	25
Delivery Preparation	Breastfeeding	Child Spacing	Next Visit	Possession of TT Card	Knowledge of Postnatal Danger Signs (Any three)

4. Ilaka no 3 Bhodaha and Rampuruwa HPs has 4 indicators with inadequate knowledge or practices according to LQAS thresholds and decision rules. List of indicators are;

8	9	11	22
Child Spacing	EPI	Nutrition	Maternal iron postnatal supplementation

5. Ilaka no 5 Ganjabhawanipur PHC and Bariyarpur HP has 4 indicators with with inadequate knowledge or practices according to LQAS thresholds and decision rules. List of indicators are;

6	16	22	23
Delivery Preparation	Iron supplementation prenatal iron Coverage	Maternal iron postnatal supplementation	Placement at Birth

6. Ilaka no. 2 Rampurwa and Haraiya HPs and Ilaka no. 6 Chiutaha and Gadahal HPs have shown adequate knowledge in all 25 indicators.

Indicator wise description of inadequate knowledge and practices

1. Indicator no. 8 Child spacing has 4 Ilakas namely 1. Simraha and Nijgudh HPs,: 3. Bhodaha & Rampur HPs; 4. Parsauni and Phetaha HPs; 7 Simrahganj, Kabahigoat HPs and Hardia PHC with inadequate knowledge and practices according to LQAS thresholds and decision rules.
2. Indicator no 22. Maternal iron postnatal supplementation has 4 Ilakas namely 3: Bhodaha & Rampur HPs; 4: Parsauni and Phetaha HPs ; 5: Ganjabhawanipur PHC and Bariyarpur HP and 7: Simrahganj, Kabahigoat HPs and Hardia PHC with inadequate knowledge and practices according to LQAS thresholds and decision rules.
3. Except 5 indicators namely 1. Breastfeeding Initiation; 3 Colostrums feeding; 14 TT Coverage; 18 Clean cord cut (CHDK + New Razer) and 24 Knowledge of Neonatal Danger Signs (Any three); all indicators are evenly distributed in the Ilakas from 1 to 3 indicators with inadequate knowledge and practices according to LQAS thresholds and decision rules.

Table-2: Number of Mothers with children 12-23 months with inadequate knowledge or with practices according to LQAS thresholds and decision rules [benchmark percentage (based on monitoring targets) of Jun'06, Dec'09 and Jun-Jul 2011 LQAS; and details figures/numbers presented against program average and monitoring targets for the eighth LQAS].

Threshold: Decision Rules (LQAS-Jun'06)	**95%:16**	**85%:14**	**85%:14**	**80%:13**	**75%:12**	**95%:16**	**95%:16**	**90%:15**	**85%:14**	**75%:12**	
Program Average %:Decision Rule (LQAS-Jun'06)	**99%:**	**74%:12**	**71%:12**	**72%:11**	**72%:12**	**98%:**	**92%:16**	**84%:14**	**92%:16**	**78%:13**	
Threshold: Decision Rules (LQAS-Dec'09)	**99%:**	**74%:12**	**71%:12**	**72%:11**	**72%:12**	**98%:**	**92%:16**	**84%:14**	**92%:16**	**78%:13**	
Program Average %:Decision Rule (LQAS-Dec'09)	**90%:15**	**25%:2**	**22%:2**	**20%:1**	**15%:1**	**68%:11**	**44%:6**	**61%:10**	**67%:11**	**31%:4**	
***Threshold: Decision Rules (LQASJun-Jul'11)**	**99%:**	**74%:12**	**71%:12**	**72%:12**	**72%:12**	**98%:**	**92%:16**	**84%:14**	**92%:16**	**78%:13**	
****** **Program Average %:Decision Rule (LQASJun-Jul'11)**	**98.5%:**	**45.1%:7**	**45.1%:7**	**45.1%:7**	**45.1%:7**	**94%:16**	**94.7%:16**	**88.7%:15**	**85%:14**	**61.7%:10**	
Field Area	Vitamin "A"	Possession of vaccination Card	EPI Access	Measles Vaccination Coverage	EPI Coverage (All)	ARI danger sign (any three)	Diarrhea danger sign (any three)	Maternal Competenc y in ORS Preparation	Maternal Hand Washing before Food Preparation	Maternal Hand Washing before Food Preparation before feeding/after attending to a child who has defecated	**Total substandard intervention**
1: Simara and Nijgudh PHCs	19	11*	11*	11*	11*	13#*	15#*	12#*	10#*	5#*	**5**
2: Rampurwa and Haraiya HPs	19	7*	7*	7*	7*	19	19	18	18	13	
3: Bhodaha & Rampur HPs	18	15	15	15	15	18	19	17	17	9#*	**1**
4: Parsauni and Phetaha HPs	18	9*	9*	9*	9*	19	18	17	19	13	
5: Ganjabhawanipur PHC and Bariyarpur HP	19	5#*	5#*	5#*	5#*	19	19	18	15*	14	**4**
6: Chiutaha and Gadahal HPs	19	9*	9*	9*	9*	18	18	19	15*	11*	
7: Simrahganj, Kabahigoat HPs and Hardia PHC	19	4#*	4#*	4#*	4#*	19	18	17	19	17	**4**
Total substandard SA		**2**	**2**	**2**	**2**	**1**	**1**	**1**	**1**	**2**	

Decision rule based on Monitoring/Coverage Target; Decision rule based on Program Average Coverage.
- Number with hash (#) is below program average coverage; - Number with asterisk (*) is below monitoring/coverage target; - Number with asterisk and circle is below program average coverage and monitoring/coverage target.

Ilaka wise description:

1. Ilaka no 1 Simara and Nijgudh PHCs has 5 indicators namely 6. ARI danger sign (any three); 7. Diarrhea danger sign (any three); 8. Maternal Competency in ORS Preparation; 9. Maternal Hand Washing before Food Preparation; 10. Maternal Hand Washing before Food Preparation before feeding/after attending to a child who has defecated with inadequate knowledge and practices according to LQAS thresholds and decision rules.
2. Ilaka no. 5: Ganjabhawanipur PHC and Bariyarpur HP, and Iilaka no. 7 Simrahganj, Kabahigoat HPs and Hardia PHC have 4 indicators namely 2. Possession of vaccination Card; 3. EPI Access; 4. Measles Vaccination Coverage and 5. EPI Coverage (All) with inadequate knowledge and practices according to LQAS thresholds and decision rules.
3. Rest of the Ilakas have shown with adequate knowledge and practices except Ilaka no. 3: Bhodaha & Rampur HPs which has 1 indicator no. 10 Maternal Hand Washing before Food Preparation before feeding/after attending to a child who has defecated with inadequate knowledge and practices according to LQAS thresholds and decision rules.

Table 3: Number of Women age 15-49 years with inadequate family planning practices according to LQAS thresholds and decision rules [benchmark percentage (based on monitoring targets) of Jun'06, Dec'09 and Jun-Jul 2011 LQAS; and details figures/numbers presented against program average and monitoring targets for the eighth LQAS].

Threshold: Decision Rules (LQAS-Jun'06)	**75%:12**	**95%:16**	**70%:11**	**70%:11**	
Program Average %:Decision Rule (LQAS-Jun'06)	**66%:11**	**100%:**	**68%:11**	**69%:11**	
Threshold: Decision Rules (LQAS-Dec'09)	**66%:11**	**100%:**	**68%:11**	**69%:11**	
Program Average %:Decision Rule (LQAS-Dec'09)	**41%:5**	**91%:16**	**40%:5**	**40%:5**	
***Threshold: Decision Rules (LQASJun-Jul'11)**	**66%:11**	**100%:**	**68%:11**	**69%:11**	
****** **Program Average %:Decision Rule (LQASJun-Jul'11)**	**48.1%:7**	**95.5%:**	**61.7%:10**	**61.7%:10**	
Field Area	Contraceptive use among women/mothers who want to limit or space birth	Knowledge of source of child spacing method	HIV/AIDS Knowledge (Mode of transmission at least one)	HIV/AIDS Knowledge (prevention at least one)	**Total substandard intervention**
1: Simara and Nijgudh PHCs	8*	19	14	14	
2: Rampurwa and Haraiya HPs	11	19	14	14	
3: Bhodaha & Rampur HPs	12	19	14	14	
4: Parsauni and Phetaha HPs	11	19	6#*	6#*	**2**
5: Ganjabhawanipur PHC and Bariyarpur HP	10	14#*	10*	10*	**1**
6: Chiutaha and Gadahal HPs	7*	19	18	18	
7: Simrahganj, Kabahigoat HPs and Hardia PHC	5#*	18	6#*	6#*	**3**
Total substandard SA	**1**	**1**	**2**	**2**	

Decision rule based on Monitoring/Coverage Target; Decision rule based on Program Average Coverage.
- Number with hash (#) is below program average coverage; - Number with asterisk (*) is below monitoring/coverage target; - Number with asterisk and circle is below program average coverage and monitoring/coverage target.

Ilaka wise Description:

1. Ilaka no 7 Simrahganj, Kabahigoat HPs and Hardia PHC has 3 indicator namely 1. Contraceptive use among women/mothers who want to limit or space birth; 3. HIV/AIDS Knowledge (Mode of transmission at least one) and 4. HIV/AIDS Knowledge (prevention at least one) with inadequate knowledge and practices according to LQAS thresholds and decision rules.
2. Ilaka no 4: Parsauni and Phetaha HPs has 2 indicators 3. HIV/AIDS Knowledge (Mode of transmission at least one) and 4. HIV/AIDS Knowledge (prevention at least one) with inadequate knowledge and practices according to LQAS thresholds and decision rules.
3. Rest of Ilakas has shown adequate knowledge and practices according to LQAS thresholds and decision rules in all indicators except Ilaka no. 5 Ganjabhawanipur PHC and Bariyarpur HP with 1 indicator no. 2 Knowledge of source of child spacing method with inadequate knowledge and practices according to LQAS thresholds and decision rules.

Indicator wise description:

All indicators have 1 to 2 Ilakas with inadequate knowledge and practices according to LQAS thresholds and decision rules.

FA-wise recommendations for improvement in poor indicators data based on finding during LQAS survey on June-July, 2011

FA # 01 (Simara and Nijgadh) Date: 2068/03/17

M#	Indicators	Reason	Recommended strategy	Activities
1	• Quality of counseling. • Delivery preparation	• Lack of counseling. • Irregularity in the meeting of MG/PWG. • Low check up of ANC.	• ORC clinic should be improved. • Quality ANC check up.	• Regular mobilization of ORC/MGM/ANM/MCHW. • Regular supervision.
1	TT Card	• Low health education/counseling. • Untimely supply of TT card.	Effective and timely supply of TT card.	• Manage TT card timely. • Good counseling at the time of ANC and EPI.
1	Postnatal danger sign	• Lack of counseling. • Lack of check up in ANC	• Hospital delivery. • Effective counseling.	• Awareness program for hospital delivery. • Mobilization of extra-team in remote and industrial area for ANC/ORC/EPI clinic.
2	ARI/CDD	• Low awareness on ARI/CDD due to remote/forest area.	• Regular meeting of VHW/MCH/PWG/MGM	• Monthly meeting of FCHVs. • Distribution of posters and pamphlets in PHC/ORC/EPI clinic.

FA-wise recommendations for improvement in poor indicators data based on finding during LQAS survey on June-July, 2011

FA # 02 (Rampurwa and Haraiya) Date: 2068/03/17

M#	Indicators	Reason	Recommended strategy	Activities
1	• Placenta at birth	• Inadequate knowledge of health education in ORC/MGM.	• Promotion of institutional delivery. • Awareness raising on Placenta at birth.	• Regular meeting of FCHW/ MGM/PWG/Ilaka level. • Monthly meeting of FCHV • Manage suitable place and equipments for check up of ANC.
1	TT/EPI Card	• Low health education/counseling. • Untimely supply of TT card.	Effective and timely supply of TT card.	• Manage TT card timely. • Good counseling at the time of ANC and EPI.

FA-wise recommendations for improvement in poor indicators data based on finding during LQAS survey on June-July, 2011

FA # 03 (Rampur- Tokani and Bhodaha) Date: 2068/03/17

M#	Indicators	Reason	Recommended strategy	Activities
1	Breast feeding within one hour	Lack of awareness and knowledge	• Counseling service • Health education • Street drama	• Mother group meeting • Monthly meeting of FCHV • PHC/ORC clinic conduction • distribution of pamphlet, poster • Street drama • ANC/PNC visit.
1	Child spacing counseling	• Low ANC visit. • Lack of counseling from staff.	• Health education • Quality service for ANC visit by PHC\ORC clinic • Training of staff	• Manage suitable place and equipments for check up of ANC. • Re-enforce on training, supervision and monitoring.
1	EPI counseling	Lack of awareness and knowledge.	• Health education • PHC/ORC/EPI clinic. • Counseling in clusters.	• Meeting of MGM/PWG. • Monthly meeting of FCHVs. • Distributions posters and pamphlets in PHC/ORC/EPI clinic.
2	Maternal hand washing before food preparation/after attending to child w/w has defecated.	• Lack of knowledge • No importance given	• Health education street drama • Exhibition on health education.	• Meeting of MGM/PWG/staff meeting. • Posters/pamphlets distribution • Broadcast through media on health education. • Street drama by DHO/NGO/INGOs.

FA-wise recommendations for improvement in poor indicators data based on finding during LQAS survey on June-July, 2011

FA # 04 (Pheta and Prasauni VDC) Date: 2068/03/17

M#	Indicators	Reason	Recommended strategy	Activities
1	Breast feeding within one hour	Lack of health education	• Regular PWG/MGM. • Increase institutional delivery. • Encouragements to the ANM/MCHW for counseling.	• Regularization of the meeting of MCHW/MGM/PWG. • Distribution of pamphlets, posters • Coordination with HFMC and VDC
2	**Counseling** • Breast feeding • EPI child spacing • Dangerous sign.	• Lack of health education	• Promote the ANC/PNC service.	• Manage physical facilities and human resources. • Develop the key message. • Encourage ANM and MCHW.
3	ANC fourth Visit.	• Vacancy of nursing staff, physical facilities. • Lack of awareness about ANC check up.	• Coordinate DHO/DPHO • Orient the community members for ANC/PNC check up.	• Organize the regular meeting with DHO/DPHO. • Sharing with community members during planning.
4	Delivery by skilled health person.	• Inadequate knowledge about dangerous sign. • Insufficient birthing centers. • Transfer of staff to other places.	• Awareness package on delivery by skilled health person. eg. School health mother group, FCHV, health management committee.	• Regular meeting with MCHW, MGM, PWG. • Awareness raising program. • Coordination with stakeholders.
5	PNC Visit.	• Inadequate knowledge • Behavior change problem.	• Awareness package on PNC visit.	• Awareness raising program in the community.

FA-wise recommendations for improvement in poor indicators data based on finding during LQAS survey on June-July, 2011

FA # 05(Ganjbhawanipur and Bariyarpur) Date: 2068/03/17

M#	Indicators	Reason	Recommended strategy	Activities
1	• Breast feeding within one hour • Iron supplementation on prenatal Iron coverage	• Lack of awareness and knowledge • Inadequate supply of iron tab • Lack of knowledge of mother about Iron tab	• Counseling service • Health education • Street drama • Adequate regular supply of Iron tab	• Mother group meeting • Monthly meeting of FCHV • PHC/ORC clinic conduction • Distribution of pamphlets, posters • Street drama • ANC/PNC visit. • Supply during Ilaka staff meeting
1	Child spacing counseling	• Low ANC visit. • Lack of counseling from staff. • Lack of information about FP • Social and Cultural barrier	• Health education • Quality service for ANC visit by PHC\ORC clinic • Training of staff • Awareness raising specially in Muslim community	• Manage suitable place and equipments for check up of ANC. • Re-enforce on training, supervision and monitoring. • Operate health facility regularly and timely
1	EPI counseling and card	• Lack of awareness and knowledge. • Irregular supply of EPI card • Carelessness about EPI card	• Health education • PHC/ORC/EPI clinic. • Counseling in clusters. • Regular supply • Canceling about importance of EPI card	• Meeting of MGM/PWG. • Monthly meeting of FCHVs. • Distribution poster and pamphlets in PHC/ORC/EPI clinic.
2	Maternal hand washing before food preparation/after attending to child w/w has defecated.	• Lack of knowledge • No importance given • Poverty	• Health education street drama • Exhibition on health education.	• Meeting of MGM/PWG/staff meeting. • Posters/pamphlets distribution • Broadcast through media on health education. • Street drama by DHO/NGO/INGOs .

FA-wise recommendations for improvement in poor indicators data based on finding during LQAS survey on June-July, 2011

FA # 06 (Gadhal and Chyutuha) Date: 2068/03/17

M#	Indicators	Reason	Recommended strategy	Activities
1	TT card	Card received during the vaccination of TT but the record card lost	Counseling on the importance of TT vaccination Card for protection in future	Mobilization of FCHV, PWGs and Mother Groups to encourage women to protect card for future record
2	Hand Washing	Lack of awareness / information and importance of hand washing	Health education on Hand Washing	• Public Sanitation day / awareness raising by PWGs , MGM and FCHV

FA-wise recommendations for improvement in poor indicators data based on finding during LQAS survey on June-July, 2011

FA # 07 (Simourangadh, Hardiya and Kabhi Goth) Date: 2068/03/17

M#	Indicators	Reason	Recommended strategy	Activities
M1	Breast feeding with in 1 hrs of delivery	• Inadequate heath education teaching in HI's, MGs, PWGs groups • Lack of Nursing Staff	• Activate MGs, PWGs meeting • Fulfill the vacant posts • MCH clinic should be functional	• Activate all MGs, PWGs meeting from coming month • MCH clinic in every weeks
M1	Prenatal care by MCHW	• Lack of Nursing Staff • Less functioning of PHC/ORC • Absenteeism in His	• Fulfill of Nursing staff • Regular Functioning of PHC/ORC • Motivation to MCHWs	• Regular PHC/ORC • Supervision and monitoring • Fulfill nursing staff as soon as possible
M1	Quality of Counseling in ANC/PNC	• Lack of Nursing Staff • Service provider hurry in work	• Regularize MCH/ORC	• Regular MCH clinic twice in a week • timely functioning of PHC/ORC
M1	Possession of TT card	• Not given by service provider • Low importance given to protect card by mothers • Service provider hurry in work • Lack of TT card	• Supply of TT card regularly • Health education and counseling	• Regular supervision and monitoring • Full time for EPI clinic • Health Education to PWGs
M1	Prenatal Visit (4th time)	• Lack of awareness and	• Quality of counseling in	• Regular MCH/ANC

		counseling in ANC clinic • Lack of Nursing Staff	ANC	Clinic
M1	Iron supplementation prenatal iron coverage and post natal iron	• Lack of functioning of MCH clinic • Lack of awareness and iron supply	• Regular supply of iron • Regular PWGs meeting • Regular functioning of MCH	• Regular MCH/ANC Clinic • FCHV should supply iron
M1	Delivery by Skilled health professional up to MCHW	• Lack of skilled MCHW, counseling, birthing centre and awareness raising among community people	• Capacity building training to MCHW • Fulfill Vacant Position • Establishment of Birthing Centre	• Fulfill vacant post immediately • SBA training to all health worker
M1	CHDR	• No supply of CHDR • Lack of awareness and no availability of CHDR in rural market	• Supply CHDR regularly • Regular PWG meeting	• Supply of CHDR to all as soon as possible
M2	Possession of Vaccination Card	• Lack of Vaccination card • Low importance given by guardian • Card not given vaccinator	• Supply the vaccination Card • Provide Health education to Guardians • Compulsory distribution of vaccination card	• Supply of Vaccination card to all intuition as soon as possible • Health education in EPI clinic
M2	EPI/EPI access coverage and measles vaccination	• Less due to not functioning of EPI clinic full time • No defaulter tracking	• Full time should be given to EPI clinic • Defaulter should be tracked • EPI campaign should be implemented	• EPI clinic must be on time • Defaulter children should be brought to increase in EPI clinic
M3	Contraceptive use among women/ mothers who want to limit or birth spacing	• lack of education about importance of contraceptive • Low functioning of MGs, PWGs	• Regular MGs/ PWGs meeting	• MGs/ PEGs meeting
M3	Mot and Prevention of HIV/AIDS	• Lack of health education • Low functioning of MGs, PWGs • Lack of HIV/AIDS program	• To make regular MGs, PWGs meeting • Launch HIV/AIDS related program	• MGs, PWGs meeting regularly • HIV/AIDS related program should be implemented at rural level

Bara – CSSA Status description:

The first component, Health Outcomes, represents people's health, which is generally addressed through proxy health objectives such as immunization coverage, child growth, exclusive breastfeeding, and/or improved knowledge (e.g. management of the sick child, danger sign during pregnancy, delivery and postnatal period). The outcomes in the component is significantly decrease to 53 indices in 2011 rather than 63 indices in 2006, although significant improvement has been made in 2011 than mid-term achievement 41 indices in 2009. The low results during the mid-term occurred due to unstable political situation. However, situation improved after 2009 and continued again from the stakeholders and DHO realized the low performance in these components. Increased knowledge of mothers and their practices supports in their behavior has complemented to improve the indices in the final evaluation.

The second component consists of elements in the health and social services approach such as quality, cost and accessibility which will influence the durability of any health improvement, effectiveness, equity, appropriateness and appropriateness of the activities. The component increased to 73 indices in final evaluation in the year 2011 from 63 indices in 2006 and 62 indices in 2009. The major factor of the achievement was regular month meeting, providing timely reporting and availability of essential drug in health facilities as well as regular supportive supervision.

The third component represents the organizational capacity focused on the health facility management committee, which needs to exist in the local partner(s) to maintain performance and its capacity. Component achievement has slightly decreased to 60 indices in 2011 from 67 indices in 2006 and 63 indices in 2009 due to less community participation and in contribution of cash or kind to their health facility activities and its support program.

The fourth component represents the organizational viability which is the overlapping element of organizational capacity focused on the same health facility management committee and/or the key local partners. Dependency relates not only to financial viability, but also to the other essential types of support on which an organization may depend to continue existing and fulfilling its mission. The component slightly increased to 54 indices in the final evaluation in 2011 from 51 indices in 2006 and 33 indices in 2009. The factor of improvement is the organizational role for coordination, networking and alliances with stakeholders and local resource mobilization which has been increased. The village health development committee followed the district health policy and guideline and the system that made the improvement in the results.

The fifth component refers to community capacity and the overlapping elements of cultural acceptance and social cohesion. All these elements can be viewed under the umbrella concept of community competence. The outcomes in the component have no changes between then year 2011 and 2006 which is to 76 indices. It was 44 indices in the mid term in 2009. The changes slowed down in mid-term due to

unstable political situation. However, the situation improved and realized by DHO. Continued support from the stakeholders as well as increased knowledge of mothers and their practice in the behavior has complemented to improve the indices in final evaluation.

The sixth and last component includes a number of elements within the environment, of the project in the largest sense: national policies, the economic and political environment, and the environmental and human development situation. These elements are frequently, but not always, outside of a project's scope of intervention. They may, however, be relevant to a sustainability assessment within a CS project, as they indicate important transitional stages of development, which project cannot ignore. The component increased to 50 indices in final evaluation 2011 from 32 indices in 2006 and 21 indices in 2009. The major factor of the achievement was stable political situation and no disruption to medicine supply and literacy rate in the district has been increased.

4. CSSA Final Evaluation Report

Part Three – Main Report on CSSA
Child Survival Sustainability Assessment workshops

4.1. Background

Sustainability in an open and larger social laboratory for child and maternal health promotion in joint collaboration with and participation of various kinds and nature of stakeholders, actors, individuals, communities, disadvantaged groups, community organizations, government, non-government, para-statal bodies, private sectors with their own interest and way of actions is un-predictable with 100 percent precision in its achievement of performance. With diverse social, cultural belief and traditional practices, ultra resource poor, marginalized and discriminated communities where girl children and women are treated at sub-human level, child and maternal health program may not be in their top priorities in the highly low literate communities.

Child survival projects have been expanded and scaled up openly with shared common vision and mission among various agencies, government, non-government, local communities and disadvantaged groups, children and mothers by Plan Nepal in most resource poor districts of Nepal In such cases, common commitment and obligation for performance results, delegated and decentralized roles and responsibilities, sensitivity and sensibility of stakeholders and actors for accountability to their moral social obligation to poor communities, capacity and competence of communities to utilize and mobilize health services are accounted much for sustainability and continuity of the good results of health facilities as a used-to habit formation of all stakeholders and actors and communities.

4.2 Introduction to CSSA and Child Survival Projects

Evolution of Sustainability:
Stage 1: Since 1985 to 1995, Plan Nepal has challenges of performing its results in small manageable, sizeable and controllable atmosphere.

Stage 2: Since 1995, it has challenges of expanding, scaling up of its services to the un-reached children, mothers and communities of Nepal beyond its control, resources and management in open social laboratories with joint collaboration with cooperation and participation of various relevant actors, stakeholders and the communities.

Some of the pertinent challenges are as below.
The three mores that are being demanded of Private Volunteer Organization (PVOs)/NGOs:

1. More reduction in mortality, fertility, and everything else – through greater equity, quality etc.
2. More people reached: Scale
3. More lasting impact: Sustainability;
   to implement interventions where health systems are very weak or non-existent, access to health facilities is poor, few trained health workers, ultra poor and marginalized groups with low level of awareness, information and education.

Challenges in producing further reductions in mortality

- Increase equity: Reach the poorest and those farthest away
- Increase quality of implementation
- Address other causes of mortality that are more difficult to decrease e.g. neonatal mortality

More quality & complexity

Further reductions in mortality and fertility require interventions that:

- Have better quality and greater complexity
- More effectively reach the poorest

More quality & complexity

- The paradox:
- Biggest demand for more quality & complexity is in rural and suburban areas hard hit by poverty, HIV/AIDS, malaria, tuberculosis, malnutrition, diarrhea, pneumonia and other communicable diseases.
- These same areas have the least ability to implement complex interventions: Health workers with less training, communities with lower literacy, transport and communication more difficult

More people reached: Scale

Four types of scaling up processes identified:

- Quantitative scale up: ↑ beneficiaries
- Functional scale up: ↑ technical areas
- Political scale up/policy dialog
- Organization scale up

Scaling up processes

- Work in advocacy, coalition building, policy dialog etc. often invisible
- Reasonable expectations: Time, funding, personnel for scale-up
- Response to the large demand to “go to scale”
- Implementation at scale ultimately entails some loss of control

Accountability in a multi-district CS project (Quantitative scale up)

- PVO and wider range of partners at district, state and national levels
- Targeted resource poor communities & households are located in remote and inaccessible areas in many districts where projects are implemented
- Less intensive monitoring & oversight by PVO
- Outcomes are less certain

Accountability for results when implementing at scale

- Need to rely on partners to implement and solve problems as they occur
- Some will be effective in problem-solving, others will not
- This will naturally result in uneven implementation: Areas of high and low coverage

Loss of control

- Issues in scale and sustainability are related
  - Working at scale means dealing with loss of control and uncertainty in the present
  - Sustainability means dealing with loss of control and uncertainty in the future
- How to maintain benefits for the population even when we have limited control?

Equity concerns related to sustainability

- Identify innovative ways and means to address – "Planning for maintaining equity gains"

A definition of sustainability

Sustainability in primary health care projects is a contribution to development of conditions enabling individuals, communities, and local organizations to express their potential, improve local functionality, develop mutual relationships of support and accountability, decrease dependency on insecure resources (financial, human, technical, informational), in order for local stakeholders to negotiate their respective roles in the pursuit of health, wellbeing and development beyond project intervention.

The present thinking about sustainability:

There has been ongoing discussion about the need for sustainability within USAID and the CS grants program.

- In the late 90s, this "crystallized" into thinking about how to measure sustainability, hence was born the Sustainability Initiative Study in 2000.
- The thinking and tools have evolved through an iterative process of dialogue with PVO HQ and field staff
- The present CSSA has emerged

"Project Thinking" versus "Development (Sustainability) Thinking"

Project Planning (Results Framework or Logical Framework) is based on reducing reality to a simple equation:

Inputs → processes → outputs → outcomes

The “real world” in which development occurs is actually much more complex:

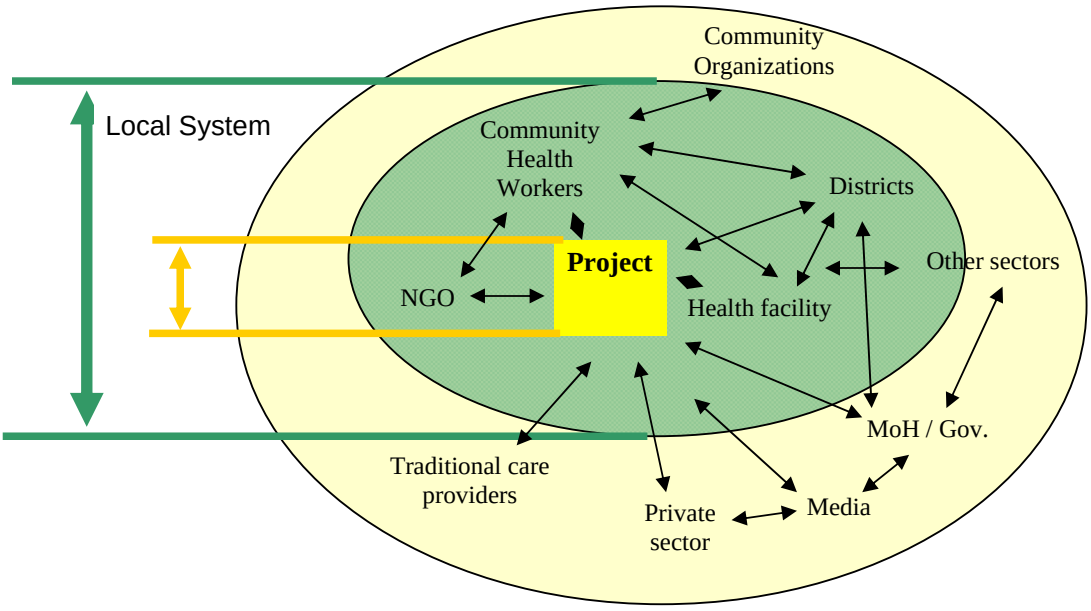
- **There are many actors that affect outcomes**
- **Variables are interdependent**
- **There are factors outside control of project**

The basic premise of sustainability Planning

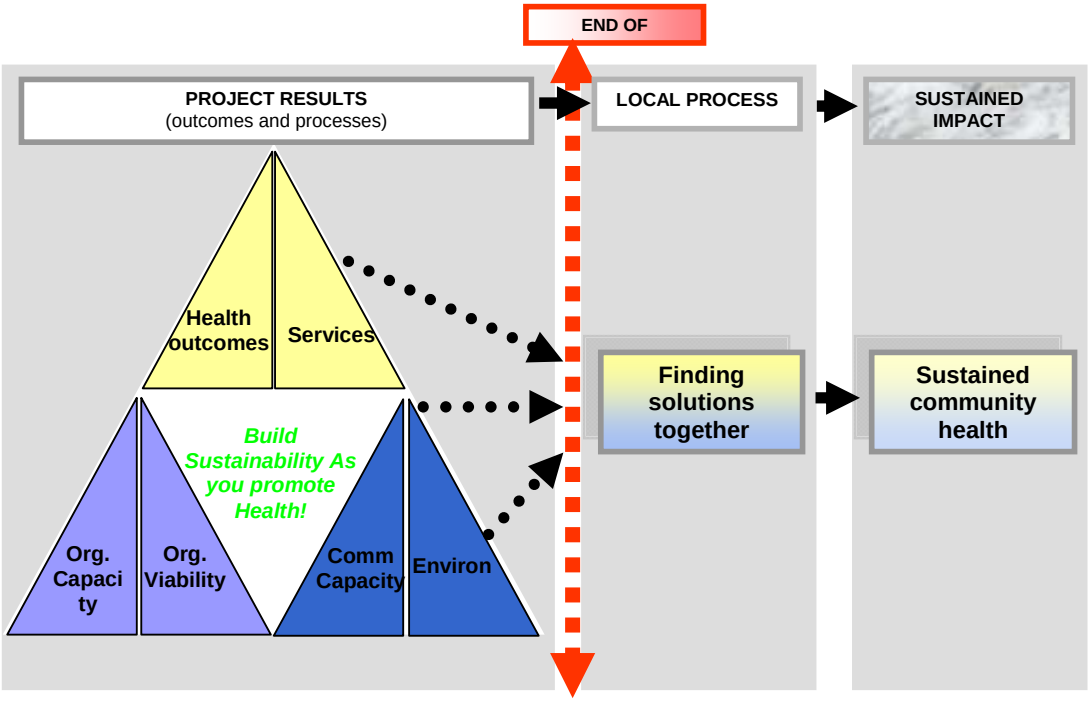
Individuals, communities, and local organizations (“local actors”) constitute a **local system** within an overall environment.

Based on their own understanding of their health and development, **the coordinated interactions and efforts of these local actors** will lead to **lasting (sustainable) health impact.**

System thinking: many actors contribute to sustainability
CS sustainability self-assessment of 22 projects (2001)



Elements of Sustainability Framework = Having the ability to maintain impact



Health Outcomes:
Health Outcomes, represents the population's health, which is generally addressed through proxy health objectives such as immunization coverage, child growth, healthy household behaviors (exclusive breastfeeding, weaning practices, sleeping under bed nets) and/or improved knowledge (e.g. management of the sick child, risk of HIV transmission).

Health services:
Health and Social Services, consists of elements in the health and social services approach, such as quality, cost, accessibility, equity, appropriateness and coverage—whether through public or private, community or facility-based service delivery.

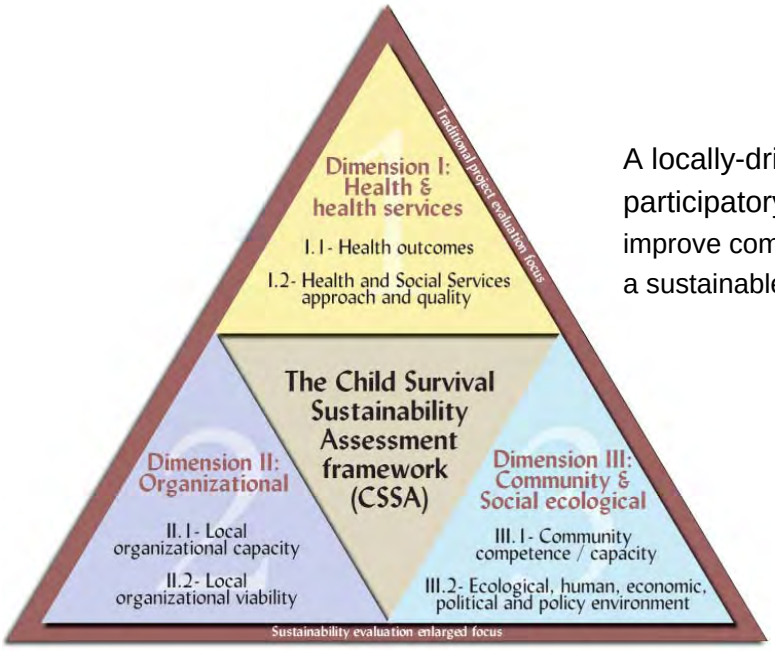
Organizational Capacity:
Organizational Capacity represents the capacity that needs to exist in local organizations in order to maintain essential services and activities. Organizational capacity refers to a range of functions that are necessary to the life of an organization, to its administration, and its ability to perform its mission (Lafond et al., 2002).

Organizational Viability
Organizational Viability, relates not only to financial viability, but also to other essential types of support and relationships—connectedness— which an organization depends on to fulfill its mission. This is not so much self-reliance, an optimistic and ambiguous concept at best, but a rational profile of organizational dependency, or interdependency, in a given institutional environment.
Organizational capacity and viability are two overlapping concepts, though sometimes considered one and the same.

Community Competence & Capacity:
Community Competence/Capacity, refers to overlapping elements that affect the community, such as cultural acceptance of positive changes, social cohesion, collective efficacy, etc. All these elements can be looked at under the umbrella concept of community competence (Cottrell, 1983).

Ecological, human, economic, political and policy environment:
Ecological, Human, Economic, Political and Policy Environment - includes a number of elements within the environment of the local system: national and regional policies, the economic and political environment, the environmental/ecological conditions and human development situation. These elements are frequently outside of a project's scope of intervention, but represent important transitional stages of development, which NGOs cannot ignore

Diagrammatic Presentation of Sustainability Framework – An Interdependence Approach for Holistic Performance Results



A locally-driven, participatory process to improve community health in a sustainable way

Stepwise action for sustainability assessment

Six steps for conducting a sustainability assessment

1. Defining the system to be assessed, its vision and its goals and results
2. Identifying elements for the local system for sustainability
3. Choosing indicators and identifying scales to assess the progress they measure
4. Measuring the status of the individual indicators
5. Mapping indicators along the scales to define progress combining the indicators into indices
6. Review of results and formulation of a follow-up Action Plan based on results.

4**.3 Survey Proceedings:**

All the three workshops were held as scheduled in the three districts. Participation of representatives from relevant stakeholders, actors and partners like central and regional divisional heads, chiefs of child and maternal health, CB-NCP, CB-IMCI of MoHP, DHO/DPHO, DDC, municipalities, FPAN field office, WDO, DEO and local partner NGOs was quite lively and inquisitive regarding the results from the Black Box to know the formula of interpretation of data by the participants. As per set objectives, the workshop followed all the 6 steps for sustainability assessment as a self-discovery tool to know, to realize and to improve the situation of child and maternal health condition through follow-up action plan for the coming year. Facilitator team members from central to field office made hard efforts as usual for data exploration, analysis and to make the stakeholders, actors and partners realize their ownership and responsibility for informed planning and management. Findings of results and workshop are presented systematically in step wise below and proceeding including list of participants are annexed under respective district headings.

4.4 Objectives:
Objective of the Workshop for MTE
The objectives of the workshop were to:

- *To define sustainability within the context of health programs.*
- *To assess the sustainability of LIBON Project in Sunsari and Parsa and develop a Plan of action.*
- *To assist local partner organizations to assess their own sustainability.*

4.5 Methodology:

Step 1: Defining the system to be assessed, vision, goals and results
Key actors and participants

- Formal health service providers: public, private: MoHP, District DHOs, DPHOs, IOM, RHCs, VHDCs, DDCs, VDCs
- NGOs and private organizations
- CBOs
- Households and individuals
- Mothers and Pregnant Women's Groups
- Communities

Clarity on vision of sustainability
Vision statements lead to:

- Building a vision is part of the strategy for change
  Assessment is a part of building capacity
- Achievements lead to greater visions
- Evaluations lead to more realistic visions

Building a common vision for sustainability

- Planning contextually
- Building ownership
- Finding a working consensus
- Mapping out a direction

Facilitators' team clarified the objectives of the CSSA – Workshop as an assessment tool for MTE of LIBON Project Districts. After usual proceedings, groups are formed to assess the results as follows. Representative participants worked together in groups and unanimously agreed on the following vision along with goals, sub-goals, results and strategies.

Vision:
Sunsari:
VISION: A community where the women and children enjoy their full right for health and survival through an active participation and organized effort of a well established network of public and private organizations in the community

Parsa:
VISION: "A healthy community with well established network of public and private sectors where women and children enjoy their full rights of health and survival ensured through active participative and collaborative effort of all stakeholders"

Bara:
VISION: "That all our community members, especially mothers and children stay healthy"

4.6 Finalizing Indicators:
2. Identifying elements for the local system
3. Choosing indicators and identifying scales to assess the progress they measure

Defining Elements and Group Works on Elements and Indicators
Monitoring and Evaluation Officer (Mr. Dipak Dahal) highlighted on the dimension, component, element and indicator. After discussions and clarification the participants worked in the same previous groups to develop indicators in the areas of each of the component and elements. The following dimensions and components are agreed in the plenary.

Dimension 1: Health and health Services
Component 1: Health Outcomes
Component 2: Health Services

Dimension 2: Organizational
Component 1: Local Organizational Capacity
Component 2: Local Organizational Viability

Dimension 3: Community and social Ecological

Component 1: Community competence and capacity
Component 2: Ecological, human, economic political and policy environment

The group discussed about the ownership of the future health of community along with influence on health program, roles and responsibilities and relationships among various factors in the communities. DHO shared the present status of the community and availability of services, existing capacity of Health Management Committee and observed areas of improvements. Internal and external environment and possible threats in achieving the vision is openly shared and discussed.

After the group works, all the three groups presented their vision and elements including indicators indicating the health and health service, organizational capacity and viability and community competency and socio political, ecological environment. Finally, the group finalized the common elements and indicators of each component.

The sources are identified and consensus on the indicator settings is made. The sources of indicators are HMIS, LQAS and other information from DHO, District Education Office (DEO), Women Development Organization (WDO), health facility information and external reports.

4.7. CSSA Survey Final Evaluation Report - Parsa District (1 – 3 August 2011)

Major Findings and results in the Final Evaluation

The three days CSSA workshop was held from 1 – 3 August 2011 in Birgunj, Parsa. The participants were representing from DPHO, Municipalities, DDCs, DEO, DWO, CDO, local partner and others. They were aware on child survival evolution and sustainability assessment. After that, the participants were involved in preparing the coverage/measure of each indicator defined in last workshop on March 2010 and shared the individual dimension in the respective groups then it was finalized in the plenary session. The outcomes of the each indicator support to prepare dashboard as well as spider web graphic with the help of black box. Based on the findings, team has prepared the plan of action with remarkable recommendation for the further improvement and achievement in future. The major findings are in Dimension-1, Component-1, Health outcome index has increased to 75% in 2011, from 54.9% in 2008 and 54.7% in 2010 and component 2 Health services index increased to 61% from 52% in 2008 and decreased by 4% than in 2010. Dimension 2, component 3, organizational capacity index increased to 72% from 47% in 2008 and 51% in 2010 and component 4 organizational viability has increased to 47% from 16% in 2008 and decreased by 2% in 2010.

While Dimension 3, component 5 Community capacity index has increased to 50% in 2011 from 48% in 2008 and 42% in 2010. Component 6 environmental index remained 43% in 2011 and 2008 and decreased in 2010 by 3%

The Dash Board results and the table presentation show that there has been an increased improvement in the achievements of components irrespective of problems being faced as have been shown in the action plan formulation. Regarding, level of achievements, Dimension 2, component 4 organizational viability although the figure is quite high in 2011 compared to the initial stage in 2008, but still for homogenous progress and achievement, it is lower to other components like health outcome index and organizational capacity index. Similarly, Dimension 3, component 6, environmental index remains to be the same in 2008 and 2011.

So, there is a need to reflect and review such heterogeneous figures during regular meetings at Ilaka level and district level for homogeneity in achievement that reflects steady and winning situation in sustaining the results in a balanced and harmonious way. However, the achievements of the results are quite encouraging compared to Mid Term level.

For lasting sustainability, component 4, 5 and 6 namely organizational viability, community capacity and environmental indices, there is a need for address the issues for integrated and joint collaboration through linkage, networking and coordination among the stakeholders like DDC, VDCs, CBOs, MGs, PWGs, Saving

and credit groups through integrated approach of the line agencies more particularly with District Agriculture and Cooperative office, District Education Office, Women Development Office, District Health Office and the local self-governance bodies.

At the end of the workshop, participants make specific recommendations to improve the situation of child and mother's health condition based on the findings and the results including their past experiences and lessons learned. Recommendations are included after action plan.

Indicators by Components Developed by the Participants – Parsa District on 1 – 3 August 2011

Dimension 1: Component 1: Health outcomes

Elements	Indicators	Source of Information	Measure (% or scale)	Score
Mortality	▪ Neonatal mortality rate	National source	3.3%	93.4
	▪ Maternal mortality ratio	National source	0.28%	99.2
Immunization	▪ % of BCG coverage	HSIS	95%	90.0
	▪ % of HB/DPT III coverage	HSIS	90%	80.0
	▪ % of Measles coverage	HSIS	85%	73.4
	▪ % of TT2 coverage	HSIS	70%	55.1
Nutrition	▪ % of under weight children of under 5 years	HSIS	6%	3.4
	▪ % of new growth monitoring of under 5 years children	HSIS	56%	41.0
	▪ % of mother who breastfed within one hour after child birth	LQAS	78.9%	65.2
	▪ % of exclusive breastfeeding of under 6 months	LQAS	98.7%	97.4
	▪ % of mother of children aged 0-5 months consuming/folic acid tablet at 6 months during their pregnancy	LQAS	77.7%	63.6
	▪ % of mother of children aged 0-5 months who received vitamin 'A' 200000 IU within 45 days of their birth	LQAS	83.4%	71.3
	▪ % of pregnant mother supplemented with albendazole	LQAS	87.9%	77.3
CB-IMCI	▪ % of severe pneumonia & very severe disease among total cases	HSIS	0.6%	0.3
	▪ Incidence of Diarrhea/1,000 population	HSIS	37%	48.0
	▪ % of severe dehydration among total cases	HSIS	0.05%	99.9
Safe motherhood	▪ % of 4 times ANC visit	LQAS	68%	53.1
	▪ % of delivered at institutional by SBA *(Doctor, Nurse, ANM whether received training or not)*	LQAS	59.5%	44.5
	▪ % of mothers with children aged 0-5 months (and their newborns) who received a first checkup by a skilled provider (doctor or nurse or HA or AHW or ANM) within the first two	LQAS	98.8%	97.6

Elements	Indicators	Source of Information	Measure (% or scale)	Score
	days of birth			
	▪ % of mothers of children aged 0-5 months who know at least two danger sign during delivery	LQAS	91.5%	83.0
	▪ % of mothers of children aged 0-5 months who know at least two danger sign among newborns	LQAS	97.6%	95.2
	▪ % of newborns immediately after birth, who were dried off, exposed to a heating source (including kangaroo care) and avoided bathing for 24 hours	LQAS	89.5%	79.5
Family planning	▪ Contraceptive Prevalence Rate (CPR)	HSIS	67%	52.1
Sanitation	▪ % of mothers of children age 0-23 months who live in households with soap at the place for hand washing	LQAS	72.9%	58.0
Recording and reporting	▪ % of timely reporting	DPHO	83%	70.7
		Total		**1875.4**
		Average		**75.01**

Dimension 1: Component 2: Health services

Elements	Indicators	Source of Information	Measure (% or scale)	Score	Definition of scale (where we are using scale)
Functionality of Health facilities	▪ Immunization clinic held per month	HSIS	5	80.0	1. No immunization clinic 2. Immunization clinic upto 20% tool 3. Immunization clinic upto 40% tool 4. Immunization clinic upto 60% tool 5. Immunization clinic upto 80% tool 6. Immunization clinic more than 80%
	▪ Dalit / Janajati children immunized measles vaccine.	HSIS	5	80.0	1. No immunized measles vaccine 2. Immunized measles vaccine upto 20% tool 3. Immunized measles vaccine upto 40% tool 4. Immunized measles vaccine upto 60% tool 5. Immunized measles vaccine upto 80% tool 6. Immunized measles vaccine more than 80%
	▪ ORC clinic held per month people served by per clinic	HSIS	2	20.0	1. No ORC clinic 2. ORC clinic upto 20% 3. ORC clinic upto 40% 4. ORC clinic upto 60% 5. ORC clinic upto 80% 6. ORC clinic more than 80%
	▪ VHW/MCHW attendance in mother's group meeting	HSIS	3	40.0	1. No attend in MGM 2. Attend in MGM upto 20% 3. Attend in MGM upto 40% 4. Attend in MGM upto 60%

Elements	Indicators	Source of Information	Measure (% or scale)	Score	Definition of scale (where we are using scale)
					5. Attend in MGM upto 80% 6. Attend in MGM more than 80%
Logistic	▪ % of LMIS report received by quarterly basis	DPHO report	83%	70.7	
	▪ % of stock out of 10 essential drug commodities + gentamycine *(Condom, pills, iron, Vit A, ORS, Cotrim, CHDK, gentamycine, CHX)*	DPHO report	5	80.0	1. Stock-out more than 80% 2. Stock out upto 80% 3. Stock out upto 60% 4. Stock out upto 40% 5. Stock out upto 20% 6. No stock out
Supervision and monitoring	▪ % of supervision and monitoring of HF	HSIS	4	60.0	1. No supervision and monitoring 2. Supervision and monitoring upto 20% 3. Supervision and monitoring upto 40% 4. Supervision and monitoring upto 60% 5. Supervision and monitoring upto 80% 6. Supervision and monitoring more than 80%
		Total		**430.7**	
		Average		**61.5**	

Dimension 2: Component 1: Organizational Capacity

Elements	Indicators	Source of Information	Measure (% or scale)	Score	Definition of scale (where we are using scale)
Human Resources	▪ % of fulfillment of sanctioned post	DPHO	95%	90.0	
	▪ % of trained human resource including FCHVs on program package (CB-NCP)	DPHO	96%	92.0	
Information Management	▪ Availability and use of tools (OPD register, services register, child health card, treatment book) at HF level	Health facility & DPHO report	5	80.0	1. No 2. Available upto 20% 3. Available upto 40% 4. Available upto 60% 5. Available upto 80% 6. Available more than 80%
	▪ Availability and use of monthly monitoring sheet (ARI treatment book, home therapy card, referral book, classification card, cotrimoxazole, timer) at community level	Health facility & DPHO report	5	80.0	1. No 2. Available upto 20% 3. Available upto 40% 4. Available upto 60% 5. Available upto 80% 6. Available more than 80%
Financial Management	▪ % of HF with financial audit	Health facility & DPHO report	6	100.0	1. No Financial audit 2. Financial audit upto 20% 3. Financial audit upto 40% 4. Financial audit upto 60% 5. Financial audit upto 80% 6. Financial audit more than 80%
Physical infrastructure	▪ % of HF with their own building	Health facility & DPHO	60%	45.0	

Elements	Indicators	Source of Information	Measure (% or scale)	Score	Definition of scale (where we are using scale)
		report			
	▪ % of HF with space for delivery	Health facility & DPHO report	4	70.7	1. No space for delivery 2. Space for delivery upto 20% 3. Space for delivery upto 40% 4. Space for delivery upto 60% 5. Space for delivery upto 80% 6. Space for delivery more than 80%
	▪ % of HF with toilet & water	Health facility & DPHO report	4	26.4	1. No toilet and tube well 2. Toilet and tube well upto 20% 3. Toilet and tube well upto 40% 4. Toilet and tube well upto 60% 5. Toilet and tube well upto 80% 6. Toilet and tube well more than 80%
Planning & evaluation	▪ % of HFMC with monthly meeting	Health facility minute	5	45.0	1. No monthly meeting 2. Monthly meeting upto 20% 3. Monthly meeting upto 40% 4. Monthly meeting upto 60% 5. Monthly meeting upto 80% 6. Monthly meeting more than 80%
	▪ % of Ilaka level monthly reporting & meeting	HF minute and HSIS	100%	100.0	
		Total		**729.2**	
		Average		**72.9**	

Dimension 2: Component 2: Organizational Viability

Elements	Indicators	Source of Information	Measure (% or scale)	Score	Definition of scale (where we are using scale)
Community Contribution	▪ % of HF with staff support from local governing body	HF & local government report	3	40.0	1. No staff support 2. Staff support upto 20% 3. Staff support upto 40% 4. Staff support upto 60% 5. Staff support upto 80% 6. Staff support more than 80%
	▪ % of HF support for FCHV monthly meeting at community level	HF & local government report	5	80.0	1. Support for NID & Vit "A" 2. Support for monthly meeting upto 20% 3. Support for monthly meeting upto 40% 4. Support for monthly meeting upto 60% 5. Support for monthly meeting upto 80% 6. Support for monthly meeting upto 100%
Transparency of program and finance	▪ Monthly performance & planning meeting at HF level with representation of DHO/Ilaka and VDC/HFMC	HFMC minute	4	60.0	1. No meeting 2. Meeting with staff only 3. HFMC meeting 4. Meeting with staffs and HFMC members 5.HFMC Meeting with representation of DPHO/Ilaka 6. Meeting, decision made in favor of Dalit, women
Social/public Auditing	▪ % of HF social/public audit conducted	HF & local government report	1	10.1	1. No social/public audit 2. Social audit/public upto 20% 3. Social audit/public upto 40% 4. Social audit/public upto 60% 5. Social audit/public upto 80% 6. Social audit/public more than 80%
		Total		**190.1**	
		Average		**47.5**	

Dimension 3: Component 1: Community Competence/Capacity

Elements	Indicators	Source of Information	Measure (% or scale)	Score	Definition of scale (where we are using scale)
Community participation	▪ % of mother of children of 0-5 months who knows at least two danger sign during pregnancy	LQAS	96.8%	93.6	
	▪ % of VDC with access to emergency fund for delivery.	DACAW	34.1%	19.5	
	▪ % of PHC/ORC conducted	Group work	50%	35.1	
Functionality of HMC	▪ Regularity of meeting	HSIS	27.8%	15.9	
Social inclusion	▪ % of HFMC formed as per protocol (marginalized, so-called Dalit, women)	HF report	75%	60.0	
	▪ Decision made in the favor of Dalit and women		5	80.0	1. No decision 2. Decision but no participation 3. Decision with participation 4. Decision but not implementation 5. Decision with partial implementation 6. Decision with full implementation
		Total		**304.1**	
		Average		**50.7**	

Dimension 3: Component 2: Ecological, human, Economic, Political & Policy Environment

Elements	Indicators	Source of Information	Measure (% or scale)	Score	Definition of scale (where we are using scale)
Policy	▪ Policy on child rights	Nepal Planning Commission (NPC) document	3	40.0	1. No policy 2. Policy at place but not implemented 3. Policy at place but partially implemented 4. Policy fully implemented 5. Policy implemented, monitored, supervised & evaluated 6. Policy implemented & sustained
	▪ Policy on women rights	NPC document	3	40.0	1. No policy 2. Policy at place but not implemented 3. Policy at place but partially implemented 4. Policy fully implemented 5. Policy implemented, monitored, supervised & evaluated 6. Policy implemented & sustained
	▪ Priority on child and maternal health programs	MoHP & DoHS	5	80.0	1. No Priority 2. Priority but not implemented 3. Priority but partially implemented 4. Priority with fully implemented 5. Priority implemented, monitored, evaluation & supervised 6. Priority implemented & sustained
Political commitment	▪ Involvement of political (formal and informal) leaders in health campaign	Supervision and feedback, national document	3	40.0	1. No commitment 2. Commitment but not involvement

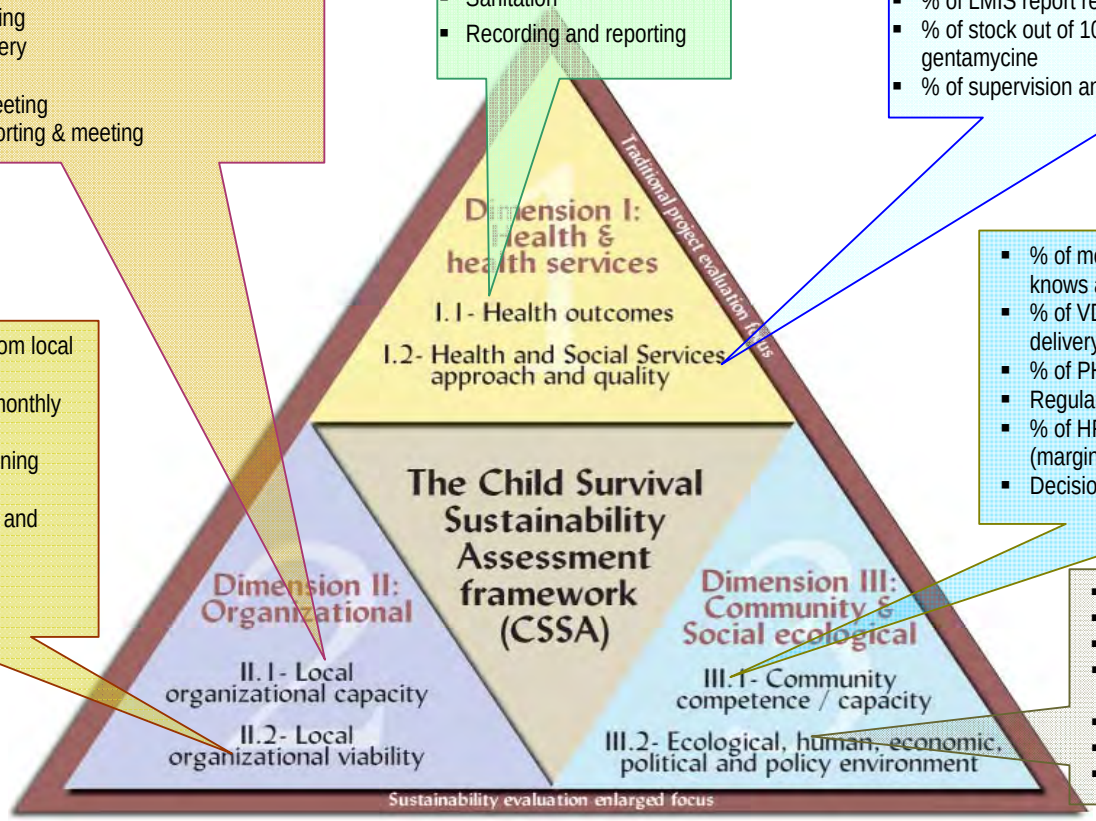
Elements	Indicators	Source of Information	Measure (% or scale)	Score	Definition of scale (where we are using scale)
					3. Commitment with less than 50% involvement 4. Commitment with between 51% to 80% involvement 5. Commitment with above 80% involvement 6. Commitment with above 80% involvement including community mobilization
	▪ Political commitment on health related issues.	Supervision and feedback, national document	3	40.0	1. No commitment 2. Commitment but not involvement 3. Commitment with less than 50% involvement 4. Commitment with between 51% to 80% involvement 5. Commitment with above 80% involvement 6. Commitment with above 80% involvement including community mobilization
Literacy	▪ Women literacy rate	LQAS (Module1)	31.2%	17.9	
Socio-economic status	▪ HDI (LE, PCI/GNP, Literacy)	UNDP, 2004	59%	44.0	
		Total		**301.9**	
		Average		**43.1**	

Outcome of CS Sustainability Assessment Framework Workshop of Parsa district, August 2011

- % of fulfillment of sanctioned post
- % of trained human resource including FCHVs on program package (CB-NCP)
- Availability and use of tools (OPD register, services register, child health card, treatment book) at HF level
- Availability and use of monthly monitoring sheet (ARI treatment book, home therapy card, referral book, classification card, cotrimoxazole, timer) at community level
- % of HF with financial audit
- % of HF with their own building
- % of HF with space for delivery
- % of HF with toilet & water
- % of HFMC with monthly meeting
- % of Ilaka level monthly reporting & meeting

- Mortality
- Immunization
- Nutrition
- CB-IMCI
- Safe motherhood
- Family planning
- Sanitation
- Recording and reporting

- Immunization clinic held per month
- Dalit/Janajati children immunized measles vaccine.
- ORC clinic held per month people served by per clinic
- VHW/MCHWs attendance in mother's group meeting
- % of LMIS report received by quarterly basis
- % of stock out of 10 essential drug commodities + gentamycine
- % of supervision and monitoring of HF



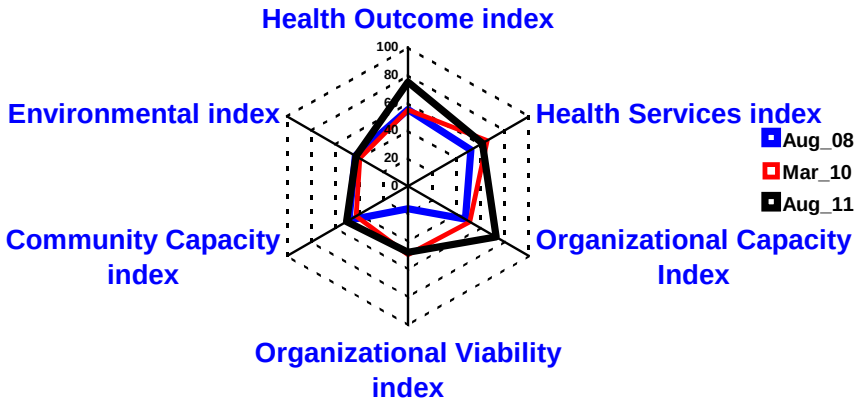
- % of mother of children of 0-5 months who knows at least two danger sign during pregnancy
- % of VDC with access to emergency fund for delivery.
- % of PHC/ORC conducted
- Regularity of meeting
- % of HFMC formed as per protocol (marginalized, so-called Dalit, women)
- Decision made in the favor of Dalit and women

- % of HF with staff support from local governing body
- % of HF support for FCHV monthly meeting at community level
- Monthly performance & planning meeting at HF level with representation of DHO/Ilaka and VDC/HFMC
- % of HF social/public audit conducted

- Policy on child rights
- Policy on women rights
- Priority on child and maternal health programs
- Involvement of political (formal and informal) leaders in health campaign
- Political commitment on health related issues.
- Women literacy rate
- HDI (LE, PCI/GNP, Literacy)

Sustainability dashboard of Parsa District Aug 2008, March 2010 and Aug 2011

Sustainability Dashboard



Dimension	Component #	Component	Indices (Aug 2008)	Indices (Mar 2010)	Indices (Aug 2011)
1	1	Health Outcome index	**54.97**	**54.76**	**75.01**
	2	Health Services index	**52**	**65.7**	**61.5**
2	3	Organizational Capacity Index	**47.5**	**51.2**	**72.9**
	4	Organizational Viability index	**16.2**	**49.2**	**47.5**
3	5	Community Capacity index	**48.9**	**42.9**	**50.7**
	6	Environmental index	**43.7**	**40**	**43.1**

CSSA Action plan – Parsa district, Aug 2011

Dimension 1: Component 1: Health outcomes

Indicators	Current Status	Expected outcome	Activities to be done	By when	By whom	Remarks
▪ Neonatal mortality rate	3.3%	2.8%	▪ Awareness raising program through FM, mother's group meeting, mass campaigning and pregnant women group (PWG) ▪ Counseling during antenatal check-up (ANC) and postnatal check-up (PNC) visit ▪ Mobilization of Female Community Health Volunteers(FCHV) ▪ Effective continuation of Community Based-Newborn Care Program (CB-NCP) implementation activities ▪ Delivery from Skill Birth Attendant (SBA) ▪ Promotion of institutional delivery practices ▪ Availability of trained human resources ▪ Timely fulfillment of the vacant positions	Aug 2012	DDC/VDC DPHO HF WDO VDC NFHP-II	
▪ Maternal mortality ratio	0.28%	0.24%	▪ Awareness raising program through FM, mother's group meeting, mass campaigning and pregnant women group (PWG) ▪ Counseling during antenatal check-up (ANC) and postnatal check-up (PNC) visit ▪ Mobilization of on Female Community	Aug 2012	DDC/VDC DPHO HF WDO VDC	

Indicators	Current Status	Expected outcome	Activities to be done	By when	By whom	Remarks
			Health Volunteers (FCHV) ▪ Effective Continuation of Community Based-Newborn Care Program (CB-NCP) implementation activities ▪ Delivery from Skill Birth Attendant (SBA) ▪ Promotion of institutional delivery practices ▪ Availability of trained human resources ▪ Timely fulfillment the vacant position		NFHP-II	
▪ % of BCG coverage	95%	97%	▪ Awareness raising program through FM, mother's group meeting, mass campaigning and pregnant women group (PWG) ▪ Maintain and regularize EPI program ▪ Fulfill the vacant position ▪ Supportive supervision and monitoring ▪ Timely reporting	Aug 2012	DDC/VDC DPHO HF NFHP-II	
▪ % of HB/DPT III coverage	90%	97%	▪ Awareness raising program through FM, mother's group meeting, mass campaigning and pregnant women group (PWG) ▪ Maintain and regularize EPI program ▪ Supportive supervision and monitoring ▪ Fulfill the vacant position ▪ Timely reporting	Aug 2012	DDC/VDC DPHO HF NFHP-II	

Indicators	Current Status	Expected outcome	Activities to be done	By when	By whom	Remarks
▪ % of Measles coverage	85%	97%	▪ Awareness raising program through FM, mother's group meeting, mass campaigning and pregnant women group (PWG) ▪ Maintain and regularize EPI program ▪ Supportive supervision and monitoring ▪ Fulfill the vacant position ▪ Timely reporting	Aug 2012	DDC/VDC DPHO HF NFHP-II	
▪ % of TT2 coverage	70%	80%	▪ Awareness raising program through FM, mother's group meeting, mass campaigning and pregnant women group (PWG) ▪ Counseling during ANC and PNC ▪ Promote school health program and continue TT campaign in school ▪ Regular supply of TT vaccine	Aug 2012	DPHO HF NFHP-II	
▪ % of under weight children of under 5 years	6%	5%	▪ Continue the existing nutrition program ▪ Awareness raising program through FM, mother's group meeting, mass campaigning and pregnant women group (PWG) ▪ Counseling during ANC and PNC	Aug 2012	DPHO HF NFHP-II	
▪ % of new growth monitoring of under 5 years children	56%	65%	▪ Continue the existing nutrition program ▪ Awareness raising program through FM, mother's group meeting, mass	Aug 2012	DPHO HF	

Indicators	Current Status	Expected outcome	Activities to be done	By when	By whom	Remarks
			campaigning and pregnant women group (PWG) ▪ Counseling during ANC and PNC		NFHP-II	
▪ % of mother who breastfed within one hour after child birth	78.9%	85%	▪ Awareness raising program through FM, mother's group meeting, mass campaigning and pregnant women group (PWG) ▪ Continue the CB-NCP ▪ Counseling during ANC and PNC ▪ Promotion of health institution delivery practices	Aug 2012	DPHO HF NFHP-II	
▪ % of exclusive breastfeeding of under 6 months	98.7%	Maintain	▪ Awareness raising program through FM, mother's group meeting, mass campaigning and pregnant women group (PWG) ▪ Continue the CB-NCP ▪ Counseling during ANC and PNC visit (focus on FP) ▪ Promoting of institution delivery practices	Aug 2012	DPHO HF NFHP-II	
▪ % of mother of children aged 0-5 months consuming/folic acid tablet at 6 months during their pregnancy	77.7%	90%	▪ Awareness raising program through FM, mother's group meeting, mass campaigning and pregnant women group (PWG) ▪ Activate MGM ▪ Regular supply of Iron tablet	Aug 2012	DPHO HF NFHP-II	

Indicators	Current Status	Expected outcome	Activities to be done	By when	By whom	Remarks
			▪ Counseling during ANC and PNC visit ▪ Regular supply of Iron tablet up to FCHV level			
▪ % of mother of children aged 0-5 months who received vitamin 'A' 200000 IU within 45 days of their birth	83.4%	90%	▪ Awareness raising program through FM, mother's group meeting, mass campaigning and pregnant women group (PWG) ▪ Activate MGM ▪ Regular supply of Vit 'A' ▪ Counseling during ANC and PNC visit	Aug 2012	DPHO HF NFHP-II	
▪ % of pregnant mother supplemented with albendazole	87.9%	95%	▪ Awareness raising program through FM, mother's group meeting, mass campaigning and pregnant women group (PWG) ▪ Counseling during ANC ▪ Regular and timely supply of albendazole	Aug 2012	DPHO HF NFHP-II	
▪ % of severe pneumonia & very severe disease among total cases	0.6%	0.5%	▪ Continue CB-NCP and CB-IMCI ▪ Awareness raising program through FM, mother's group meeting, mass campaigning and pregnant women group (PWG) ▪ Counseling during ANC and PNC ▪ Regular supply of Cotrim HF to FCHVs	Aug 2012	DPHO HF NFHP-II	

Indicators	Current Status	Expected outcome	Activities to be done	By when	By whom	Remarks
▪ Incidence of Diarrhea/1,000 population	37%	30%	▪ Awareness raising program through FM, mother's group meeting, mass campaigning and pregnant women group (PWG) ▪ Promotion of personal hygiene ▪ Proper use of toilet ▪ Pure drinking water and fresh food ▪ Counseling during ANC and PNC ▪ Regular supply of Zinc and ORS at HF and FCHV	Aug 2012	DPHO HF NFHP-II	
▪ % of severe dehydration among total cases	0.05%	0.05%	▪ Awareness raising program through FM, mother's group meeting, mass campaigning and pregnant women group (PWG) ▪ Promotion of personal hygiene ▪ Proper use of toilet ▪ Pure drinking water and fresh food ▪ Counseling during ANC and PNC ▪ Regular supply of ORS and Zinc to HF and FCHV	Aug 2012	DPHO HF NFHP-II	
▪ % of 4 times ANC visit	68%	75%	▪ Awareness raising program through FM, mother's group meeting, mass campaigning and pregnant women group (PWG) ▪ Counseling and promotion of ANC visit	Aug 2012	DDC/VDC DPHO HF NFHP-II	

Indicators	Current Status	Expected outcome	Activities to be done	By when	By whom	Remarks
			▪ Timely fulfillment of the vacant positions			
▪ % of delivered at institutional by SBA *(Doctor, Nurse, ANM whether received training or not)*	59.5%	75%	▪ Produce more SBA and provide trainings to health staff ▪ Promotion of institution delivery practices ▪ Establish birthing center ▪ Counseling and promotion of ANC visit ▪ Awareness raising program through FM, mother's group meeting, mass campaigning and pregnant women group (PWG)	Aug 2012	DPHO HF NFHP-II	
▪ % of mothers with children aged 0-5 months (and their newborns) who received a first checkup by a skilled provider (doctor or nurse or HA or AHW or ANM) within the first two days of birth	98.8%	Maintain	▪ Produce SBAs ▪ Promotion of institution delivery practices ▪ Establish birthing centers ▪ Counseling and promotion of ANC visit and PNC visit ▪ Awareness raising program through FM, mother's group meeting, mass campaigning and pregnant women group (PWG)	Aug 2012	DPHO HF NFHP-II	
▪ % of mothers of children aged 0-5 months who know at least two danger sign during delivery	91.5%	95%	▪ Awareness raising program through FM, mother's group meeting, mass campaigning and pregnant women group (PWG) ▪ Counseling during ANC visit and PNC visit	Aug 2012	DPHO HF NFHP-II	

Indicators	Current Status	Expected outcome	Activities to be done	By when	By whom	Remarks
▪ % of mothers of children aged 0-5 months who know at least two danger sign among newborns	97.6%	Maintain	▪ Awareness raising program through FM, mother's group meeting, mass campaigning and pregnant women group (PWG) ▪ Counseling during ANC visit and PNC visit	Aug 2012	DPHO HF NFHP-II	
▪ % of newborns immediately after birth, who were dried off, exposed to a heating source (including kangaroo care) and avoided bathing for 24 hours	89.5%	95%	▪ Continue CB-NCP program ▪ Awareness raising program through FM, mother's group meeting, mass campaigning and pregnant women group (PWG) ▪ Counseling during ANC visit and PNC visit	Aug 2012	DPHO HF NFHP-II	
▪ Contraceptive Prevalence Rate (CPR)	67%	70%	▪ Awareness raising program through FM, mother's group meeting, mass campaigning and pregnant women group (PWG) ▪ Counseling during ANC visit and PNC visit ▪ Regular supply of temporary family planning at HF and FCHV ▪ Increase trained human resources	Aug 2012	DPHO HF NFHP-II	
▪ % of mothers of children age 0-23 months who live in households with soap at the place for hand washing	72.9%	80%	▪ Promotion of personal hygiene ▪ Awareness raising program through FM, mother's group meeting, mass campaigning and pregnant women group (PWG) ▪ Counseling during ANC visit and PNC visit	Aug 2012	DPHO HF NFHP-II	

Indicators	Current Status	Expected outcome	Activities to be done	By when	By whom	Remarks
▪ % of timely reporting	83%	100%	▪ Develop and provide regular feedback and coaching practices ▪ Regular follow-up for timely reporting	Aug 2012	DPHO HF NFHP-II	

Dimension 1: Component 2: Health services

Indicators	Current Status	Expected outcome	Activities to be done	By when	By whom	Remarks
▪ Immunization clinic held per month	5	6	▪ Maintain the running immunization clinic ▪ Reactivate immunization clinics ▪ Supportive supervision and monitoring ▪ Regular supply ▪ Timely fulfillment of vacant position ▪ Mobilization of FCHVs	Aug 2012	DPHO HF NFHP-II	
▪ Dalit/Janjati children immunized measles vaccine.	5	6	▪ Awareness raising program through FM, mother's group meeting, mass campaigning and pregnant women group (PWG) ▪ Regular EPI clinic ▪ Mobilization of FCHVs ▪ Timely fulfillment of vacant position ▪ Follow-up for recording and reporting based on disaggregated data	Aug 2012	DPHO HF NFHP-II FCHV	

▪ ORC clinic held per month people served by per clinic	2	3	▪ Maintain running ORC clinics ▪ Reactivate ORC clinic ▪ Supportive supervision and monitoring ▪ Regular supply ▪ Timely fulfillment of vacant position ▪ Mobilization of FCHVs	Aug 2012	DPHO HF NFHP-II FCHV	
▪ VHW/MCHW attendance in mother's group meeting	3	4	▪ Regular meetings of MGMs ▪ Timely fulfillment of vacant position ▪ Supportive supervision and monitoring ▪ Mobilize FCHV and VHW/MCHW	Aug 2012	DPHO HF NFHP-II FCHV	
▪ % of LMIS report received by quarterly basis	83%	100%	▪ Develop and provide feedback and coaching practices ▪ Regular follow-up for timely reporting	Aug 2012	DPHO HF NFHP-II	
▪ % of stock out of 10 essential drug commodities + gentamycine	5	6	▪ Regular supply ▪ Supportive supervision and monitoring	Aug 2012	DPHO HF NFHP-II	
▪ % of supervision and monitoring of HF	4	5	▪ Supportive supervision and monitoring ▪ Feedback and coaching during visit ▪ Practice to develop and provide field visit reports.	Aug 2012	DPHO HF NFHP-II	

Dimension 2: Component 1: Organizational Capacity

Indicators	Current Status	Expected outcome	Activities to be done	By when	By whom	Remarks
▪ % of fulfillment of sanctioned post	95%	99%	▪ Increase and initiate advocacy for support in hiring ANM/ CMA/ to VDC/DDC ▪ Request for timely fulfillment of vacant posts to DoHS, RHD/MoHP	Aug 2012	DPHO/ HFs DDC/ VDC	
▪ % of trained human resource including FCHVs on program package (CB-NCP)	96%	99%	▪ Training to new FCHVs/HWs	Aug 2012	DPHO/CHD	
▪ Availability and use of tools (OPD register, services register, child health card, treatment book) at HF level	5	6	▪ Timely logistics supply and proper use	Aug 2012	LMD DPHO/ HFs/NFHP	
▪ Availability and use of monthly monitoring sheet (ARI treatment book, home therapy card, referral book, classification card, cotrimoxazole, timer) at community level	5	6	▪ Organize and maintain regular of monthly Ilaka meeting ▪ Organize Quarterly review meeting ▪ Proper logistics demand and supply on quarterly basis	Aug 2012	LMD HFs/ DPHO/ store /NFHP	

Indicators	Current Status	Expected outcome	Activities to be done	By when	By whom	Remarks
▪ % of HF with financial audit	6	Maintain	▪ Regularity of financial audits	Aug 2012	HF/ DPHO/ NFHP	
▪ % of HF with their own building	60%	70%	▪ Coordination and net working with DDC/VDCs ▪ Advocacy for HF building construction	Aug 2012	DPHO/ HFs/ MoHP	
▪ % of HF with space for delivery	4	5	▪ Explore the need of space for delivery ▪ Advocacy for /Promotion of institutional deliveries	Aug 2012	HFs/ DPHO	
▪ % of HF with toilet & water	4	5	▪ Provision of toilets and water supply	Aug 2012	DDC/VDC/DPHO/ Concern NGOs/ INGOs/NRCS/ District water and sanitation office	
▪ % of HFMC with monthly meeting	5	6	▪ Instruction for regular Monthly meeting ▪ Supervision and monitoring ▪ Proper feedback	Aug 2012	HF incharge/ DPHO	

Indicators	Current Status	Expected outcome	Activities to be done	By when	By whom	Remarks
▪ % of Ilaka level monthly reporting & meeting	100%	Maintain	▪ Regularity of meeting	Aug 2012	HF/DPHO	

Dimension 2: Component 2: Organizational Viability

Indicators	Current Status	Expected outcome	Activities to be done	By when	By whom	Remarks
▪ % of HF with staff support from local governing body	3	4	▪ Net working and coordination with governance bodies. ▪ Advocacy for staff recruitments	Aug 2012	VDC/ DDC/ DPHO/MoHP	
▪ % of HF support for FCHV monthly meeting at community level	5	6	▪ Advocacy for support ▪ Monitoring & supervision ▪ Boost up the morale of HWs to facilitate the meetings	Aug 2012	VDC/HFs/DPHO	
▪ Monthly performance & planning meeting at HF level with representation of DHO/Ilaka and VDC/HFMC	4	5	▪ Instruction for regular Monthly meeting ▪ Supervision and monitoring ▪ Proper feedback ▪ Regularity of meeting	Aug 2012	VDC/HFs/DPHO	

▪ % of HF social/public audit conducted	1	3	▪ Regularity of social audit linking with free health services (FHS) program	Aug 2012	HF/ HFMC/DPHO	

Dimension 3: Component 1: Community Competence/Capacity

Indicators	Current Status	Expected outcome	Activities to be done	By when	By whom	Remarks
▪ % of mother of children of 0-5 months who knows at least two danger sign during pregnancy	96.8%	Maintain	▪ Continue health education to mothers groups and pregnant women, husband, mother-in-laws (by using mother cards) ▪ Health education to interest group of Women and Children Office (WCO) (by using mother cards) ▪ Female Community Health Volunteer (FCHV) to disseminate the key health message about danger sign during pregnancy	Aug 2012	DPHO WCO I/NGO NFHP-II RHCC	
▪ % of VDC with access to emergency fund for delivery.	34.1%	84%	▪ Coordinate with Local governance community development program of DDC to mobilize resources for emergency fund for delivery	Aug 2012	WCO, NGOCC, DDC/VDC/ Municipality DPHO	79 VDCs out of 82
▪ % of PHC/ORC conducted	50%	60%	▪ Supportive supervision and logistic	Aug 2012	DDC/VDC	

Indicators	Current Status	Expected outcome	Activities to be done	By when	By whom	Remarks
			supply by DPHO ▪ Demand creation: awareness to mother group and pregnant women group ▪ Timely fulfillment of the vacant position		DPHO WCO	
▪ Regularity of meeting - HFMC	27.8%	50%	▪ Allocate budget for snacks for meeting	Aug 2012	DPHO HFMC	
▪ % of HFMC formed as per protocol (marginalized, so-called Dalit, women)	75%	85%	▪ Awaken and remind about HFMC protocol at monthly district review meeting and also in Ilaka level review meeting	Aug 2012	DPHO	
▪ Decision made in the favor of Dalit and women	5	Maintain	▪ Coordinate with DDC to mobilize VDC fund during the VDC secretary meeting ▪ Coordination with LGCDP	Aug 2012	WCO DEO DPHO	

Dimension 3: Component 2: Ecological, human, Economic, Political & Policy Environment

Indicators	Current Status	Expected outcome	Activities to be done	By when	By whom	Remarks
▪ Policy on child rights	3	4	▪ Advocacy and coordinate with DDC/VDC for fund allocation during the VDC secretary meeting ▪ Advocacy and coordination with Local Government Community Development Program (LGCDP) ▪ Advocacy campaign	Aug 2012	WCO and DCWB Paralegal committee DEO DPHO Child Club	
▪ Policy on women rights	3	4	▪ Advocacy and coordinate with DDC/VDC for fund allocation during the VDC secretary meeting ▪ Advocacy and coordination with Local Government Community Development Program (LGCDP) for local health governance strengthening program by linking with PWG and CB-NCPs ▪ Advocacy campaigns	Aug 2012	DDC / VDC WCO Paralegal committee	
▪ Priority on child and maternal health programs	5	Maintain	▪ Continue monitoring of CBNCP, BPP and CBIMCI programs ▪ Continue pregnant women groups	Aug 2012	DPHO	

▪ Involvement of political (formal and informal) leaders in health campaign	3	4	▪ Pre-campaign meeting with all GOs, NGOs, INGOs and political parties ▪ Mobilization of women groups of WDO ▪ Resource Person (RP) for monthly meeting – open school in campaign day	Aug 2012	DDC/DAO DPHO WCO DEO	
▪ Political commitment on health related issues.	3	4	▪ Advocacy for commitment by political parties for health related issues of Parsa district	Aug 2012	DDC/DPHO	
▪ Women literacy rate	31.2%	35%	▪ Women literacy plan via community learning centers (CLC) ▪ Continue formal girls education	Aug 2012	DEO	50 classes X 30 persons
▪ HDI (LE, PCI/GNP, Literacy)	59%	59%	▪ Livehood support program ▪ Literacy campaign	Aug 2012	DDC / VDC DEO, I/NGOs UNICEF	

RECOMMENDATION:

- Continuity for monitoring of data collection through Lot Quality Assurance Sampling (LQAS) survey technique
- Coordination for CSSA action plan by sharing with stakeholders (DDC and VDC secretary network) and implementation as per action plan
- Orientation to mother's group meeting for the role and responsibilities of MG and maternal and child health package
- Strengthening of PHC/ORC *(timely logistic supply, management and supportive supervision)*
- Review and refresher training of CB-NCP and recording reporting
- Integrated child health review meeting to be expand from 3 to 4 days - CHD
- Review and follow-up of CSSA workshop
- CB-NCP and CB-IMCI form and format to be regularly available through government existing supply system
- CB-NCP training to be provided to newly transfer and hired staff
- Ensure the involvement of municipality health staff in district level health program activities
- CB-NCP program to be introduced in health facilities of municipalities areas in coordination with Child Health Division and PHC revitalization divisions
- Orientation of cold-chain management to focal person in Ilaka health facilities
- Maintenance of freeze/defreeze or new supply
- Continue support from Plan Nepal for three years
- Introduce of Local Health Governance Strengthening (LHGS) program into LGCDP
- Dissemination of health message through mass media such as FM
- Mass campaign and PWG/MGM continuity and follow-up

4.8 CSSA Survey Report – Sunsari District (9 – 11 August, 2011)

Major Findings and Results

Sunsari

The three days CSSA workshop was held from 9 – 11 August 2011 in Inaruwa, Sunsari. The participants were representing from DHO, Municipalities, DDCs, DEO, DWO, CDO, local partner and others. They were aware on child survival evolution and sustainability assessment. After that, the participants were involved in preparing the coverage/measure of each indicator defined in last workshop on January 2010 and shared the individual dimension in the respective groups then it was finalized in the plenary session. The outcomes of the each indicator support to prepare dashboard as well as spider web graphic with the help of black box. Based on the findings, team has prepared the plan of action with remarkable recommendation for the further improvement and achievement in future. The overall, there is no any decrease in the results of achievement in this district except in Dimension 2 component 4, organizational viability, but, increase in achievement 3, component 5 and 6 namely Organizational Capacity, Community capacity and environment respectively however, component-5 is quite remarkable like 80% in 2011 from 34% in 2008. But, on the whole, the results are quite encouraging towards sustainability.

Some of the results are as high as up to 80% in 2011 compared to low results of 47% in Mid Term as per the Dash board and the result table, but, increasing trend is quite encouraging. Now, focus is needed for a more informed, balance and harmonious progress towards sustainability. But, compared to 2008 and 2010, the results have been remarkably increased like component 1 health outcome 58% from 45%; component 2 Health services 81% from 57%; component 3 Organizational capacity 60% from 45%; component 5 Community Capacity 80% from 40%; and component 6 Environmental Index 54% from 35% except component 4 Organization viability which is slightly increased by 47% from 43% in Final 2011 from the initial phase 2008.

So, there are enough roles to promote organizational viability in future.

At the end of the workshop, participants make specific recommendations to improve the situation of child and mother's health condition based on the findings and the results including their past experiences and lessons learned. Recommendations are included after action plan.

Measuring the status of individual indicators:

Indicators and measure exercise during CSSA workshop of Sunsari district held in 9 – 11 August 2011

Dimension 1: Component 1: Health outcomes

Elements	Indicators	Source of Information	Measure (% or scale)	Score
▪ Immunization	▪ % of BCG coverage	▪ HMIS	92%	84.0
	▪ % of DPT/HB III coverage	▪ HMIS	80%	73.4
	▪ % of measles coverage	▪ HMIS	81%	66.7
▪ Nutrition	▪ % of under weight children below 5 years (* under 3 years)	▪ HMIS	3.3%	91.0
	▪ % of children under 6 months exclusively breastfed	▪ LQAS	74.7%	81.4
	▪ Average number of growth monitored (20 times = 100%)	▪ HMIS	16.5%	6.3
	▪ % of post partum mother received vitamin 'A'	▪ HMIS	84%	56.1
▪ Pneumonia	▪ % of pneumonia among new cases of under five	▪ HMIS	41%	28.0
	▪ % of children treated by Cotrim during pneumonia	▪ HMIS	100%	28.0
▪ Diarrhea	▪ % of children treated by ORS	▪ HMIS	88%	92.0
▪ Safe Motherhood	▪ % of pregnant women who visit at least 4 times for ANC	▪ HMIS	44%	37.1
	▪ % of mother consumed iron tablet during pregnancy at least 4 months	▪ LQAS	93%	74.8
▪ Family Planning	▪ CPR (Contraceptive Prevalence Rate)	▪ HMIS	50%	35.1
		Total		753.9
		Average		**58.0**

Dimension 1: Component 2: Health services

Elements	Indicators	Source of Information	Measure (% or scale)	Score
▪ Immunization clinic	▪ % of functional EPI clinic (12 months data of FY'067/68)	▪ HMIS	98%	96.0
▪ Community based intervention (IMCI)	▪ % of mothers group meeting held in a year per FCHV	▪ HMIS	77%	62.7
▪ Monitoring & Supervision	▪ % of monthly Ilaka review meeting (12 months of FY'067/68)	▪ DHO report	100%	100.0
▪ Recording & reporting	▪ % timely reporting	▪ HMIS	100%	100.0
▪ Institutional delivery	▪ % of delivery conducted by skilled birth attendant	▪ HMIS	65%	50.1
▪ Health institution	▪ % of availability of essential drugs *(seven commodities)*	▪ Group discussion, LMIS	90%	80.0
		Total		488.7
		Average		81.5

Dimension 2: Component 1: Organizational Capacity

Elements	Indicators	Source of Information	Measure (% or scale)	Score	Definition of scale (where we are using scale)
▪ Functional Health Facility Management Committee	▪ % of monthly meeting	▪ HMIS, Group discussion	3	40.0	1. 0-2 times 2. 3-4 times 3. 5-6 times 4. 7-8 times 5. 9-10 times 6. 11-12 times
▪ Human resource	▪ % of fulfillment of sanctioned position of health facility of FY'67/68	▪ DHO report	95%	90.0	
▪ Public/Social audit	▪ % of HF have done public/social audit in annual basis	▪ DHO report	1	10.1	1. 0 – 9 HFs 2. 10 – 18 HFs 3. 19 – 27 HFs 4. 28 – 36 HFs 5. 37 – 45 HFs 6. 46 – 52 HFs
▪ Health facility Planning	▪ % of HF having the regular health program Plan	▪ Group discussion	6	100.0	1. 0 – 9 HFs 2. 10 – 18 HFs 3. 19 – 27 HFs 4. 28 – 36 HFs 5. 37 – 45 HFs 6. 46 – 52 HFs
		Total		**240.1**	
		Average		**60.0**	

Dimension 2: Component 2: Organizational Viability

Elements	Indicators	Source of Information	Measure (% or scale)	Score	Definition of scale (where we are using scale)
▪ Coordination with other related NGO/CBO/GO	▪ Number of coordination meeting held in supporting with NGO/CBO/GO by annual basis (e.g. RHCC meeting)	▪ DHO report	50%	35.1	
▪ Financial resource	▪ Number of health facility who received fund from concerned DDC/VDC and municipality	▪ Health facility report, ▪ Group discussion	6	100.0	1. 0 – 9 HFs 2. 10 – 18 HFs 3. 19 – 27 HFs 4. 28 – 36 HFs 5. 37 – 45 HFs 6. 46 – 52 HFs
▪ Transparency of program and finance	▪ Participation on key stakeholders in annual review/reflection session	▪ Health facility report ▪ Group discussion	50%	35.1	
▪ Participation of social inclusion in decision making	▪ Participation of children, woman, marginalized, disable people in activities against planned	▪ Observation ▪ Minutes ▪ Group discussion	2	20	1. No participations 2. Partial participation 3. Full participation in less than 25% of HF 4. Full participation in 25% to 49% of HFs 5. Full participation in 50% to 74% of HFs 6. Full participation in more than 75% of HFs
		Total		190.2	
		Average		47.6	

Dimension 3: Component 1: Community Competence/Capacity

Elements	Indicators	Source of Information	Measure (% or scale)	Score	Definition of scale (where we are using scale)
▪ Resource generation and mobilization	▪ % of community contribution (cash, kind, land etc.)	▪ Health facility report ▪ Group discussion	6	100.0	1. No contribution 2. <25% contribution in 25% HFs 3. 25% contribution in 25% HFs 4. 25% contribution in 25% to 50% HFs 5. 25% contribution in 50% to 75% HFs 6. 25% contribution in >75% HFs
▪ Decision making	▪ % of female & marginalized group members in Health Facility Management Committee	▪ Health facility ▪ Group discussion	90%	80.0	
▪ Participation in health services	▪ % of mothers group meeting / FCHV	▪ HMIS/DHO report	77%	62.7	
▪ Demand for service	▪ % of mothers who know at least 2 danger sign during ANC	▪ LQAS	91.6%	83.2	
	▪ % of mother who know at least 2 danger sign during PNC	▪ LQAS	86.7%	75.7	
		Total		401.6	
		Average		80.3	

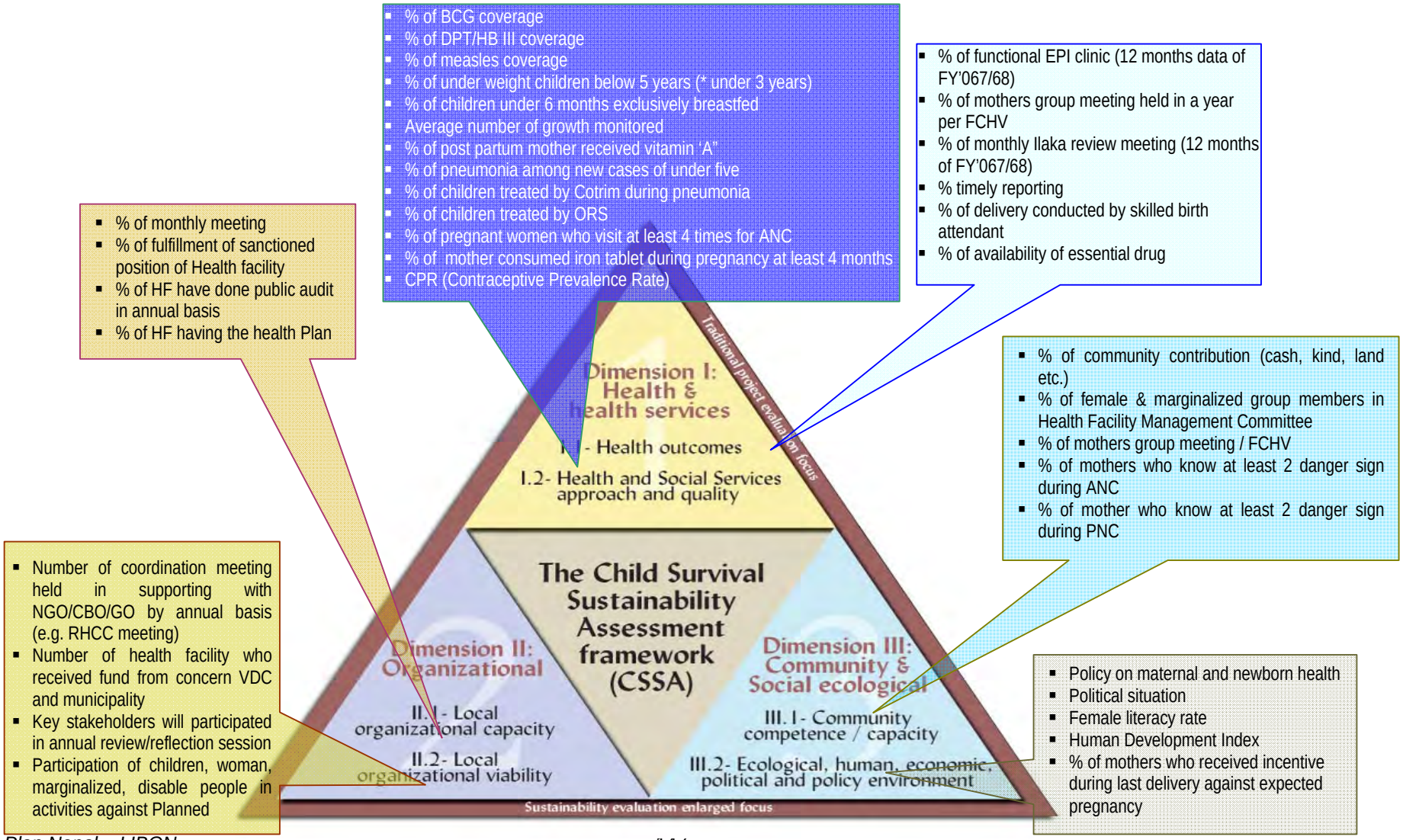
Dimension 3: Component 2: Ecological, human, Economic, Political & Policy

Elements	Indicators	Source of information	Measure (% or scale)	Score	Definition of scale (where we are using scale)
▪ Policy	▪ Policy on maternal and newborn health	▪ MoHP, DHS	5	80.0	1. No policy 2. Policy at place but not implement 3. Policy at place but Planning to implemented 4. Policy implemented 5. Policy implemented with supervision, monitoring, evaluation; and 6. Policy implemented and sustained
▪ Political stability	▪ Political situation	▪ Community ▪ DDC ▪ Newspaper	5	80.0	1. Worse situation 2. Access to movement in 25% HFs 3. Access to movement in 26% to 50% HFs 4. Access to movement in 51% to 75% HFs 5. Access to movement in 76% to 100% HFs 6. Full secure
▪ Literacy	▪ Female literacy rate	▪ (LQAS-2)	65.3%	50.4	
▪ Income/purchasing power	▪ Human Development Index	▪ ICIMOD ▪ UNDP	50%	35.1	
▪ Economic	▪ % of mothers who received incentive during last delivery as per pregnancy (institutional delivery)	▪ DHO report	38.8%*	23.8	
		Total		269.2	
		Average		53.8	

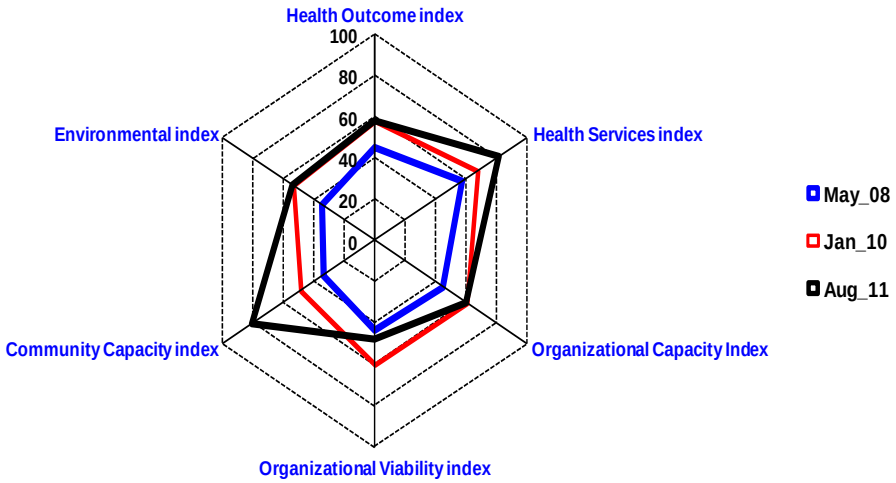
** Excluded the institutional delivery of 8,767 of BPKIHS (BP Koirala Institute of Health Science) among 14,339 delivery of Sunsari distric*

Step 2 & 3: 2. Identifying elements for the local system; 3. Choosing indicators to identify scales to assess the progress they measure

Outcome of CS Sustainability Assessment Framework Workshop of Sunsari district, August 2011



Sustainability Dashboard



Dimension	Component #	Component	Indices (May 2008)	Indices (Jan 2010)	Indices (Aug 2011)
1	1	Health Outcome index	**45.2**	**58**	58
	2	Health Services index	**57.9**	**67.6**	81.5
2	3	Organizational Capacity Index	**45.0**	**60.5**	60
	4	Organizational Viability index	**43.1**	**60**	47.6
3	5	Community Capacity index	**33.9**	**48.7**	80.3
	6	Environmental index	**35.0**	**53.6**	53.8

Action Plan
CSSA workshop of Sunsari district held on Aug 2011

Dimension 1: Component 1: Health outcomes

Indicators	Measure (% or scale)	Activities to be done	Expected Outcome	By when	By Whom
▪ % of BCG coverage	92%	▪ Prompt fulfillment if vacant positions ▪ Mobilize FCHVs ▪ Increase counseling in ORC ▪ Counseling during ANC ▪ Regularize monthly FCHVs meetings ▪ Awareness raising through FM, mass campaign, MGM, PWG ▪ Regular supply of materials, drugs	95%	Aug 2012	MoHP, DHO, HFs, VHW/MCHW, FCHVs, World Vision, Plan Nepal
▪ % of DPT/HB III coverage	80%	▪ Prompt fulfillment if vacant positions ▪ Mobilize FCHVs ▪ Increase counseling in ORC ▪ Counseling during ANC ▪ Regularize monthly FCHVs meetings ▪ Awareness raising through FM, mass campaign, MGM, PWG ▪ Regular supply of materials, drugs	90%	Aug 2012	MoHP, DHO, HFs, VHW/MCHW, FCHVs, World Vision, Plan Nepal
▪ % of measles coverage	81%	▪ Prompt fulfillment if vacant positions ▪ Mobilize FCHVs ▪ Increase counseling in ORC ▪ Counseling during ANC ▪ Regularize monthly FCHVs meetings ▪ Awareness raising through FM, mass campaign, MGM, PWG ▪ Regular supply of materials, drugs	90%	Aug 2012	MoHP, DHO, HFs, VHW/MCHW, FCHVs, World Vision, Plan Nepal

Indicators	Measure (% or scale)	Activities to be done	Expected Outcome	By when	By Whom
▪ % of under weight children below 5 years (*under 3 years)	3.3%	▪ Maintain and continue the exiting program and activities	3%	Aug 2012	MoHP, DHO, HFs, VHW/MCHW, FCHVs, World Vision, Plan Nepal
▪ % of children under 6 months exclusively breastfed	74.7%	▪ Awareness raising through FM, mass campaign, MGM, PWG ▪ BPP counseling during ANC and PNC ▪ Regularize ORC and EPI session	80%	Aug 2012	MoHP, DHO, HFs, VHW/MCHW, FCHVs, World Vision, Plan Nepal
▪ Average number of growth monitored (20 times = 100%)	16.5%	▪ Mobilize FCHVs ▪ Growth monitoring of ORC and EPI session with supervision and monitoring ▪ BPP counseling during ANC and PNC ▪ Well maintain timely recording reporting (IMCI)	20%	Aug 2012	MoHP, DHO, HFs, VHW/MCHW, FCHVs, World Vision, Plan Nepal
▪ % of post partum mother received vitamin 'A'	84%	▪ Regular supply ▪ Systematical collection of records and reporting from municipalities	90%	Aug 2012	Store, DHO, HFs, VHW/MCHW, FCHVs
▪ % of pneumonia among new cases of under five	41%	▪ Mobilize FCHV and VHW/MCHW effectively ▪ Awareness raising during MGM ▪ Early cases deduction and treatment seeking ▪ Re-strengthening of ORC clinic	30%	Aug 2012	DHO, HFs, VHW/MCHW, FCHVs
▪ % of children treated by Cotrim during pneumonia	100%	▪ Maintain and continue the existing program and activities	Maintain	Aug 2012	DHO, HFs, VHW/MCHW, FCHVs

Indicators	Measure (% or scale)	Activities to be done	Expected Outcome	By when	By Whom
▪ % of children treated by ORS	88%	▪ Maintain and continue the existing program and activities ▪ Regular supply of ORS	90%	Aug 2012	DHO, HFs, VHW/MCHW, FCHVs
▪ % of pregnant women who at least 4 times visit for ANC	44%	▪ Awareness raising through FM, mass campaign, MGM, PWG ▪ BPP counseling during ANC ▪ Regularize ORC and EPI session	50%	Aug 2012	MoHP, DHO, HFs, VHW/MCHW, FCHVs, World Vision, Plan Nepal
▪ % of mother consumed iron tablet during pregnancy at least 4 months	93%	▪ Regular supply of Iron tablet ▪ Awareness raising through FM, mass campaign, MGM, PWG ▪ BPP counseling during ANC	95%	Aug 2012	MoHP, DHO, HFs, VHW/MCHW, FCHVs, World Vision, Plan Nepal
▪ CPR (Contraceptive Prevalence Rate)	50%	▪ Regular supply of contraceptives ▪ Awareness raising through FM, mass campaign, MGM, PWG ▪ Counseling during ANC and PNC	Maintain	Aug 2012	DHO, HFs, VHW/MCHW, FCHVs, FP, MS,

Dimension 1: Component 2: Health services

Indicators	Measure (% or scale)	Activities to be done	Expected Outcome	By when	By Whom
▪ % of functional EPI clinic (12 months data of FY'067/68)	98%	▪ Prompt fulfillment if vacant positions ▪ Regular supply ▪ Re-strengthening EPI clinic	Maintain	Aug 2012	MoHP, DDC, DHO, HFs, VHW/MCHW
▪ % of mothers group meeting held in a year per FCHV	77%	▪ Regularize the mother group meeting ▪ Regular supply of IEC ▪ Supportive supervision and monitoring ▪ Regular participation of VHW/MCHW	85%	Aug 2012	DHO, HFs, VHW/MCHW, FHCV
▪ % of monthly Ilaka review meeting (12 months of FY'067/68)	100%	▪ Continue and maintain the monthly Ilaka review meeting	Maintain	Aug 2012	DHO, HFs
▪ % timely reporting	100%	▪ Continue and maintain for timely recording report	Maintain	Aug 2012	DHO, HFs
▪ % of delivery conducted by skilled birth attendant	65%	▪ Promote institutional delivery ▪ Counseling during ANC ▪ Strengthening of recording and reporting system	70%	Aug 2012	DHO, HFs
▪ % of availability of essential drug	90%	▪ Regular supply of essential drug ▪ Coordination with central/regional level	100%	Aug 2012	DHO, HFs

Dimension 2: Component 1: Organizational Capacity

Indicators	Measure (% or scale)	Activities to be done	Expected Outcome	By when	By Whom
▪ % of monthly meeting (HFMC)	3	▪ Regularize HFMC meeting ▪ Coordination with community	4	Aug 2012	DHO, HFMC, HF
▪ % of fulfill of sanctioned position of health facility of FY'67/68	95%	▪ Coordination with central and regional level to fulfill the vacant position	98%	Aug 2012	MoHP, DHO, DDC
▪ % of HF have done public/social audit in annual basis	1	▪ Coordinate with HFMC and community	2	Aug 2012	DHO, HFs
▪ % of HF having the regular health program Plan	6	▪ Maintain the existing program and activities	Maintain	Aug 2012	DHO, HFs

Dimension 2: Component 2: Organizational Viability

Indicators	Measure (% or scale)	Activities to be done	Expected Outcome	By when	By Whom
▪ Number of coordination meetings with NGO/CBO/GO by annual basis (RHCC meeting) for mutual support	50%	▪ Regularize annual meeting ▪ Coordination with stakeholders	60%	Aug 2012	DHO, HFs, stakeholders and partners
▪ Number of health facility who received fund from concerned VDCs and municipality	6	▪ Maintain the existing program and activities	Maintain	Aug 2012	DHO and stakeholders, partners
▪ Key stakeholders will participate in annual review/reflection session	50%	▪ Regularize annual meeting ▪ Coordination with stakeholders	60%	Aug 2012	DHO and stakeholders, partners
▪ Participation of children, woman, marginalized, disable people in activities against Planned	2	▪ Involve target members for decision making and participation ▪ Coordination with community	3	Aug 2012	DHO, HFs, community

Dimension 3: Component 1: Community Competence/Capacity

Indicators	Measure (% or scale)	Activities to be done	Expected Outcome	By when	By Whom
▪ % of community contribution (cash, kind, land etc.)*	6	▪ Maintain coordination with community, VDC and DDC	Maintain	Aug 2012	DHO, HF, VDC, DDC
▪ % of female & marginalized group members in Health Facility Management Committee*	90%	▪ Reinforcement of existing policy and practice	95%	Aug 2012	DHO, HF,
▪ % of mothers group meeting / FCHV	77%	▪ Regularize the mother group meeting ▪ Regular supply of IEC ▪ Supportive supervision and monitoring ▪ Regular presence of VHW/MCHW	85%	Aug 2012	DHO, HFs, VHW/MCHW, FHCV
▪ % of mothers who know at least 2 danger sign during ANC	91.6%	▪ Awareness raising through FM, mass campaign, MGM, PWG ▪ BPP counseling during ANC and PNC ▪ Regularize ORC and EPI session	95%	Aug 2012	DHO, HFs, VHW/MCHW, FHCV, World Vision, Plan Nepal
▪ % of mother who know at least 2 danger sign during PNC	86.7%	▪ Awareness raising through FM, mass campaign, MGM, PWG ▪ BPP counseling during ANC and PNC ▪ Regularize ORC and EPI session	95%	Aug 2012	DHO, HFs, VHW/MCHW, FHCV, World Vision, Plan Nepal

Dimension 3: Component 2: Ecological, human, Economic, Political & Policy

Indicators	Measure (% or scale)	Activities to be done	Expected Outcome	By when	By Whom
▪ Policy on maternal and newborn health	5	▪ Maintain the existing program and activities	Maintain	Aug 2012	MoHP,
▪ Political situation	5	▪ Maintain the existing program and activities	Maintain	Aug 2012	Political parties

▪ Female literacy rate	65.3%	▪ Coordination with DEO	70%	Aug 2012	DEO, DHO
▪ Human Development Index	50%	▪ Maintain the existing program and activities	Maintain	Aug 2012	
▪ % of mothers who received incentive during last delivery against expected pregnancy (institutional delivery)	38.8%*	▪ Awareness raising through FM, mass campaign, MGM, PWG ▪ Coordination with BPKHIS ▪ Promote institutional delivery ▪ Counseling during ANC	80%	Aug 2012	DHO, BPKHIS, HFs

** Excluded the institutional delivery of 8, 767 of BPKIHS (BP Koirala Institute of Health Science) among 14,339 delivery of Sunsari district*

Recommendation:

- Regular coordination with stakeholders for annual review meeting
- Strengthening of ORC/EPI clinic
- Regularize mother's group meeting
- Prompt fulfillment vacant positions from the concerned departments
- Include health message on other line agencies and civil society organization and involvement of local health staff
- Regularize social and public audit on annual basis
- Maximum involvement of marginalized group and female in decision making
- Exposure visit to national and international events , trainings, meetings for selected health worker and FCHVs
- Regular basis supportive supervision and monitoring from different level
- Regular supply
- Regular media coverage
- Timely recording and reporting
- Coordination with BPKHIS
- Strengthening of Local Health Governance Support Program (LHGSP)
- Review meeting / refresher training on CB-NCP
- Increase Youth participation

4.9 CSSA Survey Report – Bara District (26 – 28 July, 2011)

Major Findings and Results

Proceedings:

The three workshops on CSSA held on different dates rigorously contemplated to produce and process information and data from different sources among the participants to cover all 6 components. Participants range local self governance representatives and line ministries, district based agencies like VDCs, Municipalities, DDCs, DEO, DWO, CDO and others. The workshop team discuss, share the information at equal footing and process them to framework and dashboard then they exercise to formulate action plan and recommendations based on the information available including their valuable experiences and learning in the past.

The findings and results are presented below in district base.

Bara District:

The three days CSSA workshop was held from 26 – 28 July 2011 in Kalaiya, Bara. The participants were representing from DHO, Municipalities, DDCs, DEO, DWO, CDO, local partner and others. They were aware on child survival evolution and sustainability assessment. After that, the participants were involved in preparing the coverage/measure of each indicator defined in last workshop in December 2009 and shared the individual dimension in the respective groups then it was finalized in the plenary session. The outcomes of each indicator support to prepare dashboard as well as spider web graphic with the help of black box. Based on the findings, team has prepared the plan of action with remarkable recommendations for further improvement and achievement in future. The major findings are in Dimension 1, component 1, Health outcome index result has decreased to 53% in 2011 compared to 63% in 2006, although it has increased to 10% from Mid Term achievement i.e. 41% in 2009; while component 2 health service index has increased to 73% in 2011 from 63% in 2006, with a difference of 11% from Mid Term achievement i.e. 62% in 2009. Similarly, Dimension 2, component 3, organizational capacity has slightly decreased to 60% in 2011 from 67% in 2006 and 63% in 2009, while achievements in components 4 and 5 namely organizational viability and community capacity have been better maintained as 54% and 76% in 2011 compared to 51% and 67% in 2006, but, there is a remarkable achievement in Dimension 3, component 6, Environmental index showing 50% in 2011 from 32% in 2006 and 21.8% in 2009.

The indices of all 6 components have decreased in the Mid Term 2009 from the final survey of Child Survival (CS) project in 2006 so called initial. The reasons are drastic pullout of Plan staff members from 33 to 2 staffs and withdraw of Plan Nepal activities due to conflict after year 2006. When the situation became stable after 2009, Mid Term; the progress results became positive as shown in the survey result.

So, compared to the initial and the Mid Term, the results are quite encouraging. The root cause of achievement is informed planning through the visible instruments of LQAS and CSSA shown by the Dash Board and the result table. The other reasons are as follows.

As pointed out in the Action Plan, problems come from transfer and delayed fulfillment of the staff members and local unfavorable political environment in decision making. So, mass level campaigns, orientations should encompass political decision makers at VDC, DDC and other relevant levels to focus on new born child and the mother.

At the end of the workshop, participants make specific recommendations to improve the situation of child and mother's health condition based on the findings and the results including their past experiences and lessons learned. Recommendations are included after action plan.

CSSA workshop of Bara district held on 26 to 28 July 2011

Exercise to measure value (% or scale) and its definition of scale by the Participants

Dimension 1: Component 1: Health Outcomes

Indicators	Indicators/Definition	Source of information	Measured value (% or Scale)	Score	Definition of Scale (where we are using scale)
Underweight Children	Underweight Children < 2yrs (0-24 months)	LQAS	6.0%	88.0	
Exclusive Breast feeding Rate	Percent of infants aged 0-5 months who were fed breastfed milk only in the last 24 hours	LQAS	70.4%	55.5	
Vitamin "A" Coverage	Percent of Children aged 12-23 months who received a vitamin A does in the last six months	LQAS	98%	96.0	
Possession of vaccination Card	Percent of Children aged 12-23 months who have a Vaccination Card	LQAS	45%	30.1	
Diarrhea prevalence	Percent of children aged 0-23 months with diarrhea in the last two weeks	LQAS	24%	61.3	
ORT use during a Diarrhea Episode	Percent of children aged 0-23 months with diarrhea in the last two weeks who received oral rehydration solution (ORS) and/ or recommended home fluids (RHF)	LQAS	49%	34.1	
Care-Seeking for Diarrhea	Percent of Children aged 0-23 months with diarrhea in the last two weeks whose mothers Sought outside advice or treatment for the illness	LQAS	98%	96.0	
Maternal Hand Washing before Food Preparation before feeding /after attending to a child who has defecated	Percent of mothers who usually wash their hands with soap or ash before food preparation, before feeding children, after defecation, and after attending to a child who has defecated.	LQAS	62%	47.0	
ARI Care - seeking	Percent of Children aged 0-23 months with cough and fast / difficult breathing in the last two weeks who were taken to a health facility or	LQAS	44%	29.0	

Indicators	Indicators/Definition	Source of information	Measured value (% or Scale)	Score	Definition of Scale (where we are using scale)
	received treatment.				
Tetanus Toxoid Coverage	Percent of mothers who received at least **TWO** tetanus toxoid injections (Card confirmed) before the birth of the youngest child less than 12 months of age.	LQAS	10%	5.7	
Iron Supplimentation Coverage	Percent of mothers who received /brought iron supplements while pregnant with the youngest child less than 12 months of age.	LQAS	86%	74.8	
Delivery by skilled Health Personnel	Percent of children aged 0-11 months whose delivery was attended by a skilled health personal up to MCHW level	LQAS	59%	44.0	
Postpartum Contact	Percent of mother who had at least **ONE** postpartum check-up	LQAS	47%	32.1	
Maternal Vitamin A supplementation	Percent of mothers who received a Vitamin A dose during the first six weeks after delivery	LQAS	89%	78.8	
Contraceptive Use Among Mothers Who Want to limit or space births	Percent of non pregnant mothers who desire no more children in the next two years or are not sure, who are using a modern method of child spacing	LQAS	48%	33.1	
Adequate birth interval between surviving children	Percent of children aged 0-23 months who were born at least 24 months after the previous surviving child	LQAS	64%	49.0	
Knowledge about HIV/AIDS and STD Prevention	Percent of mothers who knows at least **ONE** HIV/AIDS and STD prevention (MOT)	LQAS	62%	47.0	
		Total		**901.5**	
		Average		**53.03**	

Dimension 1: Component 2: Health Services (System)

Indicators	Source of information	Measured value (% or Scale)	Score	Definition of Scale (where we are using scale)
Proportion of health facilities who had received at least one supervisory visit in the last 6 months	HMIS	3	40.0	1. No supervision 2. Supervision at least 1 time within six months 3. #2 and regularly visit 4. #3 and as per supervision checklist 5. #4 and coaching 6. #5, supply and reporting timely
Proportion of district level meeting held in the district	DHO report, Meeting minute	100%	100.0	
Monthly Ilaka review meeting	DHO report, meeting minute	100%	100.0	
Percent of HFs having monthly reporting timely	DHO report	100%	100.0	
Percent of HFs having availability of essential drugs for 12 months	LMIS	100%	100.0	
% of under 2 months sick children among under five years visited to health facilities	IMCI / HMIS report DHO	1.2%	0.7	
	Total		440.7	
	Average		73.4	

Dimension 2: Component 3: Organization Capacity

Indicators	Source of information	Measured value (% or Scale)	Score	Definition of Scale (where we are using scale)
% of health facility committees formed based on national guideline	DHO	90%	80	
Health facility managing income and expenditure based on guideline	DHO	5	80.0	1. Fund request 2. # 1 and received fund 3. # 2 and bank deposit 4. # 3 and meeting minute 5. # 4 and expenditure based on meeting decision 6. # 5 and audit / social audit
Health facility with annual review/reflection and annual plan	Key Informant Workshop	3	40.0	1. No plan 2. Sketchy plan without full documentation 3. Annual review/reflection and plan prepared by committee member only 4. # 3 and involving community members to some extend 5. # 4 and periodic review 6. Annual plan, periodic review involving community, groups and local organizations
Community contributed cash or kind to their health facility activities	Key Informant Workshop	4	60.0	1. No contribution 2. Kind contribution like land as event 3. Token contribution on ad hoc basis 4. Contribution based on community demand basis like FCHV demand for snack during annual campaign and during epidemic 5. VDC regular contribution to strengthen regular health program 6. VDC and other local resource mobilization for long term support of local health program
Female community health volunteers supported by community	Key Informant Workshop	2	20.0	1. No support and without mothers' group 2. Mothers' groups are meeting but irregular 3. Mothers' group are meeting regularly (at least 8 times a year) 4. # 3 and active involvement of mothers' group in health campaign

Indicators	Source of information	Measured value (% or Scale)	Score	Definition of Scale (where we are using scale)
				5. # 4 with revolving scheme 6. # 5 with no stock out in the last year
% of health facility without (essential drugs) stock out in the last year	DHO report	54%	39.1	
Procurement at district level is timely and district inventory is based on national guideline	DHO	5	80.0	1. No procurement plan in advance 2. There is procurement plan in place 3. # 2 and there is responsible person to oversee on regular basis 4. # 3 and list of item and amount to be procured ready with distribution plan 5. # 4 and following national inventory management procedure 6. No stock out in the catchments health faculties in the last year
District decision are based on the data and information (HMIS)	DHO Key Informant Workshop	5	80.0	1. Never use program data for management decision and reported data use to report higher level only 2. Routine collection of data as per requirement but rarely use locally 3. Routine collection of data but only use by few people at DHO 4. Routine collection of data and use by DHO based staff only 5. Routine collection of data and supervisory information for program decision 6. # 5 and help and support local health facility staff to use their data for local decision
	Total		**479.1**	
	Average		**59.9**	

Dimension 2: Component 4: Organization Viability

Indicators	Source of information	Measured value (% or Scale)	Score	Definition of Scale (where we are using scale)
% of VDC follow approach of district health system	Key Informant, Review meeting	100%	100.0	
% of health facility who are mobilizing local resources i.e. VDC, local NGOs, etc	Key Informant, Review meeting	75%	60.0	
% of VDC who have networking and alliance with other stakeholders	Key Informant Workshop	60%	45.0	
Involvement of children, youth, women and disadvantaged group in health facility management committee functioning	Key Informant Workshop	2	20.0	1. No involvement 2. Annual involvement of some groups only 3. Annual involvement all the groups for review and planning 4. Periodic involvement of review and planning 5. Involvement in review, planning and program implementation 6. # 5 and involvement before or during major decision of children, youth, women and disadvantaged group
VDC level strategic planning and management	Key Informant Workshop	3	40.0	1. No plan 2. Sketchy plan without full documentation 3. Plan prepared by committee member only 4. # 3 and involving community member to some extent 5. # 4 and periodic review and management 6. Strategic plan, annual plan, periodic review and management involving community, groups and local organizations
% of VDC general assembly discussed health issue and allocate budget proportionate to other program	Key Informant Workshop	75%	60.0	
	Total		**325.0**	
	Average		**54.2**	

Dimension 3: Component 5: Community Competence/Capacity

Indicators	Source of information	Measured value (% or Scale)	Score	Definition of Scale (where we are using scale)
% of community involved different group in the health program	Key Informant Workshop	70%	55.1	
% of VDC with functioning mothers' or interest group	Key Informant Workshop	60%	45.0	
% of VDC involved in national health campaign in planned way	Key Informant Workshop	60%	45.0	
% of mother who know at least 3 danger signs/symptoms during pregnancy	LQAS	100%	100.0	
% of mother who know at least 3 danger signs/symptoms of after delivery	LQAS	95%	90.0	
% of mother who know at least 3 danger signs of new born	LQAS	99%	98.0	
% of mother who know at least 3 danger signs/symptoms of pneumonia	LQAS	93%	86.0	
% of mother who know at least 3 danger signs of diarrhea/dysentery	LQAS	95%	90.0	
	Total		**609.1**	
	Average		**76.1**	

Dimension 3: Component 6: Ecological, human, Economic, Political & Policy

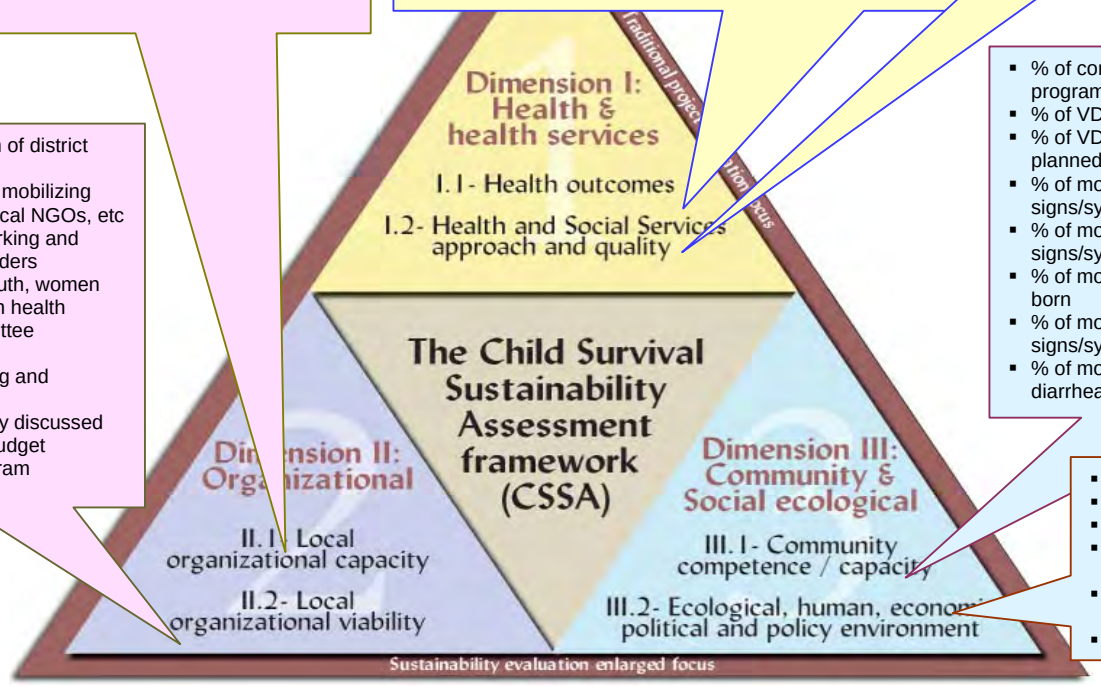
Indicators	Source of information	Measured value (% or Scale)	Score	Definition of Scale (where we are using scale)
% of literacy	DEO Bara Flash report 2066	60%	45.0	
% of women literacy	LQAS (M-1)	31%	17.8	
% of landless population	CBS 2058	9%	82.0	
Number of times of medicine supplies disruption last year	Key Informant Workshop	5	80.0	Supplies disrupted due to unrest, bandh or central problem 1. Supplies disrupted more than equal 5 times 2. Supplies disrupted more than 4 times 3. Supplies disrupted more than 3 times 4. Supplies disrupted more than twice 5. Supplies disrupted only once in a year 6. No supply disruption
Decentralization plan and implementation status	Key Informant Workshop	2	20.0	1. No policy 2. Policy at place but not implemented 3. Policy at place but planning to implemented 4. Policy implemented 5. Policy implemented with monitoring, evaluation and supervision 6. Policy implemented and sustained
NGO desk at DDC	Key Informant Workshop	4	60.0	1. No desk 2. Desk decided but not function 3. Desk function when needed 4. Desk function without any plan 5. Desk function with plan 6. Desk function with strategic plan and monitor implementation
	Total		**304.8**	
	Average		**50.8**	

Outcome of CS Sustainability Assessment Framework Workshop of Bara district, July 2011

- % of health facility committees formed based on national guideline
- Health facility managing income and expenditure based on guideline
- Health facility with annual review/reflection and annual plan
- Community contributed cash or kind to their health facility activities
- Female community health volunteers supported by community
- % of health facility without (essential drugs) stock out in the last year
- Procurement at district level is timely and district inventory is based on national guideline
- District decision are based on the data and information (HMIS)

- Underweight Children
- Exclusive Breast feeding Rate
- Vitamin "A" Coverage
- Possession of vaccination Card
- Diarrhea prevalence
- ORT use during a Diarrhea Episode
- Care-Seeking for Diarrhea
- Maternal Hand Washing before Food Preparation before feeding /after attending to a child who has defecated
- ARI Care -seeking
- Tetanus Toxoid Coverage
- Iron Supplementation Coverage
- Delivery by skilled Health Personnel
- Postpartum Contact
- Maternal Vitamin A supplementation
- Contraceptive Use Among Mothers Who Want to limit or space births
- Adequate birth interval between surviving children
- Knowledge about HIV/AIDS and STD Prevention

- Proportion of health facilities who had received at least one supervisory visit in the last 6
- Proportion of district level meeting held in the district
- Monthly Ilaka review meeting
- Percent of HFs having monthly reporting timely
- Percent of HFs having availability of essential drugs for 12 months
- % of under 2 months sick children among under five years visited to health facilities

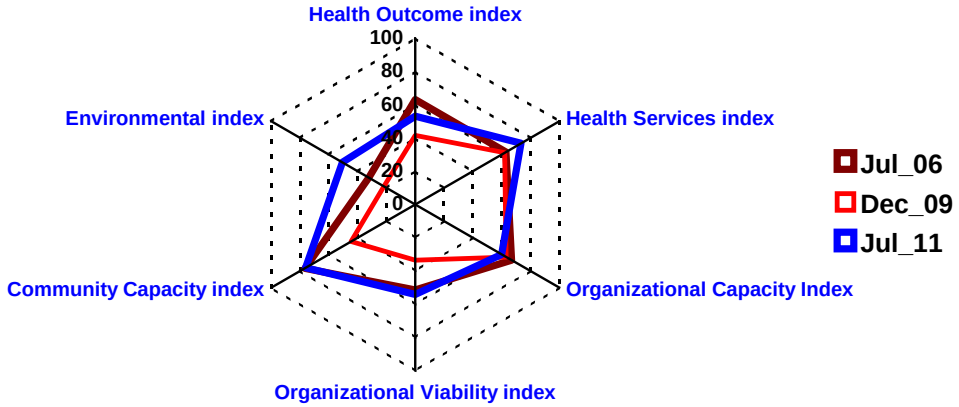


- % of VDC follows approach of district health system
- % of health facility who are mobilizing local resources i.e. VDC, local NGOs, etc
- % of VDC who have networking and alliance with other stakeholders
- Involvement of children, youth, women and disadvantaged group in health facility management committee functioning
- VDC level strategic planning and management
- % of VDC general assembly discussed health issue and allocate budget proportionate to other program

- % of community involved different group in the health program
- % of VDC with functioning mothers' or interest group
- % of VDCs involved in national health campaign in planned way
- % of mother who know at least 3 danger signs/symptoms during pregnancy
- % of mother who know at least 3 danger signs/symptoms of after delivery
- % of mother who know at least 3 danger signs of new born
- % of mother who know at least 3 danger signs/symptoms of pneumonia
- % of mother who know at least 3 danger signs of diarrhea/dysentery

- % of literacy
- % of women literacy
- % of landless population
- Number of times of medicine supplies disruption last year
- Decentralization plan and implementation status
- NGO desk at DDC

Sustainability Dashboard



Dimension	Component #	Component	Indices (Jul 2006)	Indices (Dec 2009)	Indices (Jul 2011)
1	1	Health Outcome index	**63.0**	**41.5**	**53.0**
	2	Health Services index	**63.1**	**62.1**	**73.4**
2	3	Organizational Capacity Index	**67.0**	**63.3**	**59.9**
	4	Organizational Viability index	**51.4**	**33.5**	**54.2**
3	5	Community Capacity index	**76.6**	**44.5**	**76.1**
	6	Environmental index	**32.3**	**21.8**	**50.8**

Child Survival Sustainability Assessment (CSSA) Workshop
DHO, Bara and Plan Nepal, Bara PU, LIBON project
26-28 July 2011

Action Plan

C1: Health Outcome

Component	Current status	Activities to be done	Expected outcome	By when	By whom	Remarks
Underweight Children < 2yrs (0-24 months)	6.0%	▪ Increase awareness program through FM, mother's group, PWG, mass campaign ▪ Increase ANC and PNC visits ▪ Organize exhibition program ▪ Nutrition program ▪ Refresher trainings at district to community level	5%	Jul'12	DHO Bara Health Facility FCHV NFHP-II	
Percent of infants aged 0-5 months who were fed breastfed milk only in the last 24 hours	70.4%	▪ Increase awareness program through FM, mother's group, PWG, mass campaign ▪ Increase ANC and PNC visits ▪ Promote on breastfeeding week	80%	Jul'12	DHO Bara Health Facility FCHV NFHP-II	
Percent of Children aged 12-23 months who received a vitamin A does in the last six months	98%	▪ Timely Supply and distribution of Vit "A" in concerned areas ▪ Coverage of all children in the bi-annual mass campaign without fail ▪ Increase awareness program through FM, mother's group, PWG, mass campaign	99%	Jul'12	DHO Bara Health Facility FCHV NFHP-II	
Percent of Children aged 12-23 months who have a Vaccination Card	45%	▪ Supply of vaccination card ▪ Provide the message on the importance of vaccination card during ANC and PNC visit as well as EPI clinic ▪ Increase awareness program through FM, mother's group, PWG, mass campaign ▪ Check and verify vaccination cards during supportive supervision	60%	Jul'12	DHO Bara Health Facility FCHV NFHP-II	
Percent of children aged 0-23 months with diarrhea in the last two weeks	24%	▪ Promote hand washing practices ▪ Awareness on safe and pure water and hygienic food	20%	Jul'12	DHO Bara Health Facility FCHV	

Component	Current status	Activities to be done	Expected outcome	By when	By whom	Remarks
		▪ Increase awareness program through FM, mother's group, PWG, mass campaign ▪ Specific focus on marginalized groups ▪ Promote personal and environmental hygiene program and activities			NFHP-II	
Percent of children aged 0-23 months with diarrhea in the last two weeks who received oral rehydration solution (ORS) and/ or recommended home fluids (RHF)	49%	▪ Regular and timely supply and distribution of ORS ▪ ORS should be available at FCHV level ▪ Activate for the re-functioning of ORT corners in all health facilities ▪ Increase awareness program through FM, mother's group, PWG, mass campaign	70%	Jul'12	DHO Bara Health Facility FCHV NFHP-II	
Percent of Children aged 0-23 months with diarrhea in the last two weeks whose mothers Sought outside advice or treatment for the illness	98%	▪ Maintain the existing activities and programs	98%	Jul'12	DHO Bara Health Facility FCHV NFHP-II	
Percent of mothers who usually wash their hands with soap or ash before food preparation, before feeding children, after defecation, and after attending to a child who has defecated.	62%	▪ Increase awareness program through FM, mother's group, PWG, mass campaign ▪ Provide counseling to women during ANC and PNC visit ▪ Actively organize and conduct World Hand Washing day	80%	Jul'12	DHO Bara Health Facility FCHV NFHP-II	
Percent of Children aged 0-23 months with cough and fast / difficult breathing in the last two weeks who were taken to a health facility or received treatment.	44%	▪ Increase awareness program through FM, mother's group, PWG, mass campaign ▪ Re-functioning of IMCI clinic in all health facilities ▪ Review/refresher training to FCHV with specific focused on CB-IMCI	70%	Jul'12	DHO Bara Health Facility FCHV NFHP-II	
Percent of mothers who received at least **TWO** tetanus toxoid injections (Card confirmed) before the birth of	10%	▪ Supply of vaccination card ▪ Provide the message on the importance of vaccination card during ANC and PNC visit as well as EPI clinic	60%	Jul'12	DHO Bara Health Facility FCHV NFHP-II	

Component	Current status	Activities to be done	Expected outcome	By when	By whom	Remarks
the youngest child less than 12 months of age.		▪ Increase awareness program through FM, mother's group, PWG, mass campaign ▪ Check and verify vaccination cards during supportive supervision				
Percent of mothers who received /brought iron supplements while pregnant with the youngest child less than 12 months of age.	86%	▪ Supply and distribute iron tablets ▪ Provide counseling on ANC and PNC visit ▪ Increase awareness program through FM, mother's group, PWG, mass campaign ▪ Promote and activate Birth Preparedness Plan package	95%	Jul'12	DHO Bara Health Facility FCHV NFHP-II	
Percent of children aged 0-11 months whose delivery was attended by a skilled health personal up to MCHW level	59%	▪ Promote institutional delivery ▪ Expansion of birthing centers ▪ Full-fill vacant positions on time ▪ Increase awareness program through FM, mother's group, PWG, mass campaign	75%	Jul'12	DHO Bara Health Facility FCHV NFHP-II	
Percent of mother who had at least **ONE** postpartum check-up	47%	▪ Provide counseling on ANC and PNC visit ▪ Increase awareness program through FM, mother's group, PWG, mass campaign ▪ Promote and activate Birth Preparedness Plan package	60%	Jul'12	DHO Bara Health Facility FCHV NFHP-II	
Percent of mothers who received a Vitamin A dose during the first six weeks after delivery	89%	▪ Supply and distribution of Vit "A" in concerned areas ▪ Provide counseling on ANC and PNC visits ▪ Increase awareness program through FM, mother's group, PWG, mass campaign ▪ Vit A should be available at FCHV level	95%	Jul'12	DHO Bara Health Facility FCHV NFHP-II	
Percent of non pregnant mothers who desire no more children in the next two years or are not sure, who are using a modern method of child spacing	48%	▪ Counseling on ANC and PNC visit ▪ Increase awareness program through FM, mother's group, PWG, mass campaign ▪ Promote and activate Birth Preparedness Plan package ▪ Availability of family planning contraceptives at health facilities and FCHVs	55%	Jul'12	DHO Bara Health Facility FCHV NFHP-II	

Component	Current status	Activities to be done	Expected outcome	By when	By whom	Remarks
Percent of children aged 0-23 months who were born at least 24 months after the previous surviving child	64%	▪ Counseling on ANC and PNC visit ▪ Increase awareness program through FM, mother's group, PWG, mass campaign ▪ Promote and activate Birth Preparedness Plan package ▪ Availability of family planning contraceptive at health facilities and FCHVs	70%	Jul'12	DHO Bara Health Facility FCHV NFHP-II	
Percent of mothers who knows at least **ONE** HIV/AIDS and STD prevention (MOT)	62%	▪ Increase awareness program through FM, mother's group, PWG, mass campaign ▪ Specific focus on marginalized group ▪ Prepare and implement long term-plan ▪ Increase DACC activities at all levels	75%	Jul'12	DHO Bara DACC Bara Health Facility NFHP-II NGO partners DDC	

C2: Health Services

Component	Current status	Activities to be done	Expected outcome	By when	By whom	Remarks
Proportion of health facilities who had received at least one supervisory visit in the last 6	3	▪ Seek additional budget for supportive supervision ▪ Planning for supportive supervision ▪ Develop check-list ▪ Regular jointly supportive supervision visit ▪ Provide onsite coaching and provide feedback and suggestion ▪ Prepare report and utilize in regular basis	5	Jul'12	DHO Bara NFHP-II	
Proportion of district level meeting held in the district	100%	▪ Maintain existing program and activities	100%	Jul'12	DHO Bara Health Facility FCHV NFHP-II	
Monthly Ilaka review meeting	100%	▪ Maintain existing program and activities	100%	Jul'12	DHO Bara Health Facility FCHV NFHP-II	
Percent of HFs having monthly reporting timely	100%	▪ Maintain existing program and activities	100%	Jul'12	DHO Bara Health Facility FCHV NFHP-II	
Percent of HFs having availability of essential drugs for 12 months	100%	▪ Maintain existing program and activities	100%	Jul'12	DHO Bara Health Facility FCHV NFHP-II	
% of under 2 months sick children among under five years visited to health facilities	1.2%	▪ Increase awareness program through FM, mother's group, PWG, mass campaign ▪ Re-functioning of IMCI clinic in all health facilities ▪ Review/refresher training to FCHV with special focused on CB-IMCI mass campaign ▪ Referral mechanism should be continued and maintained ▪ Request to implement CB-NCP program in Bara district	2%	Jul'12	DHO Bara Health Facility FCHV NFHP-II	

C3: Organizational Capacity

Component	Current status	Activities to be done	Expected outcome	By when	By whom	Remarks
% of health facility committees formed based on national guideline	90%	▪ Advocacy during DDC monthly secretariat meeting ▪ Advocacy DDC/VDC general assembly for local health governance strengthening program for maternal and child health	100%	Jul'12	DPHO Local HF	
Health facility managing income and expenditure based on guideline	5	▪ Organize regularize Social Audit and General Audit ▪ Monitoring ▪ Timely reporting	6	Jul'12	HF	
Health facility with annual review/reflection and annual plan	3	▪ Circular for annual review and planning by DHO ▪ Implement annual review reflection meeting and planning in each health facility ▪ Monitoring from DHO ▪ Advocacy during DDC/VDC general assembly for local health governance strengthening program for maternal and child health	6	Jul'12	DHO HFMC	
Community contributed cash or kind to their health facility activities	4	▪ Advocacy during DDC monthly secretary meeting and DDC general Assembly along with VDC general Assembly ▪ HFMC need to coordinate with VDC	5	Jul'12	DHO/HF	
Female community health volunteers supported by community	2	▪ FCHV conduct MGM timely and regularly ▪ Conduct MGM in the presence of VHW/MCHW and supervise MGM by local HFI and DHO supervisors regularly ▪ Coordination with other stakeholders	4	Jul'12	DHO supervisors Stakeholders HF	

Component	Current status	Activities to be done	Expected outcome	By when	By whom	Remarks
% of health facility without (essential drugs) stock out in the last year	54%	▪ Regular supply from district store ▪ Supportive supervision and monitoring ▪ Authorized Stock Level (ASL)/Emergency Order Point (EOP) should be maintained by the support of HFOMC (local management) ▪ Follow-up pull system	100%	Jul'12	• Store Focal Person • HF • HFOMC	
Procurement at district level is timely and district inventory is based on national guideline	5	▪ Make procurement plan and follow it timely ▪ Regular supply from district store ▪ Supportive supervision and monitoring ▪ Authorized Stock Level (ASL)/Emergency Order Point (EOP) should be maintained by the support of HFOMC (local management)	6	Jul'12	• Store Focal Person	
District decision are based on the data and information (HMIS)	5	▪ Data to be utilized and make decision based on outcomes by health facility staff ▪ Planning and implementation to be done ▪ Monitoring and supervision to be done ▪ Ilaka meeting should be strengthened along with HF monthly meeting	6	Jul'12	DHO Supervisors HFIs	

C4: Organizational Viability

Component	Current status	Activities to be done	Expected outcome	By when	By whom	Remarks
% of VDC follow approach of district health system	100%	▪ Maintain existing system and the ongoing activities	100%	Jul'12	DHO HFI	
% of health facility who are mobilizing local resources i.e. VDC, local NGOs, etc	75%	▪ Advocacy during DDC monthly secretariat meeting ▪ Advocacy during DDC general Assembly for local health governance strengthening program for maternal and child health along with VDC general assembly ▪ Coordination with local NGOs/CBOs	90%	Jul'12	DPHO Local HF	
% of VDC who have networking and alliance with other stakeholders	60%	▪ Close coordination, networking, sharing and alliance with stakeholders at VDC and District level	80%	Jul'12	HFI	
Involvement of children, youth, women and disadvantaged group in health facility management committee functioning	2	▪ Advocacy at national level to include youth and children and active participant ▪ Follow national guidelines for functional health facility management committee ▪ Monitoring and supervision	5	Jul'12	DHO HFI	
VDC level strategic planning and management	3	▪ Advocacy for the strategic planning and management in DDC/VDC general assembly ▪ Involve community people for planning and management	4	Jul'12	DHO/HFI	
% of VDC general assembly discussed health issue and allocate budget proportionate to other program	75%	▪ Discuss health issue and allocate budget in proportionate to other program during VDC/DDC general assembly ▪ Participation of health staff during planning in VDC general assembly	100%	Jul'12	DHO/HFI	

C5: Community Competency and capacity

Component	Current status	Activities to be done	Expected outcome	By when	By whom	Remarks
% of community involved different group in the health program	70%	▪ Cooperative Group initiation to promote health activities ▪ Regularization of mother's group meeting by regular monitoring of health facilities ▪ Health education to head teacher and resource for coordination between teachers resource center and local health facilities	80%	Jul'12	WCO DHO DEO	
% of VDC with functioning mothers' or interest group	60%	▪ Cooperative Group initiation to promote health activities ▪ Regularization of mother's group meeting by regular monitoring of health facilities ▪ Health education to head teacher and resource for coordination between teachers resource center and local health facilities	70%	Jul'12	WCO DHO DEO	
% of VDCs involved in national health campaign in planned way	60%	▪ Coordination with DDC to involve VDCs in national health campaigns	65%	Jul'12	DHO DDC	
% of mother who know at least 3 danger signs/symptoms during pregnancy	100%	▪ Health education of dangers signs/symptoms during pregnancy to Cooperative Group through the support (mother's card) of DHO ▪ Continue birth preparedness campaign to pregnant women, husbands, mother in laws etc. by health facility in each months ▪ Health education of dangers signs /symptoms during pregnancy in each ward of Kalaiya municipality through the FCHV by support (mother's card) of DHO ▪ Health education of dangers signs/symptoms	Maintain	Jul'12	DHO WCO Municipality DEO	

Component	Current status	Activities to be done	Expected outcome	By when	By whom	Remarks
		during pregnancy in each higher secondary and secondary schools by health and population teachers through the support (mother's card) of DHO				
% of mother who know at least 3 danger signs/symptoms of after delivery	95%	▪ Health education of dangers signs/symptoms after delivery to Cooperative Group through the support (mother's card) of DHO ▪ Continue birth preparedness campaign to pregnant women, husbands, mother in laws etc. by health facility in each months ▪ Health education of dangers signs /symptoms after delivery in each ward of Kalaiya municipality by FCHV through the support (mother's card) of DHO ▪ Health education of dangers signs/symptoms after delivery in each higher secondary and secondary schools by health and population teachers through the support (mother's card) of DHO	Maintain	Jul'12	DHO WCO Municipality DEO	
% of mother who know at least 3 danger signs of new born	99%	▪ Health education of dangers signs of newborn to Cooperative Group through the support (mother's card) of DHO ▪ Continue birth preparedness campaign to pregnant women, husbands, mother in laws etc. by health facility in each months ▪ Health education of dangers signs of newborn in each ward of Kalaiya municipality by FCHV through the support (mother's card) of DHO ▪ Health education of dangers signs of newborn in each higher secondary and secondary schools by health and population teacher through the support (mother's card) of DHO	Maintain	Jul'12	DHO WCO Municipality DEO	

Component	Current status	Activities to be done	Expected outcome	By when	By whom	Remarks
% of mother who know at least 3 danger signs/symptoms of pneumonia	93%	▪ Health education of dangers signs/symptoms of pneumonia to Cooperative Group through the support (mother's card) of DHO ▪ Continue health education session on pneumonia to pregnant women, husbands, mother in laws etc. by health facility in each months ▪ Health education of dangers signs/symptoms of pneumonia in each ward of Kalaiya municipality by FCHV through the support of DHO ▪ Health education of dangers signs/symptoms of pneumonia in each higher secondary and secondary schools by health and population teacher through the support of DHO	Maintain	Jul'12	DHO WCO Municipality DEO	
% of mother who know at least 3 danger signs of diarrhea/dysentery	95%	▪ Health education of dangers signs of diarrhea to Cooperative Group through the support (mother's card) of DHO ▪ Continue health education sessions on danger signs of diarrhea mothers group by health facility in each months ▪ Health education of dangers signs in each ward of Kalaiya municipality by FCHV through the support of DHO ▪ Health education of dangers signs of diarrhea in each higher secondary and secondary schools by health and population teacher through the support of DHO	Maintain	Jul'12	DHO WCO Municipality DEO	

C6: Ecological, Human, Economical Political & Policy

Component	Current status	Activities to be done	Expected outcome	By when	By whom	Remarks
% of literacy	60%	▪ Support literacy program by Local government (DDC), VDC, DHO, WCO, municipality (technical support from DEO)	70%	Jul'12	DEO	
% of women literacy	31%	▪ Support literacy program by Local government (DDC), VDC, DHO, WCO, municipality (technical support from DEO)	40%	Jul'12	DEO	
% of landless population	9%	▪		Jul'12		Political stability is needed to implement the policy
Number of times of medicine supplies disruption last year	5	▪ Request for medicines to RMS and LMD before stock out	6	Jul'12	DHO	
Decentralization plan and implementation status	2	▪		Jul'12		Political stability is needed to implement the policy
NGO desk at DDC	4	▪ Coordination with DDC to activate the NGO desk at DDC	5	Jul'12	DHO	

CSSA Bara Recommendation

- Implementation of Community Based Newborn Care Program (CB-NCP) for mass level coverage through orientation on CB-NCP
- Implementation of Local Health Governance Strengthening (LHGS) program for community participation
- Institutionalization of maternal and child health clinic and PHC/ORC clinics
- Continuity of birth preparedness plan (BPP) mass campaign
- Follow-up for capacity building activities of MGMs/PWGs for their stronger advocacy to local governance bodies - DDC/VDCs, Municipalities for allocation of funds for maternal and new born child health program
- Linkages and networking of PWGs with PHC/ORC clinics and birth preparedness programs BPP
- Joint integrated planning *on mother and child health, education, livelihood for joint* monitoring, supervision based on HMIS/LMIS data and information
- Strengthening and continuation of monthly FCHV, Ilaka and district level review meeting
- Functional working coordination, networking, sharing meetings of health related agencies such as *Reproductive Health Coordination Committee (RHCC), Quality Assurance Working Group (QAWG), District AIDS Coordination Committee (DACC)* at district level
- Follow up for regular operationalization of drugs and inputs procurement plan as per government national guidelines for regular supply and delivery
- Expansion of birthing center and family planning service sites
- Promotion of satellite clinics for functional family planning methods
- Promote Behavior Change Communication (BCC)/Information Education and Communication (IEC) activities
- Continue Lot Quality Assurance Sampling (LQAS) and Child Survival Sustainability Assessment (CSSA) for informed sustainable planning, monitoring and evaluation.

5. Conclusions and Recommendations:

Conclusions:

Overall findings, recommendations and action-plan of LQAS and CSSA in 3 LIBON districts stand valid and relevant to final evaluation findings and results for analysis and interpretation of results and information. The problems stated in the government policies and programmes are still the same in the field level. The policies and the programmes are still relevant to LIBON programme details.

Tools like LQAS and CSSA used for collecting data and information for informed planning, monitoring, supervision, review and evaluation including follow up action plan and recommendations for future implementation, monitoring and evaluation proved to be eye opening means to all stakeholders mostly decision makers, implementers, supervisors, frontline functionaries in health promotion like FCHVs, VHWs, MCHW, PWGs, MGs

The tools proved to be instrumental, meaningful in changing the attitude because of its transparency, accountability and responsibility of all individuals as a Team member representing institutions and agencies. The motivating, touching and mind changing factor in behaviors of stakeholders is the visibility of results in a participatory manner due to the methods and techniques adopted in LQAS and CSSA.

The results achieved in all three districts as presented are quite positive and encouraging.

Recommendations:

As the results are positive and encouraging, but, the remaining lot of being left out, un-reached marginalized, vulnerable groups, the DAGs are still a challenge – as the mores to cover – as their fundamental rights to health, education, livelihood, shelter and so on. So in this regard, instead of total phasing out the area, Plan Nepal should better slightly change or shift its strategy for improved mechanism with wider, open and broader participation through its initiation for integrated informed planning, monitoring and evaluation practices for the holistic development of the target communities through rights based approach to meet their fundamental rights to health, education, livelihood. So, coordinated and integrated approach at departmental, Divisional Level of line Ministries of Health, Education, Women, Child and Social Welfare, Local Development, Agriculture and Cooperative for streamlining the activities in a more synergistic and effective manner would be a favorable wining game for all stakeholders towards informed planning and gaining achievements and for ensured sustainability and continuity of benefits.

It would be a cost sharing basis among the stakeholders with minimum low cost of technical inputs for coordination mechanism and informed and integrated planning, monitoring and

evaluation for holistic development. LQAS and CSSA are meaningful tools to en-light the insight of people.

It should be replicated up to VDC level – SHP level, where all relevant ministries merge together as focal target community. It is an acute need of the holistic planning and development where all human needs, requirements are met.

Annex I

Major highlights:
4.1 Government policy and programmes relevant to Plan Nepal, LIBON Project

Problems, challenges, opportunities, long term vision, objectives, strategies and programmes identified as mentioned in the 3 Year Interim Plan 2007/8-2009/2010.

Problems

- Lack of skilled human resources and problems in their mobilization to health centers.
- Centralization of general and financial administration.
- Very slow pace of decentralization process.
- Inadequate supply of Equipment and Drugs.
- Political interference in management.
- Weak supervision.
- Lack of physical infrastructure and inadequate repair and maintenance of physical infrastructure.

Challenges:

- Delivery of equal health services to the people belonging to various cultural/gender, geographical regions and social status.

Opportunities:

- The Three Year Interim Constitution recognized that health is the fundamental human rights of all citizens.
- Health institutions have been extended upto VDC level.(Community)
- Decentralization policy implementation is underway for DDCs and VDCs.
- Private sector's and NGOs involvement to a considerable extent is noteworthy.

Long Term Vision:

To establish appropriate conditions of quality health services delivery, accessible to all citizens, with a particular focus on the low income citizens and contribution to the improvement of health of all citizens in Nepal.

Objectives:

To ensure citizen's fundamental rights to have improved health services through access to quality health services without any discrimination by region, class, gender, ethnicity, religion, political belief and social and economic status keeping in view the broader context of social inclusion. The constituent elements of the objectives are:

- To provide quality health service.
- To ensure easy access to health services to all citizens (geographical, cultural, economic and gender)
- To ensure enabling environment for utilizing available health services.

Strategies

The strategies are as bellow:

- Public health promotion will be focused on through public health education.
- Inter linkage between health profession education, treatment and public health services will be strengthened as part of the health sector management for making health services pro-people and efficient.
- Management of human, financial and physical resources will be made more effective in order to upgrade the quality of health services being provided by the private, government and non- government sectors.
- Special attention will be given to health improvement of the economically and socially disadvantaged people and communities.
- A policy to deal with NGOs, the private sector, community and cooperatives will be prepared and implemented.
- Decentralization process will be strengthened as integrate part of community empowerment.
- Mobile health services camps with specialized services will be launched for the benefit of the marginalized, poor Adibasi Janajati the Madhesi and Muslim communities.
- Free and basic health services and other health provisions will be brought into practice and in every health institution a citizens' charter will be placed in a distinctly visible manner.
- Communicable disease control programs will be continued with added emphasis to the problems of drug addicts, and control of HIV/AIDS.

Regular program

Safer Motherhood and New-born Child Health Program

- Basic obstetric care will be available at health institutions down to the level of primary health centers. The maternity services will be provided by the health posts and sub-health posts, provided that they are equipped with necessary infrastructure and health human resources. For the Comprehensive Emergency Obstetric Care, physical infrastructure in various additional hospitals will be delivered by such hospitals. Until the skilled birth attendances are available trained health workers with general training will be further trained to provide delivery services.
- Safe motherhood promotive program, life security program and skilled birth attendant program will be conducted effectively. For this, the private sectors and NGOs will also be involved.
- To operate the youth Reproductive Health Service Program up to the village level, rural clinic will be strengthened by mobilizing the local bodies and other organizations.

Child Health Program

- Expanded program of immunization and polio eradication programs will be conducted effectively by upgrading the quality of the services. Additional effective measure for

polio eradication will be taken up. Some new immunization campaigns like combined measles, mumps/rubell will be lunched in the selected districts.

- The Community Based Integrated Management of Child Illness-CB-IMCI, will be reviewed and extended to all the 75 districts within 3 years. The quality of diarrhea and respiratory disease treatment services will be enhanced for easy increasing of access.

Drug Management:

- Procurement of standard quality drugs by their generic names will be done at national level from the pre-qualified suppliers. The central level will negotiate contract prices of drugs to be so procured with arrangement for the delivery of such drugs to the districts. The payment of such delivery will be done by the concerned districts.

Public Health Promotive Program through Health Education:

- Education, information and communication components will be included in all health programs.
- All available communication media will be used for health education and communication promotion.
- Education, information and communication materials will be supplied through all distribution systems of private and public health service agencies.
- Local FM radio and magazines will be used for production, promotion and dissemination of health education, information and communication of local communities.
- For the promotion of community participation in health improvement program, local bodies like consumer groups, mother groups' management committees and local clubs will be mobilized.

Decentralization Program:

- At the central level, there will be a committee of the ministries of Health, Finance, Local Development, Women, Children and Social Welfare, and the National Planning Commission.
- Local health management committees will be given orientation and training.
- There will be a separate unit of management in the region and department to conduct programs related to the decentralization scheme in the districts and local levels.
- Progress measurement, supervision and monitoring will be conducted by the central and regional levels without any external interference.
- There will be a coordination committee established from central to districts levels to make the health decentralization scheme more effective in consultation with the Ministries of Health, Finance and Local Development. In addition, a health decentralization policy will be prepared and its implementation process launched as an integral part of community empowerment.

Urban Health Promotion:

- To strengthen the health departments of municipalities, technical support will be provided.
- Support for developing a mechanism to deliver health services at ward levels of the municipalities will be provided.
- For the supply of safe drinking water, public toilets and sanitation, necessary support will be provided with the coordination among the concerned ministry, the private sector and NGOs.

Second Long Term Health Plan-1997-2017 of the Ministry of Health and Population (MoHP)

- To reduce the infant mortality rate to 34.4 per thousand live birth.
- To reduce under - 5 mortality rate to 62.5 per thousand.
- To reduce the total fertility rate to 3.05.
- To increase life expectancy to 68.7 years.
- To reduce the maternal mortality rate (MMR) to 250 per thousand births.
- To increase the contraceptive prevalence rate to 58.2
- To increase the percentage of deliveries attended by trained personal to 95 percent.
- To increase the percentage of pregnant women attending a minimum of four antenatal visit to 80 percent.
- To reduce the percentage of iron- deficiency anemia among pregnant women to 15 percent.
- To reduce the percentage of women of child-bearing age (15-44) who receive TT2 to 90 percent.
- To decreases the percentage of newborns weighing less than 2500 gram to 12 percent.

4.2 Overall Findings and Recommendations of CSSA in 3 LIBON districts

- As described in the beginning of CSSA regarding indicative results of scale up of the program due to loss of control, reduced monitoring and supervision that may lead to decreased result values, there is a slight reduction in the outcomes of the program in Bara district due to suspension the program for few months in 2007. Plan Nepal and DHO mutually agreed that DHO will maintain the results of health outcomes and Plan Nepal will support in monitoring and reviewing of progress through the application of LQAS and CSSA that helps DHO-Bara for informed planning and monitoring of health programs related to neonatal and maternal mortality rate reduction. In this regards, indicators for Mothers Groups (MGs) and Pregnant Women's Groups (PWGs) need to be developed and assessed for including in the indices under Dimension III, Component V and VI to maintain and sustain community competence and capacity in the community because MGs and PWGs are the base to mobilize and maintain health services as pressure groups even after the phase out of LIBON. Capacity building components to empower PWGs and MGs to advocate as their fundamental human rights to health, education, livelihood and women empowerment

are essential tools to sustain health services for neonatal and maternal survival by enhancing organizational & institutional strength of PWGs and MGs.

- Promotion, linkage, networking and alliance building of MGs and PWGs with micro finance cooperatives, agencies, and institutions are vital components for their survival and sustainability which lead to sustain and maintain basic human needs like health, education, livelihood as fundamental human rights according to basic human living condition. Micro-finance component has been internationally approved as a basic and fundamental tool to empower the powerless, discriminated and marginalized communities like the World Bank, Asian Development Bank and many donor agencies which support government and national financial institutions like Rastra Bank, Rural Micro Finance Development Center (RMDC) and others to extend support to the neediest communities in the country. Poverty Alleviation Fund (PAF) and Micro Finance Institutions (MFIs) are basic two venues suitable for long institutional development through linkage, networking and alliance building with the MGs and PWGs beyond the life span of the present mothers up to many generations to come.
- Official registration of MGs and PWGs is essential for their legal status and legitimacy to claim their rights legally. So, these groups need to be promoted both as micro finance group/cooperative societies and they can be registered under Cooperative Act under the Ministry of Agriculture and Cooperative and under Social Organization Act with District Administration Office under Ministry of Home Affairs. These groups need to be federated and inter-federated at VDC, Ilaka – Supervision Area and district level. Inter-district, regional and national federation of these groups can be formed under Plan Nepal LIBON Project within its intervention period. It will facilitate for easy access to linkages, networking and alliance building with similar agencies, institutions and organizations in future for broader and wider coverage for louder voice to advocate their basic human rights apart from health services. International Human Rights Instruments like Convention on the Rights of Children (CRC), Convention on Elimination of All forms of Discrimination against Women (CEDAW), International Labor Organization ILO 169 and Minorities Rights are meant for these groups.
- Regarding Dimension III & Component VI, slight decrease in indices of 3 districts from the base line indicates the urgent need to address external forces which are very vital to promote and sustain health services at the community level. These urgent needs are to increase the level of literacy of the communities and women which are very low. Landlessness of the target communities is another burning issue which is out of control of this project. To address these issues, rights based approach like fundamental human rights to education and property acquisition are vital components for integration in the program. These issues fall under Constitutional Provision as fundamental human rights of citizens. So, Inter-Ministerial and Inter-Government Departmental networking linkages and coordination to alleviate illiteracy, poverty and mortality of children and mothers under various ministries like Ministry of Health and Population (MoHP), Ministry of Education (MoE), Ministry of Agriculture and Cooperative (MoAC), Ministry of Local Development (MoLD) and National

Human Rights Commission (NHRC), Commission for Women, Indigenous people, Dalits, Madhesis, Muslims and the minorities including national human rights organizations - NGOs need to be promoted and integrated to address the human rights issues of the citizens focusing on MGs and PWGs from MTE onward.

- Local self governance bodies like VDCs, Municipalities, DDCs are responsible agencies to promote primary health services, literacy and primary education, livelihood and basic infrastructure to address the acute basic needs of the people which fall under fundamental human rights of people. Community organizations like MGs and PWGs need to be empowered and capacitated under rights based approach to advocate their rights to ministries, departments and government as well as non governmental national human rights, local self governance bodies which are directly responsible while planning and implementing regular programs in their respective institutions like VDCs, DDCs and municipalities. Community organizations need to be informed and raised their awareness level through sensitization process regarding their fundamental rights to participation for their development in the community, Positive Discrimination provisions and special arrangements for the marginalized communities in the Interim Constitution and Three Year Interim Plan of Nepal. People fear because they are poor and powerless because they do not have information, knowledge and skill to advocate their rights to participation and development. They require organizational and institutional strength for their solidarity to advocate and put pressure on the concerned bodies, agencies, institutions for their rights and basic needs provisioned in the Constitution and the Three Year Interim Plan.
- There is a need for paradigm shift from welfare model development approach to rights based development approach that ensures fundamental rights of the people to health, education, livelihood, shelter and dignity in a sustained way. Because, it is the moral obligation of higher authorities and responsibility of the government to protect fundamental human rights of people by providing basic human needs to the needy poor people.
- However, the Action Plan prepared by local concerned stakeholders has indicated the above issues for improvement but still basic needs and fundamental human rights specifically rights to organizations of people to protect and defend their own rights by themselves and for themselves is much more important for their empowerment that capacitates them to put pressure on and demand for the continuation of quality health services as sustainability indicator. Microfinance activities will support PWGs & MGs for livelihood promotion that will sustain the groups to demand and advocate their rights to health, education, participation and development as a holistic development approach of poor communities.

Annex 2:

LQAS Participants:

Participant name list for LQAS survey for Final Evaluation, Parsa district
3 July -14 July 2011

SN	Name	Organization	Position
1	Chandra Kanta Lal Karna		
2	Satya Narayan Yadav	Sirsiya HP	SAHW
3	Raghunath Chaurasiya		
4	Mahesh Prasad Singh	Pakaha HP	PHO
5	Sashi Kant Singh	Pokhariya Hospital	PHI
6	Chhote Lal	Langadi HP	PHI
7	Bal Krishna Chaudhary	Bhikhampur PHC	PHO
8	Ram Bahadur Chaudhary	Sedhawa HP	SAHW
9	Kaushledra Mishra	Nichuta HP	HAO
10	Damodar Yadav	Bageshwori PHC	SAHW
11	Indra Dev Sah	Bagahi PHC	PHO
12	Ashok Raut	Thori HP	SAHW
13	Kameshwro Chaurasiya	DPHO	PHO
14	Prem Chandra jaiswal	DPHO	PHO
15	Phulena Prasad Sriwastav	DPHO	PHO
16	Uma Shankar Yadav	DPHO	PHO
17	Ashwini Dubedi	DPHO	VCO
18	Deokant Mishra	DPHO	EPI
19	Bhawnath Jha	DPHO	PH
20	Sonalal Chaurasiya	Jhauwa	SHP
21	Sri Ram Sah	Bairiya	AHW
22	Yogendra Chaurasiya		
23	Saroj giri		
24	Rajesh Rauniyar		
25	Prabhendra Sah	Auraha	SHP
26	Ram Binay Gupta	Shivbarba	SAHW
27	Shambhu Sah	Tulsibarwa	SAHW
28	Basu Rimal	Bahauwa	SAHW
29	Bhujendra Yadav		SAHW
30	Kavindra Kishor Yadav	Bhawanipur	SAHW
31	Newa Lal Thakur	Maniyari	SAHW
32	Lal Babu Prasad	Prasaunibirta	SAHW
33	Jagdish Singh	DPHO	Kharidar
34	Raj Kishor Prasad Chaudhary	Plan Nepal	LF
35	Ram Dev Sah	Lipnibirta	SAHW
36	Ramesh Mehata	Surjaha SHP	SAHW
37	Satrudhan Yadav	Bindabasini	SAHW
38	Shyam Prasad Sah	Langadi HP	SAHW
39	Subash Chanda Gupta	Sirsiya HP	AHW

40	Devendra Sah	Jagatnathpur	
41	Sher Bahadur Rana	Plan Nepal	HC
42	Hari Bhakta Khoju	RUWDES	
43	Sonal lal Raut	DPHO	OA
44	Diwakar Mishra	Plan Nepal	ADLC
45	Krishna Achhami	Plan Nepal	ADLC
46	Ejaz Ansari	Plan Nepal	LF
47	Ramesh Sah		
48	Bijay Sah	Plan Nepal	LF
49	Sajit Kumar Adhikari	Plan Nepal	LF
50	Krishna Dev Tiwari	RYC	PC
51	Rajendra Pradhan	RYC	
52	Arjun Bikram Hamal	DPHO	Acct
53	Rajendra Sah	Plan Nepal	LF
54	Jay Mangal Thakur	Plan Nepal	LF
55	Srijana Rai	Plan Nepal	AA
56	J. M. Pradhan	DPHO	Stat Ass
57	Bhagawan Das Shrestha	Plan Nepal	PC
58	Rajeshwar Prasad	DPHO	Storekeeper
59	Devnath Pokharel	RHD	Section Officer
60	Shashank Bajimaya	NFHP	Asst Field Officer
61	Prabesh Jaiswal	Plan Nepal	Acct
62	Yuwaraj KC	TTV	
63	Ghanshyam Chaudhary	Plan Nepal	ICO
64	Sarita Singh	DPHO	PHO

Participant name list for LQAS survey for Final Evaluation, Sunsari district 27 May - 9 Jun 2011

SN	Name	Designation	Organisation	Remarks
1	Ram Dhan Mehta	ARD	ERHD	
2	Indra Narayan Das	DHO	DHO	
3	Shiv Narayan Yadav	PHI	DHO	
4	Ram Charitra Mehta	HA	DHO	
5	Sonelal Yadav	SAHW	Satterjhora PHC	
6	Bijay Guragain		DHO	
7	Ram Babu Shrestha	SAHW	Sitaganj HP	
8	Khadga Singh Chouhan	HPI	Bhutaha HP	
9	Devendra Pokharel	PHI	Chatara PHC	
10	Harideo Thakur	SAHW	Baklauri HP	
11	Urmila Budhathoki	HEO	DHO	
12	Sulochana Chaudhary	HA	DHO	
13	Sitaram Gupta	HA	Madheli HP	
14	Maiya Sanjel	PHN	DHO	
15	Karuna Timsina	Staff Nurse	Itahari PHC	
16	Prem Kumar Das	VCS	DHO	
17	Amol Narayan Chaudhary	CCS	DHO	
18	Bal Bahadur Basnet	FPO	DHO	
19	Kameshwor Jha	MRO	DHO	
20	Bhuban Kumar Bhandari	CO	DHO	
21	Md. Shamim Ansari	PHO	Madhuwan PHC	
22	Shivan Thakur	VCO	DHO	
23	Ramesh Kumar Shah	HA	Prakashpur HP	
24	Mahesh K Yadav	DEC	ERHD	
25	Madhav Lal Deo	PHO	Harinagara PHC	
26	Rameshwor Sah	PHO	Dewanganj HP	
27	Kapleshwar Prasad Shah	EPIS officer	DHO	
28	Indra Mani Pokharel	SAHW	Dharan SHP	
29	Raj Narayan Mandal	PHI	DHO	
30	Shiv Dayal Mehta	PHO	DHO	
31	Ram Charan Chaudhary	PHO	Itahari PHC	
32	Pramila Rai	MPH Student	BPKHIS	
33	Pooja Pant	MPH	KHS College, Brt	
34	Krishna Dev Tiwari	PC	RYC	
35	Sita Kumari Sah	PWGF	RYC	
36	Rajendra Shrestha		RYC	
37	Hari Dev Shah	ADC	Plan Nepal	
38	Rajendra Pd. Sah	LIBON facilitator	Plan Nepal	

39	Yam Bahadur Thapa	LIBON facilitator	Plan Nepal	
40	Premchandra Pd. Jayswal	LIBON facilitator	Plan Nepal	
41	Bijay Kumar Sah	LIBON facilitator	Plan Nepal	
42	Kalawati Changbang	HPC	Plan Nepal	
43	Dipak Dahal	M&E Officer	Plan Nepal	Faciliator

Participant name list for LQAS survey for Final Evaluation, Bara district 22 Jun 2011 to 1 July 2011

Sn	Name	Organization	Position	Remarks
1	Amaleshwor Mishra	DHO,Bara	PHO	
2	Anil Kumar Mishra	DHO,Bara	F.P.N	
3	Ashok Jaiswal	Simara PHC	HA	
4	Babu Lal Swarnakar	Haraiya HP	P.H.O	
5	Bal chand Prasad	Bhodaha HP	Sr.AHW	
6	Balmaya Ghale	NFHP II	F.O	
7	Bhagawan Das Shrestha	Plan Nepal	PC-LIBON	
8	Bijay Kumar Sah	Plan Nepal	L.F	
9	Deepak kumar Neupane	Parsauni HP	Sr.AHW	
10	Dipak Dahal	Plan Nepal	M&EO	Facilitator
11	Diwakar Mishra	Plan Nepal	ADLC	
12	Dr. Surendra pd. Chaudhary	DHO ,Bara	DHO	
13	Jagannath pd. Jaiswal	DHO,Bara	PHI	
14	Jagannath pd. Jaiswal	Ganjbhawanipur	HA	
15	Kaushal Kishor Jha	DHO,Bara		
16	Kishori prasad Chaudhary	Gadhal HP	PHI	
17	Krishna Dev Tiwari	RYC,Sunsari	P.C	
18	Md. Sabir	DHO,Bara	PHO	
19	Nathuni Mishra	RYC	CMA	
20	Punit prasad Chaudhary	Rampur HP	Sr.AHW	
21	Raj Kishore pd. Chaudhary	Plan Nepal	LF	
22	Raj Kishore Prasad	Rampur HP	PHO	
23	Rajendra pd. Sah	Plan Nepal	LF	
24	Rajendra Pradhan	RYC		
25	Ram Binehi Yadav	DHO,Bara	D.T.L.O	
26	Ram Naresh Yadav	DHO,Bara	S.O	
27	Ramesh Sah			
28	Rameshwor pd. Sharma	Feta HP	Sr.AHW	
29	Roop Narayan pd. Yadav	Bariyarpur	PHO	
30	Sabir Ojha	RYC		
31	Sandip Kushwaha	NFHP II		
32	Shankar pd. Gupta	DHO,Bara	V.C.I	
33	Sher Bd. Rana	Plan Nepal	HC	
34	Sunil Kumar sriwastav	DHO,Bara	ISO	
35	Suresh Kumar Shah	Hardiya PHC	Sr.AHW	

36	Sursen pd. Chaudhary	Simraungad HP	PHO	
37	Tej Narayan Singh	DHO,Bara	V.C.I	
38	Tulsi pd. Mahato	Chiutaha	PHO	
39	Vijay Kumar Paswan	Kabhigoth	HA	
40	Yam Bdr. Thapa	Plan Nepal	LF	
41	Yogendra Shah	Nijgad PHC	HA	

CSSA Participants:

Participant name list for CSSA workshop of Parsa district from 1 to 3 Aug 2011

SN	Name	Organization	Position	Remarks
1	Bachu Lal Chaudhary	DEO	SO	
2	Binod Mehta	NRCS	PC	
3	Shiv Raj P Mahto	NGOCC	FO	
4	Kameshwor Pd Chaurasiya	DPHO	PHO	
5	Deo Kant Mishra	DPHO	EPIO	
6	Proful Mishra	DPHO	CCA	
7	Raj Kumar Mishra	DPHO	LA	
8	Kishor Giri	DPHO	CO	
9	JM Pradhan	DPHO		
10	Ram Lochan Mukhiya	DPHO		
11	Gyanendra Kumar Singh	DPHO	SO	
12	Savitri Kumari Bhandari	DCWB	CO	
13	Hari Bhakta Khoju	Plan Nepal	Consultant	
14	Reeta Lamichhane	NFHP-II	Officer	
15	Khusbu Mishra	DPHO	Staff Nurse	
16	Ram Bishwas Sah	DPHO	Lab Tech	
17	Phulena Pd. Shrivastav	DPHO	PHI	
18	Anil Kumar	DPHO	OA	
19	Bhawnath Jha	DPHO	PHO	
20	Inarjit Pd. Chaurasiya	NSRH	OA	
21	Srijana Rai	Plan Nepal	AA	
22	Krishan Bahadur Achhami	Plan Nepal	ADLC	
23	Sajit Kumar Adhikari	Plan Nepal	LF	
24	Dipak Dahal	Plan Nepal	M&EO	Facilitator
25	Deo Ratna Chaudhary	Plan Nepal	DLC	
26	Sumitra Lama	DPHO	SO	
27	Sumita Dhakal	DPHO	SN	
28	Urbara Luitel	WCO	WDO	
29	Bhagawan Das Shrestha	Plan Nepal	PC LIBON	
30	Ashwini Kumar Dwivedi	DPHO	VCO	
31	Sher Bahadur Rana	Plan Nepal	HC	3rd day only
31	Deepak Poudel	USAID		3rd day only
32	Ann Mc Cauley	USAID		3rd day only

Participant name list for CSSA workshop of Sunsari district from 9 to 11 Aug 2011

SN	Name	Organization	Remarks
1	Dr. I. N. Das	DHO, Sunsari	Partially
2	Sone Lal Yadav	Satejhora PHC	
3	Devendra Pokharel	Chatra PHC	
4	Ranjhana Pokharel	WCCO	
5	Maya Rai	DDC	
6	Gita Subedi (Nepal)	Inarwa Municipality	
7	Rameshwor Sah	Dewangunj HP	
8	Samim Ansari	Madhuwan PHC	
9	Ram Babu Shrestha	Sitagunj HP	
10	Sita Ram Gupta	Madheli HP	
11	Madhav Lal Deo	Harinagara PHC	
12	Prakash Adhikari	DHO, Sunsari	
13	Puspa Bhattarai	NGOCC	
14	Kapaleshwor Prasad Sah	DHO, Sunsari	
15	Haridev Thakur	Baklauri HP	
16	Urmila Budhathoki	DHO, Sunsari	
17	Ramesh Kumar Sah	Prakashpur HP	
18	Amol Narayan Chaudhary	DHO, Sunsari	
19	Sudhir Kumar Mehata	Inarwa HP	
20	Bal Bahadur Basnet	DHO, Sunsari	
21	Khadga Singh Chauhan	Bhutaha HP	
22	Bhuwan Bhandari	DHO, Sunsari	
23	Kameshwor Jha	DHO, Sunsari	
24	Bijaya Kumar Sah	Plan Nepal	
25	Sulochana Chaudhary	DHO, Sunsari	
26	Hari Bhakta Khoju	Plan Nepal	
27	Kedar Koirala	NFHS	
28	Bijaya Guragain	DHO, Sunsari	
29	Ramesh Kumar Yadav	Youth Kriyasan S. S	
30	Shanti Limbu	World Vision	
31	Shiv Dayal Mehato	DHO, Sunsari	
32	Ram Chanrand Chaudhary	DHO, Sunsari	
33	Shanti Ram Niraula	DHO, Sunsari	
34	Kisan Karki	DHO, Sunsari	
35	Shiv Narayan Yadav	DHO, Sunsari	
36	Maya Sanjel	DHO, Sunsari	
37	Rajendra Pd. Sah	Plan Nepal	
38	Yam Bahadur Thapa	Plan Nepal	
39	Prem Chandra Pd Jaiswal	Plan Nepal	
40	Kalawati Changbang	Plan Nepal	
41	Dipak Dahal	Plan Nepal	Facilitator
42	Bhagawan Das Shrestha	Plan Nepal	

43	Hari Dev Shah	Plan Nepal	
44	Yogesh Niraula	Plan Nepal	Partially
45	Sher Bahadur Rana	Plan Nepal	Partially
46	Shankar Joshi	Child Health Division	Partially
47	Narayan Khadka	ERHD	Partially

Participant list - CSSA workshop, Bara district from 26 to 28 July 2011

SN	Name	Position	Organization	Remarks
1	Basanta Kumar Upadhayay	CDO	DAO	
2	Krishna Pd. Yadav	CPO	DCWB, Bara	
3	Ashok Rauniyar	SS	DEO	
4	Mohammad Sabir	DPHO	DHO Bara	
5	Sunil Kumar Shrevastav	IJO	DHO Bara	
6	Amleshwor Mishra	PHO	DHO Bara	
7	Jhagru Prasad Yadav	Storekeeper	DHO Bara	
8	Ram Binehi Yadav	DTLO	DHO Bara	
9	Dipendra Tiwari	DACW	DHO Bara	
10	Ram Naresh Yadav	SO	DHO Bara	
11	Jagannath Prasad Jaiswal	PHI	DHO Bara	
12	Jagat Kumar Singh	Accontant	DHO Bara	
13	Ram Raja Dhungana	OA	DHO Bara	
14	Krishna Pd. Yadav	CPO	DCWB, Bara	
15	Ashok Rauniyar	SS	DEO	
16	Sujit Aryal	Reporter	Kripa Daily	
17	Punti Kumari Chaudhary	M&EO	Mahila Tatha Bal Bikas	
18	Brij Bhusan Singh	Assistant	Kalaiya Municipality	
19	Sandeep Kushwaha	CHA	NFHP-II	
20	Madan Raj Thapa	IM	NFHP-II	
21	Renu Kumari Ray	CHA	NFHP-II	
22	Bhagawan Das Shrestha	PC	Plan Nepal	
23	Raj Kishor Pd. Chaudhary	LF	Plan Nepal	
24	Diwakar Mishra	ADLC	Plan Nepal	
25	Hari Bhakta Khoju	Consultant	Plan Nepal	
26	Deo Ratna Chaudhary	DLC	Plan Nepal	
27	Dipak Dahal	M&EO	Plan Nepal	Facilitator
28	Prajwal Khatiwada	DC	Plan Nepal	
29	Srijana Rai	OA	Plan Nepal	

Annex 7: Nepal LIBON Project - CHW Training Matrix

	Project Area (Name of district or community)	Type of Training	Duration	Official Government, CHW and Partner	Paid or Volunteer	Planning Scheduled Date	Number of Trained	Focus of Training	Status
1	Kathmandu district	National Level Master Training of Trainers (MTOT) on CB-NCP	7 days	Government	Paid	Aug 08	25	Training on technical skill of newborn care & management of danger signs and recording reporting, for: ▪ Infection ▪ Hypothermia ▪ Birth asphyxia ▪ Low birth weight	▪ Completed ▪ The training was funded by UNICEF Nepal with coordination with CHD, SC, Plan, Care etc
2	Sunsari and Parsa districts	Planning meeting at district level/program orientation for CB-NCP	2 days	Government	Paid	Sept 08	77	CB-NCP administrative orientation	▪ Completed
3	Sunsari and Parsa districts	District Training of Trainers (DTOT) on	7 days	Government	Paid	Sept 08	39	Training on technical skill of newborn care & management of	▪ Completed

	Project Area (Name of district or community)	Type of Training	Duration	Official Government, CHW and Partner	Paid or Volunteer	Planning Scheduled Date	Number of Trained	Focus of Training	Status
		CB-NCP						danger signs and recording reporting, for: ▪ Infection ▪ Hypothermia ▪ Birth asphyxia ▪ Low birth weight	
4	Sunsari and Parsa districts	Health Facility (HF) Ilaka level training on CB-NCP	7 days	Government	Paid	Oct 08 – Jan 09, Oct-Dec 09 and Sep'11	390	Training on technical skill of newborn care & management of danger signs and recording reporting, for: ▪ Infection ▪ Hypothermia ▪ Birth asphyxia ▪ Low birth weight	▪ Completed
5	Sunsari and Parsa districts	VHW/MCHW – SHP level training on CB-NCP	6 days	Government	Paid	Apr-Jun 09 Jan-Mar 10	235	Training on technical skill of newborn care & management of danger signs and recording	▪ Completed

	Project Area (Name of district or community)	Type of Training	Duration	Official Government, CHW and Partner	Paid or Volunteer	Planning Scheduled Date	Number of Trained	Focus of Training	Status
								reporting, for: ▪ Infection ▪ Hypothermia ▪ Birth asphyxia ▪ Low birth weight	
6	Sunsari and Parsa districts	Basic training to FCHVs on CB-NCP	7 days	CHW	Volunteer	Oct 08 – Jan 09 Oct-Dec10	1,962	Training on technical skill of newborn care & management of danger signs and recording reporting, for: ▪ Infection ▪ Hypothermia ▪ Birth asphyxia ▪ Low birth weight	▪ Completed
7	Sunsari and Parsa districts	Orientation to traditional healer on CB-NCP	1 day	CHW	Volunteer	Sep'10 – Feb'11	364	Orientation on CB-NCP program	▪ Completed
8	Sunsari and Parsa districts	Follow-up after training on CB-NCP	11 days	Government , CHW and partner	Paid and Volunteer	Oct-Dec'10	483	Training on technical skill of newborn care & management of	▪ Completed

	Project Area (Name of district or community)	Type of Training	Duration	Official Government, CHW and Partner	Paid or Volunteer	Planning Scheduled Date	Number of Trained	Focus of Training	Status
								danger signs and recording reporting, for: ▪ Infection ▪ Hypothermia ▪ Birth asphyxia ▪ Low birth weight	
9	Sunsari and Parsa districts	CB-NCP software	2 days	Government	Paid	Jun & Dec'10	22	Training on technical skill to update CB-NCP data into developed software	▪ Completed
10	Sunsari district	Regional ToT on CB-NCP	7 days	Government and partner	Paid	Feb 2009	24	Training on technical skill of newborn care & management of danger signs and recording reporting, for: ▪ Infection ▪ Hypothermia ▪ Birth asphyxia ▪ Low birth weight	▪ Completed

	Project Area (Name of district or community)	Type of Training	Duration	Official Government, CHW and Partner	Paid or Volunteer	Planning Scheduled Date	Number of Trained	Focus of Training	Status
11	Sunsari and Parsa districts	PWG training	2 days	Government and CHW	Paid and FCHV volunteer	Jul'08 to Jun'09	2,185	Training focus on demand, service and know about danger sign during pregnancy, delivery, postnatal and newborn	▪ Completed
12	Kathmandu district	LQAS training to IOM student, Kathmandu	4 days	Student	Volunteer	Sep & Dec'08	87	Training focus on survey technique; data collection through selection community, household and respondent as well as data hand tabulation and analysis	▪ Completed
13	Kathmandu district	LQAS orientation to IOM faculty member, Kathmandu	4 days	Partner	Paid	Sep'08	17	Training focus on survey technique; data collection through selection community, household and respondent as well as data hand tabulation and	▪ Completed

	Project Area (Name of district or community)	Type of Training	Duration	Official Government, CHW and Partner	Paid or Volunteer	Planning Scheduled Date	Number of Trained	Focus of Training	Status
								analysis	
14	Kathmandu district	LQAS Master TOT	5 days	Government and Partner	Paid	Jan'08	25	Training focus on survey technique; data collection through selection community, household and respondent as well as data hand tabulation and analysis	▪ Completed
15	Bara, Parsa and Sunsari district	LQAS training	4 days	Government and Partner	Paid	Jan'08, Feb'08, Dec'09 to Feb'10 and May-Aug'11	384	Training focus on survey technique; data collection through selection community, household and respondent as well as data hand tabulation and analysis	▪ Completed
16	Bara, Parsa and Sunsari district	CSSA workshop	3 days	Government, stakeholder and Partner	Paid	May'08, Aug'08, Dec'09 to Mar'10 and Jul to	319	Workshop on how to program sustainable after project completion and developed	▪ Completed

	Project Area (Name of district or community)	Type of Training	Duration	Official Government, CHW and Partner	Paid or Volunteer	Planning Scheduled Date	Number of Trained	Focus of Training	Status
						Aug'11		action plan	
17	Sunsari district	Rapid Health Facility Assessment	9 days	Government, stakeholder and Partner	Paid	Feb'10	21	Training focus on survey technique for health facilities assessment	▪ Completed
18	Parsa district	Orientation on Chlorhexidine (CHX)	1 day	Government, stakeholder and Partner	Paid	Oct'09	20	Orientation for use of CHX in umbilical stump of newborn baby	▪ Completed
19	Parsa district	CHX training to Hospital staff	1 day	Government	Paid	Nov'09	92	Training for apply of CHX in umbilical stump of newborn baby within 1 or 2 hours	▪ Completed
20	Parsa district	CHX training to district and HF staff	1 day	Government	Paid	Oct'09 & Jan'10	122	Training for apply of CHX in umbilical stump of newborn baby within 1 or 2 hours	▪ Completed
21	Parsa district	CHX training to VHW/MCHW	1 day	Government	Paid	Nov & Dec'09	132	Training for apply of CHX in umbilical stump of newborn baby within 1 or 2 hours	▪ Completed
22	Parsa	CHX training	1 day	CHW	Volunteer	Jan to	738	Training for apply	▪ Completed

	Project Area (Name of district or community)	Type of Training	Duration	Official Government, CHW and Partner	Paid or Volunteer	Planning Scheduled Date	Number of Trained	Focus of Training	Status
	district	to FCHV				Jun'10		of CHX in umbilical stump of newborn baby within 1 or 2 hours	

Annex 8: Nepal LIBON Project - Evaluation Team

Organization	Name of Member	Titles
External Consultant	Dr. Mahesh K Maskey	Team Leader
FHD – MoHP	Mangala Manandhar	Sr. Public Health Officer
ERHD - MoHP	Ram Dhan Mehata	Regional Director
DHO Sunsari	Dr. Shree Ram Sah	District Health Officer
	Shiv Narayan Yadav	Public Health Officer
DPHO Parsa	Indra Dev Yadav	District Public Health Officer
	Phulena Shreevastav	Public Health Officer
DHO Bara	Md. Sabir	District Public Health Officer
	Amleshwor Mishra	Public Health Officer
USAID local mission	Narmaya Limbu	AID Development Program Management Specialist
Care Nepal	Shanti Thakali	Field Officer
Plan USA	Harpreet Anand	Program Development Manager
Plan NCO	Sher Bahadur Rana	Health Coordinator
	Bhagawan Das Shrestha	Project Coordinator - LIBON
Plan Sunsari PU	Yogesh Niraula	Acting Program Unit Manager
	Kalawati Changbang	Health Program Coordinator
	Hari Dev Shah	Assistant District LIBON Coordinator
Plan Bara PU	Deo Ratna Chaudhary	District LIBON Coordinator
	Krishna Bahadur Achhami	Assistant District LIBON Coordinator
	Diwakar Mishra	Assistant District LIBON Coordinator
	Dipak Dahal	Monitoring and Evaluation Officer
Community *(FCHVs)*	Januka Chaudhary – Sunsari	Community Volunteer
	Naina Devi Sah – Parsa	Community Volunteer
	Kausaliya Devi Chaudhary - Bara	Community Volunteer

Annex 9: Nepal LIBON Project - Evaluation Assessment Methodology

Plan Nepal

Terms of Reference for the

Consultant for Final Evaluation of

Local Innovation for Better Outcomes for Neonates (LIBON) Project and Chlorhexidine Operational Research

1. Introduction

Plan is a child-centered community development organization without religious, political or governmental affiliation. Plan' vision is of a world in which all children realize their full potentials in societies, which respect people's rights and dignity. Child sponsorship is the basic foundation of the organization.

USAID Child Survival and Health Grant awarded Plan Nepal to implement Local Innovation for Better Outcomes for Neonates (LIBON) Project in Bara, Parsa and Sunsari districts jointly with the Ministry of Health and Population (MoHP) and other collaborating organizations in Nepal. The duration of the LIBON project is from 30 September 2007 to 29 September 2011.

The goal of the project is to sustainably reduce the burden of neonatal mortality in Nepal. This goal will be achieved through the implementation of the following results:

Result 1: Increased Access to NNH (neonatal health) Services in Parsa
Result 2: Increased Demand for NNH Services in Parsa
Result 3: Increased Quality of NNH Services in Parsa
Result 4: Strengthened support for NNM (neonatal mortality) reduction in Nepal

The following **strategies** inform the LIBON program design:

- Community Based Service Delivery
- Community Mobilization
- Health Systems Strengthening
- Stakeholder Sharing and Collaboration
- Social Inclusion

2. Scope of Work

Qualitative evaluation as a part of final evaluation of the LIBON project as well as final evaluation of chlorhexidine operational research in Parsa will be done in September 2011. The external consultant selected from USNO with concurrence from USAID Headquarters will complete this task. Local consultants will collect the quantitative information of Sunsari, Parsa and Bara districts for final evaluation and CHX ops research (in Parsa only) from May 2011 to August 2011 through Lot Quality Assurance Survey (LQAS) technique and Child Survival Sustainability Assessment (CSSA) framework workshop. The surveys and CSSA workshop will

be held in Sunsari, Parsa and Bara (May 2011 – Aug 2011). S/he will prepare reports of LQAS and CSSA. The reports will be provided to the external consultant for further analysis and references.

The external consultant will collect qualitative information through interaction with different key personnel, groups, stakeholders at national, districts and community levels as a means to triangulate the quantitative information. The outcome of quantitative and qualitative information will be de-briefed and shared with Plan Nepal staff and stakeholder's representative at national level. Finally, the external consultant will prepare the final evaluation report based on attached USAID guideline and will submit to USNO for finalization.

3. Tentative work plan for FE of external consultant (LIBON and CHX ops research)

Activities	Tentative Date and Venue	# of days	Remarks
Review project documents Team planning meetings with key PVO and partner staff to explain the purpose of the evaluation, and with the evaluation team to organize specific activities	*Sept 8-9, 2011* *Meeting with Plan Nepal CMT and concern staff* *(Meeting with CHD/ FHD/ DoHS/ SC / USAID Local Mission/ NFHP etc.)* *Prepare for quantitative information tools*	2 days	
Field work and data collection: site visits and interviews (key informants and/or focus groups)	*Sept 10-18, 2012* *Field visit in Bara, Parsa and Sunsari districts – LIBON site*	9 days	Sep 10-12 Sunsari Bara/Parsa: Sept 13-18
In-country debriefing preparation and drafting report	*Sept 19-22, 2011 (Mon-Thu)* *Preparation of draft report and presentation*	4 days	
In-country FE finding sharing to all the stakeholders of Nepal	*Sept 23, 2011 Fri (Asoj 6)* *Findings of FE share with stakeholders, partners*	1 day	
Drafting and finalizing report.	*Sept 24-29, 2011* *Prepare final report and submit to USNO*	5 days	
	TOTAL DAYS	**21 Days**	

4. Professional skill and experience

- 5-7 years of professional skills and knowledge on child survival project monitoring and evaluation and operational research
- Practical experience conducting quantitative and qualitative research
- Professional work experience in evaluating USAID funded child survival project
- Excellent analytical and report writing skills
- Proficiency of evaluation methods
- Good communication and facilitation skills
- Fluency in English
- Advanced university degree in public health and related field
- Knowledge of the country and regional context is an asse

Qualitative study methodology

- **Review of key documents**
  - Lot Quality Assurance Sampling (LQAS) report
  - Child Survival Sustainability Assessment (CSSA) report
  - USAID guidelines for Final Evaluation
  - Details Implementation Plan (DIP)
  - Mid-term Evaluation report
  - Annual reports
  - Chlorhexidine (CHX) report
- Team planning meeting with key project staff
- Development of tools for FGD and IDI for key beneficiaries and stakeholder groups
- Debriefing and feedback on tools from Country Management Team (CMT)
- Field work for data collection – 3 districts (Sunsari, Parsa and Bara)
- Preparation debriefing presentation *(including quantitative and qualitative information)* to national stakeholders
- Drafting and finalization of report

Data collection tools:

- PWG (FGD) – 2 per district
- Mothers-in-law (FGD) – 2 per district
- Husband (FGD) – 2 per district
- FCHV (IDI) – 2 per district
- Health facility in-charge (IDI) – 2 per district
- DHO/DPHO (IDI) – 1 per district

Data collection timeline:

- Sunsari: 10 – 12 September 2011
- Bara: 13 – 15 September 2011
- Parsa: 16 – 18 September 2011
  - 3 days per district (first of each day for field visit and data collection; second half of the day for debriefing between team members and data quality check)
  - One team per FGD or IDI and for consistency purposes; the team leader/facilitator for each session remained the same
  - Informed verbal consent prior to initiating each interview/FGD
  - Based on experience from the field, we separated the mother's in law and husband groups into two separate FGDs in an attempt to increase male participants in the FGD

Visited place in Sunsari district

Sonapur – Sub health post	**Chimdi – Sub health post**
Community supported birthing center	Government supported birthing center
Marginalized "Dalit" community	Muslim community
Musahar ward has pregnant women group	Muslim ward has pregnant women group
CB-NCP program	CB-NCP program
No Chlorhexidine (CHX)	No Chlorhexidine

Visited place in Parsa district

Madhuwan Mathaol – Sub health post	**Bindabasini – Sub health post**
Community supported birthing center	No birthing center
Mixed community	Marginalized community
No pregnant women group	Bindabasini ward has pregnant women group
CB-NCP program	CB-NCP program
Chlorhexidine	Chlorhexidine

Visited place in Bara district

Chhatapipara – Sub health post	**Karaiya – Sub health post**
No birthing center nearby (closest is 15 minute drive)	No birthing center nearby (closest in Birgunj or Kalaiya)
Mixed community	Mixed community
Pregnant women group	Pregnant women group
No CB-NCP	No CB-NCP
No CHX	No CHX

FGD for decision maker *(recently delivered mother's husband and mother-in-law)*
Plan Nepal, LIBON Project, Final Evaluation, September 2011

District: _____ VDC: _____

Name of Village_____, Ward no: _____ Interview date:

_____

Name of facilitator:_____ Name of note

taker(s):_____

Greeting, introduction and verbal consent!

You may be aware that the Plan Nepal, LIBON project has provided financial and technical support to District (Public) Health Office to implement Community Based Newborn Care Program (CB-NCP) in this community. Its objective is to improve neonatal and maternal health. We are here for gathering your opinion about the achievement and constraints of the program. This will be a confidential discussion and your name will not be attached to your quotes. We anticipate the discussion to take about one hour. It is your right to participate or not to participate in the discussion ……, if we have your permission to proceed then we can start discussion.

Topic for FGD

1. I understand that there are different kinds of groups in your ward. Which are the most common groups in which pregnant women participate?
2. What does it mean for you to be in this kind of group? (Need probe)
3. What topics are discussed in this group meeting? What are the activities of this group?
    - Did you get support from your mother-in-law / husband to come in the meeting?
4. Have you heard about Community Based Newborn Care Program (CB-NCP)?
5. What is the status of maternal and neonatal health services? (Need probe)
    - Before and after implementation of CB-NCP program.
    - Maternal and newborn care practices before and after CB-NCP program
6. Is PWG useful? If yes, why? How it helps to utilize maternal and neonatal health services?
7. What are the factors that contributed to its utilization (better and under utilization)? (Need probe behavior mapping and self monitoring "Tika")
8. Do you know about Birth Preparedness Plan (BPP)?

9. Did you make a BPP? How did you know about it?
10. Did you make public commitments on utilization of maternal health services? If yes, what is your opinion on this?
11. Have your daughter-in-law / wife ever antenatal check-up during pregnancy? If yes, how many times? If not or less than 4 times, why?
12. Where did your daughter-in-law / wife deliver and why? (need probe for incentive)
13. If delivery at home, who did it?
14. Did daughter-in-law / wife have postnatal check-up for yourself and newborn? If not, what are the reason/factors?

Only for Parsa district

15. Do you hear about Kawach (Chlorhexidine)? If yes, did your newborn get Kawach (Chlorhexidine)? If not applied Kawach (Chlorhexidine), why?
16. What is your opinion on Kawach (Chlorhexidine) application to newborn umbilical stump? Advantage and disadvantage?

Thank you!!

Note: Participant list will be listed in separate page

FGD for mothers' group (recently delivered mother / pregnant women)
Plan Nepal, LIBON Project, Final Evaluation, September 2011

District: _____ VDC: _____

Name of Village_____, Ward no: _____ Interview date:

_____

Name of facilitator:_____ Name of note

taker(s):_____

Greeting, introduction and verbal consent!

You may be aware that the Plan Nepal, LIBON project has provided financial and technical support to District (Public) Health Office to implement Community Based Newborn Care Program (CB-NCP) in this community. Its objective is to improve neonatal and maternal health. We are here for gathering your opinion about the achievement and constraints of the program. This will be a confidential discussion and your name will not be attached to your quotes. We anticipate the discussion to take about one hour. It is your right to participate or not to participate in the discussion ……, if we have your permission to proceed then we can start discussion.

Topic for FGD

17. Are you a member of mothers' group / pregnant women group (PWG)?
18. What does it mean for you to be in this kind of group? (Need probe)
19. What topics are discussed in this group meeting? What are the activities of this group?
    - Did you get support from your mother-in-law / husband to come in the meeting?
20. Have you heard about Community Based Newborn Care Program (CB-NCP)?
21. What is the status of maternal and neonatal health services? (Need probe)
    - Before and after implementation of CB-NCP program.
    - Maternal and newborn care practices before and after CB-NCP program
22. Is PWG useful? If yes, why? How it helps to utilize maternal and neonatal health services?
23. What are the factors that contributed to its utilization (better and under utilization)? (Need probe behavior mapping and self monitoring "Tika")
24. Do you know about Birth Preparedness Plan (BPP)?

25. Did you make a BPP? How did you know about it?
26. Did you make public commitments on utilization of maternal health services? If yes, what is your opinion on this?
27. Have you ever antenatal check-up during pregnancy? If yes, how many times? If not or less than 4 times, why?
28. Where did you deliver and why? (need probe for incentive)
29. If delivery at home, who did it?
30. Did you have postnatal check-up for yourself and newborn? If not, what are the reason/factors?

Only for Parsa district

31. Do you hear about Kawach (Chlorhexidine)? If yes, did your newborn get Kawach (Chlorhexidine)? If not applied Kawach (Chlorhexidine), why?
32. What is your opinion on Kawach (Chlorhexidine) application to newborn umbilical stump? Advantage and disadvantage?

Thank you!!

Note: Participant list will be listed in separate page

In Depth Interview Guideline for Health Facility In-charge
Plan Nepal, LIBON Project, Final Evaluation, September 2011

District: _____ VDC: _____

Type of health facility_____, Ward no: _____ Interview date:

_____

Name of facilitator:_____ Name of note

taker:_____

Greeting, introduction and verbal consent!

You may be aware that the Plan Nepal, LIBON project has provided financial and technical support to District (Public) Health Office to implement Community Based Newborn Care Program (CB-NCP) in this community. Its objective is to improve neonatal and maternal health. We are here for gathering your opinion about the achievement and constraints of the program. This will enable us to disseminate good practices and also improve upon the strategies that did not work, in our future program. This will be a confidential discussion and your name will not be attached to your quotes. We anticipate the discussion to take about one hour. It is your right to participate or not to participate in the discussion ……., if we have your permission to proceed then we can start discussion.

1. Are you aware of CB-NCP program being implemented in your Ilaka?
2. What has been your role in promoting maternal and newborn health (MNH) in your area? Please describe.
3. What is the support you receive from the higher facility or supervisors in implementing your activities in relation to CB-NCP? Probe for how often is the guidance received? How does the support being received now compare to the support received four years ago?
4. How do you compare the skills and capacities of the facility and its workers in addressing neonatal, child and mother health issues to that prevalent four years ago?
5. What are some of the additional skills and capacities still required to deal with MNH issues?

6. What is your relationship with the FCHVs? What role do they perform and how does this differ from your role?

7. Are you a participant in the HFMOC? Please describe its activities and some achievements. Please also identify some of the areas which could not be addressed successfully by the HFMOC.

8. How many mothers groups / pregnant women group are there in your coverage area? How often do you get to interact with them? Do you think the mothers will continue to be grouped after the project staff stops visiting the communities? What can be done to sustain them?

9. What materials has the project provided to generate awareness and change behavior? Do you have some of these with you? Which tool did you think worked the best? Which will you use once the project comes to an end?

10. How do you compare the way care is being provided in your health facilities now to four years ago? What are the additional changes required to completely address MNH issues.

11. How has the availability of essential drugs and equipment to your health functionaries changed in the last four years? If it has improved then do you think it will continue to remain following the closure of the project?

12. What are some of the contributions of the CB-NCP program/successes? (look for community perception about public health services, community behaviors, health outcomes, access to marginalized communities, community empowerment), Please give us some specific examples

13. What are some of the areas which could have been dealt with more effectively?

14. Now that the project has come to an end what are some of the activities which

    a) Will be continued and who will support it

    b) Will not be continued

15. Any other comments

Only for Parsa district

33. What is your opinion on Kawach (Chlorhexidine) application to newborn umbilical stump? Advantage and disadvantage?

Thank you indeed for your insightful remarks.

Note: Participant list will be listed in separate page

In Depth Interview Guideline for District (Public) Health Office staff
Plan Nepal, LIBON Project, Final Evaluation, September 2011

District: _____ Interview date: _____

Name of facilitator:_____ Name of note

taker(s):_____

Greeting, introduction and verbal consent!

You may be aware that the Plan Nepal, LIBON project has provided financial and technical support to District (Public) Health Office to implement Community Based Newborn Care Program (CB-NCP) in this community. Its objective is to improve neonatal and maternal health. We are here for gathering your opinion about the achievement and constraints of the program. This will enable us to disseminate good practices and also improve upon the strategies that did not work, in our future program. This will be a confidential discussion and your name will not be attached to your quotes. We anticipate the discussion to take about one hour. It is your right to participate or not to participate in the discussion ……., if we have your permission to proceed then we can start discussion.

Implementation: Training, logistic and other support

1. What kind of support (training, supplies, logistics) did this office receive under this project?
2. How do you compare the skills and capacities of the facility and its workers in addressing neonatal, child and mother health issues to that four prevalent four years ago?
3. What are some of the additional skills and capacities still required to deal with MNCH issues?
4. What materials has the project provided to generate awareness and change behavior? Do you have some of these with you? Which tool did you think worked the best? Which will you use once the project comes to an end?
5. How do you compare the way care is being provided in your health facilities now to four years ago? What are the additional changes required to completely address MNCH issues.

6. How has the availability of essential drugs and equipment to your health functionaries changed in the last four years? If it has improved then do you think it will continue to remain following the closure of the project?
7. What has been the result of the other inputs (note for only those inputs mentioned by the DHO)
    a. Facility strengthening
    b. Coordination
    c. Advocacy
    d. Community mobilization
    e. Community empowerment
    f. Equity interventions
8. Considering the project objectives and strategies and DHO partnership with *LIBON*, what has worked well?
9. What are some of the program management challenges that you have faced and how did you deal with them?
10. What are the areas for improvement or changes?

Sustainability:

11. Now that the project has come to an end what are some of the activities which
    a. Will be continued and who will support it
    b. Will not be continued

Summary:

12. When you assess the MNCH in your area, what is the perceived change in the four years of project implementation
13. In your opinion, what is the major success of the program
14. What could have been done differently? What did not worked well?
15. Do you have any other comments that you would like to make

---

Only for Parsa district

34. What is your opinion on Kawach (Chlorhexidine) application to newborn umbilical stump? Advantage and disadvantage?

Thank you indeed for your insightful remarks.

Note: Participant list will be listed in separate page

FGD Guidelines for FCHV for Pars and Sunsari districts in Nepali

महिला स्वास्थ्य स्वयं सेविका (म स्वा स्व से) संग गरिने छलफलको निर्देशिका

प्लान नेपाल, लिवन परियोजना अन्तिम मूल्यांकन

गाविस: _____ स्थान: _____

वार्ड नं _____ मिति: _____

सहजकर्ताको नाम: _____ अभिलेखकर्ताको नाम: _____

अभिवादन, परिचय तथा सुचित मौखिक सहमति:

प्लान नेपाल, लिवन परियोजनाको आर्थिक तथा प्राविधिक सहयोगमा जिल्ला (जन) स्वास्थ्य कार्यालयद्धारा संचालन गर्दै आएको नवजात शिशु स्याहार कार्यक्रमबारे यहाँहरुलाई अवगतै छ । यस कार्यक्रमले प्राप्त उपलब्धी तथा रोकावटको बारेमा तपाईहरुको विचार अनुभव बुझ्न यहाँ हामी उपस्थित छौं । यसले आगामी दिनहरुमा हाम्रो राम्रा व्यवहारलाई सम्प्रेषण गर्न तथा हाम्रा रणनितिहरुलाई परिमार्जन गर्न सहयोग गर्नेछ । यो छलफल गोप्य हुनेछ र तपाईहरुको नाम कतै उल्लेख गरिने छैन । यो छलफलको लागी करिब १ घण्टा जति समय लाग्छ । यस छलफलमा तपाईहरुको सहभागी हुने वा नहुने तपाईहरुकै अधिकार हो……., यदी हुने हो भने, के छलफल शुरु गरौं ।

१) के तपाईले आमा समूहको बैठक संचालन गर्ने गर्नुभएको छ? छ, भने कति कति समयमा?
२) आमा समूहको बैठकका सहभागीहरु को को हुन? तपाईको आमा समूहमा सिमान्तिकृत समुदायको सहभागिता कस्तो छ?
३) के आमा समूहको बैठकमा नवजात शिशु स्याहार कार्यक्रम (CB-NCP) को बारेमा छलफल हुन्छ? हुन्छ भने कुन कुन विषयमा?
४) समुदायमा आधारित नवजात शिशु स्याहार कार्यक्रम/जीवन सुरक्षा कार्यक्रमका कुन कुन क्रियाकलापले राम्रो छाप पार्‌यो, कुनले पारेन र किन ?
५) तपाईको विचारमा यो कार्यक्रमका सवल र कमजोर पक्षहरु के के रहेका छन् ?
६) यो कार्यक्रमले समुदायमा जनचेतना जगाउने कार्यक्रममा कत्तिको मद्दत पुर्‌याएको छ? यदी छ भने के कारणहरुले त्यसो भएको हो?

७) तपाईलाई यस कार्यक्रमले समुदायमा जनचेतना जगाउन के कस्ता सामाग्री उपलब्ध गराएको छ ? के तपाईसंग कुनै सामाग्री छ ? तपाईको विचारमा सबैभन्दा उत्तम सामाग्री कुन हो ?

८) यस कार्यक्रमले समुदायको स्वास्थ्य ब्यवहारमा परिवर्तन ल्याउन कस्तो प्रभाव पारेको छ? कुनै उदाहरण दिन सक्नुहुन्छ ?

९) यो कार्यक्रम मार्फत तपाईले दिई रहेको सेवालाई मद्दत पुर्‌याउने तत्वहरु के छन् र वाधक तत्वहरु के छन्?

१०) यस कार्यक्रमले तपाईहरुको ज्ञान र सीप वृद्धिमा मद्दत पुर्‌याएको छ कि छैन । छ भने कसरी:

११) कुन कुन अवस्थामा नवजात शिशुलाई रिफर गर्नु पर्छ र के के गर्नु हुन्छ र कस्तो कस्तो सुझाव दिनु हुन्छ?

CB-NCP Training

I'd like to ask you some questions about the training that you received as part of the CB-NCP.

12. How many types of training have you participated in under the CB-NCP? Please describe each of these. When did they take place?
13. What were your impressions of the training? What did you like about the training?
14. If you could, what would you change about the training to make it easier for you to do your work?
15. Please comment on how well you were taught to do the following during the training:
    i. Provide postnatal care to newborns? To mothers?
    ii. Use the scales and manage newborns with low birth weight?
    iii. Use the thermometer and manage newborns with hypothermia?
    iv. Use the Delay's suction and bag-and-mask and manage newborns with birth asphyxia?
    v. Use the timer and manage newborns with infections?

16. Were you visited by a district supervisor a few months after the training and asked a number of questions about the NCP and asked to demonstrate your skills using NCP equipment? If yes, what were your impressions of that activity?
17. I'd like to ask you about some of the equipment that you were give for NCP: *(Fill out the following table, FCHV should show you each item of equipment)*:

Equipment	**Do you have working equipment now? Please show me.**	**When did you receive it? (relate to before / after / during training)**
Scales		
Color-coded thermometer		
DeLee suction		
Bag-and-mask		
Timer		
NCP flipchart		
NCP job aid		
Action card		

Incentives

Under the NCP you are given an incentive for completing certain tasks.

18. Please describe what you need to do to receive the NCP incentive.
19. Have you ever received an incentive? How many times have you received it? How much did you receive?
20. Did you receive the correct amount? Do you know how to calculate the amount of incentive that you are supposed to receive?
21. How has the performance-based incentive for CB-NCP affected your work on other programs? *(probe: how do they affect the way you prioritize your work?)*

22. How has the performance-based incentive for CB-NCP affected your motivation to be a FCHV? *(probe: how has it affected how hard you work at your job?)*
23. What do you think about the NCP incentive program? What changes, if any, would you like to see made to the NCP incentives program for FCHVs?

तपाईलाई यस कार्यक्रम बारे केही थप भन्नु छ कि? तपाईको अमूल्य सुझावको लागि धन्यवाद ।

Only for Parsa district

1. Do you hear about Kawach (Chlorhexidine)? If yes, did your newborn get Kawach (Chlorhexidine)? If not applied Kawach (Chlorhexidine), why?
2. What is your opinion on Kawach (Chlorhexidine) application to newborn umbilical stump? Advantage and disadvantage?

सहभागीको लागी धन्यबाद !!!

सहभागीको नामावली छुट्टै पानामा लिनुपर्ने छ ।

FGD for decision maker *(recently delivered mother's husband and mother-in-law)*
Plan Nepal, LIBON Project, Final Evaluation, September 2011, Bara district

District: _____ VDC: _____

Name of Village_____, Ward no: _____ Interview date:

_____

Name of facilitator:_____ Name of note

taker(s):_____

Greeting, introduction and verbal consent!

You may be aware that the Plan Nepal, LIBON project has provided financial and technical support to District (Public) Health Office to implement Community Based Newborn Care Program (CB-NCP) in this community. Its objective is to improve neonatal and maternal health. We are here for gathering your opinion about the achievement and constraints of the program. This will enable us to disseminate good practices and also improve upon the strategies that did not work, in our future program. This will be a confidential discussion and your name will not be attached to your quotes. We anticipate the discussion to take about one hour. It is your right to participate or not to participate in the discussion ……, if we have your permission to proceed then we can start discussion.

Topic for FGD

3. I understand that there are different kinds of groups in your ward. Which are the most common groups in which pregnant women (your daughter in law / wife) participate?
4. Do you allow your daughter in law /wife to join the PWG? If yes why? If no why?
5. Do you know anyone in your community who do not want to allow joining their daughter in law /wife the PWG? If so why do you think?
6. Do you know what topics are discussed in this group meeting? What are the activities of this group?
7. Have you heard about child survival/ Birth Preparedness Plan (BPP)?
8. What is the status of maternal and neonatal health services? (Need probe)
    - Before and after implementation of child survival/BPP program.
9. Is PWG useful? If yes, why? How it helps to utilize maternal and neonatal health services?
10. What are the factors that contributed to its utilization (better and under utilization)? (Need probe behavior mapping and self monitoring "Tika")
11. Did you make public commitments on utilization of maternal health services? If yes, what is your opinion on this?

12. Have your daughter-in-law / wife ever antenatal check-up during pregnancy? If yes, how many times? If not or less than 4 times, why?
13. Where did your daughter-in-law / wife deliver and why? (need probe for incentive)
14. If delivery at home, who did it? Why?
15. Did daughter-in-law / wife have postnatal check-up and also for newborn? If not, what are the reason/factors?

Thank you!!

Note: Participant list will be listed in separate page

FGD for mothers' group (recently delivered <1 year mother / pregnant women)
Plan Nepal, LIBON Project, Final Evaluation, September 2011, Bara

District: _____ VDC: _____

Name of Village_____, Ward no: _____ Interview date:

_____

Name of facilitator:_____ Name of note

taker(s):_____

Greeting, introduction and verbal consent!

You may be aware that the Plan Nepal, LIBON project has provided financial and technical support to District (Public) Health Office to implement Community Based Newborn Care Program (CB-NCP) in this community. Its objective is to improve neonatal and maternal health. We are here for gathering your opinion about the achievement and constraints of the program. This will enable us to disseminate good practices and also improve upon the strategies that did not work, in our future program. This will be a confidential discussion and your name will not be attached to your quotes. We anticipate the discussion to take about one hour. It is your right to participate or not to participate in the discussion ……, if we have your permission to proceed then we can start discussion.

Topic for FGD

16. Are you a member of pregnant women group (PWG) /mothers' group?

17. How often does this group meet?

.

18. What does it mean for you to be in this kind of group? (Need probe)

19. What topics are discussed in this group meeting? What are the activities of this group?

    - How often? Did you get support from your mother-in-law / husband to come in the meeting?

20. Have you heard about Child Survival/LIBON Project?

21. What is the status of maternal and child health services? (Need probe)

    - Maternal and child care practices before and after Child Survival/LIBON program

22. Is PWG useful? If yes, why? How it helps to utilize maternal and child health services?

23. What are the factors that contributed to its utilization (better and under utilization)? (Need probe behavior mapping and self monitoring “Tika”)

24. Do you know about Birth Preparedness Plan (BPP)?

25. Did you make a BPP? How did you know about it?

26. Did you make public commitments on utilization of maternal health services? If yes, what is your opinion on this?

27. Have you ever received antenatal check-up during pregnancy? If yes, how many times and where? If not or less than 4 times, why?

28. Where did you deliver and why? (need probe for incentive)

29. If delivery at home, who has done it?

30. Did you have postnatal check-up for yourself and newborn? If not, what are the reason/factors?

Thank you!!

Note: Participant list will be listed in separate page

FGD Guidelines for FCHV for Bara district in Nepali

महिला स्वास्थ्य स्वयं सेविका (म स्वा स्व से) संग छलफलको निर्देशिका

प्लान नेपाल, लिवन परियोजना अन्तिम मूल्यांकन, बारा जिल्ला

गाविस: _____ स्थान: _____

वार्ड नं _____ मिति: _____

सहजकर्ताको नाम: _____ अभिलेखकर्ताको नाम: _____

अभिवादन, परिचय तथा सुचित मौखिक सहमति:

प्लान नेपाल, लिवन परियोजनाको आर्थिक तथा प्राविधिक सहयोगमा जिल्ला (जन) स्वास्थ्य कार्यालयद्धारा संचालन गर्दै आएको नवजात शिशु स्याहार कार्यक्रमबारे यहाँहरुलाई अवगतै छ । यस कार्यक्रमले प्राप्त उपलब्धी तथा रोकावटको बारेमा तपाईहरुको विचार अनुभव बुझ्न यहाँ हामी उपस्थित छौं । यसले आगामी दिनहरुमा हाम्रो राम्रा व्यवहारलाई सम्प्रेषण गर्न तथा हाम्रा रणनितिहरुलाई परिमार्जन गर्न सहयोग गर्नेछ । यो छलफल गोप्य हुनेछ र तपाईहरुको नाम कतै उल्लेख गरिने छैन । यो छलफलको लागी करिब १ घण्टा जति समय लाग्छ । यस छलफलमा तपाईहरुको सहभागी हुने वा नहुने तपाईहरुकै अधिकार हो……., यदी हुने हो भने, के छलफल शुरु गरौं ।

१) के तपाईले स्वास्थ्य आमा समूहको बैठक संचालन गर्ने गर्नुभएको छ? छ, भने कति कति समयमा?

२) आमा समूह वा गर्भवती आमा समूहको बैठकका सहभागीहरु को को हुन? तपाईको आमा समूहमा सिमान्तिकृत समुदायको सहभागिता कस्तो छ?

३) आमा समूह वा गर्भवती आमा समूहको बैठकमा बाल बचाउ परियोजना अन्तर्गत कुन कुन विषयमा छलफल हुन्छ?

४) बाल बचाउ परियोजनालाई अझ प्रभावकारी बनाउन के गर्नु पर्ने देखिन्छ? (आमा तथा बच्चाको स्वास्थ्य सम्बन्धि प्रगतीको बारेमा, CB-IMCI {CDD, ARI, Pneumonia}, Nutrition, FP, HIV/AIDS)

४) जीवन सुरक्षा कार्यक्रममा के गर्नु भयो के गर्नु भएन?

५) यस कार्यक्रमको कुन कुन क्रियाकलापले राम्रो छाप पार्‌यो, कुनले पारेन र किन ?

६) तपाईको विचारमा यो कार्यक्रमका सवल र कमजोर पक्षहरु के के रहेका छन् ?

७) यो कार्यक्रमले समुदायमा जनचेतना जगाउने कत्तिको मद्दत पुर्‌याएको छ? यदी छ भने के कारणहरुले त्यसो भएको होला?

८) यस कार्यक्रम अन्तर्गत तपाईलाई समुदायमा जनचेतना जगाउन के के सामाग्री उपलब्ध गराएको छ ? के तपाईसंग कुनै सामाग्री छ ? तपाईको विचारमा सबैभन्दा उत्तम सामाग्री कुन हो ?

९) यस कार्यक्रमले समुदायको स्वास्थ्य ब्यवहारमा परिवर्तन ल्याउन कस्तो प्रभाव पारेको छ? कुनै उदाहरण दिन सक्नुहुन्छ ?

१०) यो कार्यक्रम शुरु भएयता संस्थागत प्रसुतीमा बृदि भएको छ कि छैन ?

११) मार्फत तपाईले दिई रहेको सेवालाई मद्दत पुर्‌याउने तत्वहरु के छन् र वाधक तत्वहरु के छन्?

१२) यस कार्यक्रमले तपाईहरुको ज्ञान र सीप वृद्धिमा मद्दत पुर्‌याएको छ कि छैन । छ भने कसरी:

१३) जीवन सुरक्षा अनुसार लिनुपर्ने सेवा लिन सामुहिक प्रतिबद्धता (गर्भवती, सासु, श्रीमान्, म स्व स्वा से, र स्वास्थ कार्यकर्ता) बारे तपाईलाई कस्तो लाग्छ ?

१४) जीवन सुरक्षा कार्यक्रमलाई अझ प्रभावकारी बनाउन के गर्नु पर्छ होला?

Documents reviewed

Before the FE team held meeting to plan field visit and develop tools to gather qualitative data, several documents were carefully reviewed by the final evaluation team such as USAID guidelines for Final Evaluation, Detail Implementation Plan (DIP), final (LQAS) and CSSA report, Mid-term Evaluation report, Plan Nepal Annual reports, Chlorhexidine (CHX) report

Annex 10: Nepal LIBON Project - List of persons interviewed and contacted during Final Evaluation

MG/PWG interaction on 10 Sep 2011		
Sonapur - 2, Sunsari		
SN	Name of participant	Age
1	Sangita Chaudhary	22
2	Pavitra Rai	24
3	Gita Devi Sah	32
4	Parwari Rishidew	19
5	Laxmi Rishidew	25
6	Phulo Rishidew	20
7	Meena Rishidew	20
8	Gita Rishidew	25
9	Madhudevi Sah	25
10	Rangita Rishidew	20
11	Ranju	20
12	Sunar Rishidew	27
13	Sunita Rishidew	30
14	Rita Sah	28
15	Asha Rishidew	20
16	Anusha Rishidew	20
17	Lila Devi Rishidew	25
18	Sarita Sah	27
19	Lalita Rishidew	23
20	Rekha Rishidew	21
21	Nisha Rishidew	25
22	Sanichari Rishidew	75
	Harpreet Anand	Team Leader
	Dr. Shree Ram Sah	Facilitator
	Sher Bahadur Rana	Note taker
	Kalawati Changbang	Note taker
FCHV		
SN	Name of participant	
1	Meena Devi Rai	
	Januka Chaudhary	Facilitator

	Yogesh Niraula	Note taker
	Dipak Dahal	Note taker

Mother-in-law interaction on 10 Sep 2011		
Sonapur - 2, Sunsari		
SN	Name of participant	Age
1	Patali Devi Rishidev	50
2	Manru Devi Rishidev	35
3	Dhamki Devi Rishidev	60
4	Phulsariya Devi	45
5	Nela Devi	35
6	Jhaku Rishidev	45
	Narmaya Limbu	Team Leader
	Shiv Narayan Yadav	Facilitator
	Bhagawan Das Shrestha	Note taker
	Hari Dev Shah	Note taker

MG/PWG interaction on 11 Sep 2011			
Chimidi-5, Sunsari			
SN	Name of participant	Age	PW/PNM
1	Tanjila Khatun	25	PNM
2	Hadija Khatun	22	Member
3	Sanjila Khatun	22	Member
4	Sanjila Khatun	21	Member
5	Hadija Khatun	20	Member
6	Jaitun Khatun	22	Member
7	Jatun Khatun	22	Member
8	Sabina Khatun	23	Member
9	Taranam Khatun	22	Member
10	Jamila Khatun	20	Member
11	Samma Khatun	22	Member
12	Taranam Khatun	23	Member
13	Hadija Khatun	22	Member
14	Sanjita Khatun	23	Member
15	Jananam Khatun	24	Member
	Dr. Mahesh Maskey	Team Leader	
	Harpreet Anand	Note taker	

	Dr. Shree Ram Sah	Facilitator
	Bhagawan Das Shrestha	Note taker
	Kalawati Changbang	Note taker
FCHV		
SN	Name of participant	
1	Radha Devi Das	
	Januka Chaudhary	Facilitator
	Dipak Dahal	Note taker

Names of in-charge of Sonapur on 11 Sep 2011		
SN	Name of in-charge	
1	Kundan Das	
	Dr. Mahesh Maskey	
	Dr. Shreeram Prasad Sah	
	Bhagawan Das Shrestha	
Names of in-charge of Chimdi on 11 Sep 2011		
SN	Name of in-charge	
1	Apolo Kumar Bhagat	
	Dr. Mahesh Maskey	
	Dr. Shreeram Prasad Sah	
	Bhagawan Das Shrestha	
	Kalawati Changbang	

IDI with DHO on 12 Sep 2011			
SN	Name of Participants	Designation	Organisation
1	Dr. Shree Ram Shah	DHO	DHO Sunsari
2	Dr. Mahesh Maskey	Team Leader	
3	Sher Bahadur Rana	HPC	Plan NCO
4	Bhagawan Das Shrestha	LPC	Plan NCO
5	Harpreet Anand	Program Manager	Plan USNO
6	Naramaya Limbu	Division Chief	USAID
7	Kalawati Changbang	HPC	Plan Nepal

Mother-in-law interaction on 13 Sep 2011		
Chhatapipara - 5, Bara		
SN	Name of participant	
1	Pasupati Devi Chaudhary	
2	Sima Devi Paswan	
3	Sampati Chaudhary	
4	Phul Kumari Chaudhary	
5	Raj Kumari Chaudhary	
	Kausaliya Devi Chaudhary	Faciliator
	Bhagawan Das Shrestha	Note taker
FCHV		
SN	Name of participant	
1	Shiwarati Chaudhary	
	Dipak Dahal	Facilitator
	Raj Kishor Chaudhary	Note taker
Names of in-charge		
SN	Name of in-charge	
1	Mukunda Bahadur Gubhaju	
	Deo Ratna Chaudhary	Faciliator
	Md. Sabir	Note taker

Mother-in-law interaction on 14 Sep 2011		
Karaiya - 5, Bara		
SN	Name of participant	
1	Shalshwa Devi Baral	
2	Kalpana Chaudhary	
3	Parbati Chaudhary	
4	Susatiya Sahani	
5	Shyam Pati Ram	
6	Manari Suhuriya	
	Shanti Thakali	Facilitator

	Bhagawan Das Shrestha	Note taker
FCHV		
SN	Name of participant	
1	Bishnu Devi Baral	
	Dipak Dahal	Facilitator
	Raj Kishor Chaudhary	Note taker
Names of in-charge		
SN	Name of in-charge	
1	Pramod Prasad Kuswaha	
	Deo Ratna Chaudhary	Facilitator
	Md. Sabir	Note taker

DHO team interaction in DHO, Bara on 15 Sep 2011		
DHO-Bara, Kalaiya		
SN	Name of participant	
1	Dr. Surendra Pd Chaudhary	
2	Md. Sabir	
3	Amleshwor Mishra	
4	Shiv Pd. Sahani	
5	Anil Mishra	
	Dr. Mahesh Maskey	Team Leader
	Harpreet Anand	
	Mangala Manandhar	
	Badri Shrestha	
	Sher Bahadur Rana	
	Bhagawan Das Shrestha	
	Deo Ratna Chaudhary	
	Diwakar Mishra	
	Kausaliya Devi Chaudhary	
	Shanti Thakali	

Mother-in-law interaction on 16 Sep 2011		
Madhuwan Mathol, Parsa		
SN	Name of participant	
1	Dineshree Devi tharu	
2	Meena Devi Tharu	
3	Sugandi Devi Lohar	
4	Laxmi Devi Tharu	
5	Phulmati Devi Ram	
6	Panmati Devi Tharu	
7	kanti Devi Tharu	
8	Kunti Devi Ram	
9	Dropati Devi Ram	
10	Chandrawati Devi Ram	
11	Panwa Devi Ram	
12	Girija devi Tharu	
13	Jhokali Devi Majhi	
14	Shriya devi Ram	
	Dr. Indra Pd Yadav	Facilitator
	Sajit K Adhikari	Facilitator
	Bhagawan Das Shrestha	Note taker
FCHV		
SN	Name of participant	
1	Nirmala Silwal	
	Naina Devi Sah	Facilitator
	Dipak Dahal	Note taker
Interview with health facility in-charge of Madhuwan Mathaul		
SN	Name of in-charge	
1	Deep Narayan Mahato	
	Krishna Bahadur Achhami	Facilitator
	Deo Ratna Chaudhary	Note taker

Mother-in-law interaction on 17 Sep 2011		
Bindabasini, Parsa		
SN	Name of participant	
1	Silpati Devi Paswan	
2	Parbha Devi Paswan	
3	Phulmati Devi Paswan	
4	Sunera Devi Ram	
5	Khanti Sah Kalwar	
6	Radhika Yadav	
7	Urmila Devi Singh	
8	Rajani Devi Ram	
9	Sail Devi Sunar	
10	Phulmati Devi Shah	
11	Aashiya Devi Ram	
12	Maya Devi Ram	
13	Chandrakala Ram	
14	Santi Devi Ram	
15	Dhupiya Devi Ram	
16	Pramila Devi Ram	
17	Gadariya Devi Ram	
18	Ramabati Devi Ram	
19	Kalita Devi Ram	
20	Lalmati Devi Ram	
21	Rajpati Devi Yadav	
22	Tetari Devi Paswan	
23	Dewamat Devi Ram	
	Dr. Indra Pd Yadav	Facilitator
	Sajit K Adhikari	Facilitator
	Bhagawan Das Shrestha	Note taker
FCHV		
SN	Name of participant	
1	Ramila Thapa Magar	
	Naina Devi Sah	Facilitator
	Dipak Dahal	Note taker
Interview with health facility in-charge of Bindabasini		

SN	Name of in-charge	
1	Satrughan Prasad Yadav	
	Krishna Bahadur Achhami	Facilitator
	Deo Ratna Chaudhary	Note taker

Information sharing meeting with DPHO, 18 Sep 2011		
Birgunj, Parsa		
SN	Name of participant	
1	Dr. Indra Pd Yadav	
2	Phulena Shreevastav	
	Dr. Mahesh Maskey	Team Leader
	Harpreet Anand	
	Sher Bahadur Rana	
	Bhagawan Das Shrestha	
	Deo Ratna Chaudhary	
	Krishna Bahadur Achhami	
	Sajit Kumar Adhikari	
	Jay Mangal Thakur	
	Ejaz Ansari	
	Meena Singh	
	Srijana Rai	
	Dipak Dahal	

Ministry of Health and Population & Plan Nepal
Participant list of Final Evaluation Sharing Workshop of LIBON Project
Hotel Summit, Lalitpur, 23 September 2011

SN	Name	Designation	Organization
1	Amaleshwar Mishra	PH0	DHO,Bara
2	Naramaya Limbu	Team Leader, FP/MNCH/Nutrition	USAID
3	Bhim Kumari Pun	PC	Save the Children
4	Sher Bahadur Rana	HC	Plan Nepal
5	Krishna Shrestha	PME-O	Plan Nepal
6	Donal Keane	CD	Plan Nepal
7	Harpreet Anand	PM USNO	Plan USA
8	Dr.B.K.Subedi	Chief PPICD,MOHP	MOHP
9	Dr.Shilu Aryal	Sr.Cors.OT/Gyn	FHD/DOHS
10	Dr.Shree Ram Shah	DHO	DHO Sunsari
11	Subhakar Baidya	PSM	Plan Nepal
12	Janardan Thaiba	CFM	Plan Nepal
13	Badri Shrestha	PUM	Plan Nepal
14	Prabhakar K.C	PM	Plan Nepal
15	Sabina Baniya	MO	Nepal CRS Compani
16	D.P. Raman	Country Director	RTI/NTD Control Program
17	Yogesh Niraula	APUM	Plan Nepal
18	Kalawati Changbang	HPC	Plan Nepal
19	Soni Pradhan	Team Leader	Plan Nepal
20	Shib Narayan Yadhav	P.H.O	DHO,Sunsari
21	Chandra Rai	Project Director	Health Right International
22	Jyoti R Shrestha	Coordinator	MIRA
23	Hari Bahadur Rana	Training Coordinator	RTI/NTD Control Program
24	Mohan Krishna Shrestha	Central Member	NEPHA (Nepal Public Health Association)
25	Mohan Paudel	M&E Coordinator	Health Right International
26	Laxmi Narayan Deo	Deputy Director	NHTC
27	Yam Bahadur Thapa	LIBON Facilitator	Plan Nepal LIBON
28	Tribikram Karmacharya	Kanti Bal Hospital Board Chairman	Kanti Bal Hospital
29	Krishna Bahadur Achhami	ADLC	Plan Nepal LIBON
30	Kamalesh Kumar Lal	P&C Manager	Plan Nepal
31	Sabita Tuladhar	P.O M&E	NFHP II
32	Leela Khanal	Sr. Program Officer	NFHP II
33	Robin Huston	DCOP	NFHP II
34	Gaurav Sharma	MH Advisor	DFID

SN	Name	Designation	Organization
35	Jaganath Sharma	Coordinator	NFHP
36	Dilip Chandra Paudel	Tea Leader CH	NFHP
37	Dr.Balkrishna Kalakheti	Consultant	UNICEF
38	Prashu Ram Shrestha	Chief IMCI/CHD	CHD
39	Dipak Dahal	M&EO	Plan Nepal
40	Diwakar Mishra	ADLC	Plan Nepal
41	Rajendra Prasad Sah	LIBON Facilitator	Plan Nepal
42	Bijaya Kumar Sah	LIBON Facilitator	Plan Nepal
43	Sajit Kumar Adhikari	LIBON Facilitator	Plan Nepal
44	Ejaz Ansari	LIBON Facilitator	Plan Nepal
45	Jay Mangal Thakur	LIBON Facilitator	Plan Nepal
46	Rajkishor Prasad Chaudhary	LIBON Facilitator	Plan Nepal
47	Shrijana Rai	Office Assistant	Plan Nepal
48	Deo Ratna Chaudhary	DLC	Plan Nepal
49	Muiya Rai	Office Assistant	Plan Nepal
50	Meena Singh	AFO	Plan Nepal
51	Rudra Sapkota	Plan OA	Plan Nepal
52	Prajwal Jung Pandey	Director Marketing	LOMUS Pharmaceutcals Pvt
53	Shushil Joshi	PPM Business Lead	Plan IH
54	Bhagawan Das Shrestha	PC LIBON	Plan Nepal
55	Phulena Pd. Shrivastaw	P.H.O	DHO ParsaMa
56	Dr.Mahesh Maskey	Team Leader LIBON Final Evaluation	Plan Nepal

End Line Report
Operational Research on Chlorhexidine Application on Newborn's Umbilicus Stump

Parsa District

Local Innovation for Better Outcomes for Neonates Project (LIBON)

Plan Nepal Child Survival Project XXII

Funded by
United States Agency for International Development
Child Survival and Health Grants Program (CSHGP)
Grant No. GHN-A-00-07-00006-00
Bureau for Global Health
Office of Health, Infectious Disease, and Nutrition

Submitted by
Hari Bhakta Khoju
Rural Community Development Society

Submitted to
Plan Nepal

August, 2011

Acknowledgement

We acknowledge and express our gratitude to Plan-Nepal especially to Mr. Donal Keane, Country Director and Mr. Subhakar Baidya, Program Support Manager for offering us to prepare a report to Community Based-Newborn Care Program (CB-NCP) of Sunsari and Parsa Districts, Local Innovation for Better Outcomes for Neonates Project (LIBON), Plan Nepal Child Survival Project XXII.

Mr. Bhagawan Das Shrestha, Project Coordinator-LIBON and Mr. Sher Bahadur Rana, Health Coordinator, Plan Nepal deserves our heartfelt sincere thanks for their constant accomplishment and assistance in field work for data collection, data analysis and report preparation.

We would like to appreciate Mr. Dipak Dahal, Monitoring and Evaluation Officer for his endless commitment, enthusiasm and effort in convincing, building capacity and confidence of health supervisor and officials to conduct the survey for data collection without being bias to subjective judgment and data fabrication.

Dr. Naresh Pratap Rana, Director Family Health Division, Shilu Aryal FHD, Leela Khanal, NFHP, Mr. Parasuram Shrestha, Chief, Community Based-Integrated Management of Childhood Illness (CB-IMCI), Child Health Division, Ministry of Health and Population (MoHP), Mr. Indra Dev Yadav, District Public Health Office (DPHO) Parsa are also thankful to us, who provided information and inputs for report preparation.

We extend our heartfelt thanks to field based staff Mr. Deo Ratna Chaudhary, District LIBON Coordinator (DLC) Bara/Parsa, Mr. Krishna Bahadur Achhami, ADLC Parsa, Ms. Meena Kumari Singh, Admin and Finance Assistant and Ms. Srijana Rai, Office Assistant, Parsa for supporting the enumerators during data collection field work.

We should not forget to appreciate and thank to Mr. Ram Khoju Shrestha and Mohan Prasad Adhikari, who dedicated to coding, entering and cleaning data during data processing work of this project.

At last but not least, we are thankful to the survey respondents for their valuable time and patience in cooperating and providing information.

Authors

Hari Bhakta Khoju
Rural Community Development Society

CONTENTS

TABLES

EXECUTIVE SUMMARY

Local Innovation for Better Outcomes for Neonates (LIBON) project aims to reduce neo-natal mortality rate and maternal mortality ratio. Current neonatal mortality rate of 33 per 1000 live births in Nepal translates to around 23,000 neonatal deaths per annum. Studies have shown that immediate cleansing of umbilical cord with 4 per cent Chlorhexidine (CHX) (brand name Kawach) reduces the cord infection and reduces neonatal mortality by about 23 per cent. After the results of a study to compare efficacy of Chlorhexidine lotion versus aqueous and another study to examine acceptability and case in the use of two different CHX formulations (liquid or lotion) for prophylactic application on freshly cut umbilical cord stumps in Nepal the Department of Health Services (DoHS) endorsed a pilot CHX program in four districts (Banke, Bajhang, Jumla and Parsa). Parsa district was supported by Plan Nepal funded by USAID whereas other districts by NFHP-II.

In Parsa district, program was initiated through district level orientation on Oct 2009 and continued to provide training of trainers to district supervisors and health facility staff as well as training to Village Health Workers and Maternal and Child Health Worker separately. The CHX training program is aligned with Community Based Newborn Care Program training package at Female Community Health Volunteer completed in September 2010.

The overall objective of the study was to measure the coverage and compliance of Kawach at community level in Parsa district. The data was collected through Lot Quality Assurance Sampling (LQAS) technique.

Total 494 (13 SAs X 38) recently delivered women (RDW) defined as married women of age group 15-49 who had given a live birth and were living in the family with the baby were interviewed using a structured questionnaire in the district. Systematic random sampling design was used through LQAS methods by dividing the areas into 13 supervision areas (SAs) where 38 RDWs were interviewed per supervision area in July 2011.

About 88.2 percent birth attendants reported washing their hands by before touching the newborn. Similarly, 94.4 percent reported washing their hands before applying CHX. 96.4 percent reported applying full tube of Kawach to newborn baby.

Umbilical cord care: About 82.9 percent RDWs of Parsa district reported to have their newborns' umbilical cord cut with safe instruments Clean Delivery Kit (CDK). 78.6 percent RDWs received CHX from Female Community Health Volunteer (FCHV), 17.3 per cent from health facilities, 1.1 per cent from shop-CHX separately, 1.0 per cent from shop-CHX with CHDK and remaining 1.0 per cent from others. Most of the pregnant women, 65.2 per cent received CHX in eight months of their pregnancy period and 29.6 per cent in nine months of pregnancy.

There is high coverage of Kawach application on the stump of newborns 82.7 percent in Parsa district. The compliance (application of whole tube of Kawach at single event in the cord stump and surrounding areas of newborn within 2 hours of cord cut among those who applied Kawach) is almost to coverage 66.4%. Comparison between Pregnant Women Group (PWG) member and CHX applied shows that 1.3 times more CHX is applied by PWG members than non-PWG members.

In the conclusion, CHX program can be scaled up to other districts of Nepal by integrating other programme like CBNCP and its coverage can be increased by supplying through government existing health system like hospitals, health facilities, birthing centres and from community health volunteers in the monthly pregnant women group meeting.

Plan Nepal has been implementing Child Survival XX-III project called "Local Innovation for Better Outcomes for Neonates (LIBON)" in collaboration with the Ministry of Health and Population (MoHP) and Institute of Medicine (IOM), Tribhuvan University in Sunsari and Parsa districts to support to implement Community Based Newborn Care Program (CB-NCP) and supports Bara district to maintain the health service status of 2006 Final Evaluation Results. These districts are located in the Eastern and Central parts in the Southern Terai belt, the lowland plain areas, along the border of India, starting from September 2007. It is a four year project to cover up-to 2011 September.

To address these complex issues, LIBON project proposed following goals, results, strategies, interventions and activities which are in line with MoHP, Government of Nepal (GoN) policies and programs.

The main Goal of the project is "To Sustainably Reduce the Burden of Neonatal Mortality in Nepal"

The goal will be achieved through the implement of the following results:

Result 1: Increased Access to Neonatal Health (NNH) Services in Sunsari and Parsa
Result 2: Increased Demand for NNH Services in Sunsari and Parsa
Result 3: Increased Quality of NNH Services in Sunsari and Parsa
Result 4: Strengthened Support for Neonatal Mortality (NNM) Reduction in Nepal

Strategies:

- Community-based Service Delivery to increase ACCESS to meet Result 1
- Community Mobilization to increase DEMAND to meet Result 2
- Health Systems strengthening to increase QUALITY to meet Result 3
- Stakeholder sharing and Collaboration to increase SUPPORT to meet Result 4
- Social Inclusion to increase EQUITY to meet Result 1

LIBON project is designed to address the complex issues to reduce neo-natal mortality rate which is caused due to lack of awareness, knowledge, information and skill and access to health services to take care of pregnant mothers during their pregnancy, at birth and after delivery and newborn dangers sings. One of the leading causes of the newborn is infection. The infection may start from umbilicus stump infection among the newborns. It can be prevented by tropical application of chlorhexidine hydrochloride 4% (CHX) (local brand name is Kawach) ointment at umbilicus stump and around it. The major reasons for pilot programming of CHX are:

- Umbilical cord infection is one of the major causes of neo-natal infection (Neo-natal Health strategy 2004)
- Umbilical cord infection is about 62 % of local Bacterial Infection (Report of MINI Morang)

- CHX application on the umbilical cord prevents from infection
- Aapplication of Chlorhexidine to the umbilical area of the neonate was associated with a 24% decrease in neonatal mortality, 34% if applied on day of delivery (Mullany et al, 2006).
- Near universal use of CHX up to 1/3 reduction in mortality over the neonatal period
- 70-80% reduction in incidence of severe omphalitis (infection of umbilicus stump)
- National Medical Standards, volume 3 – dry cord care as general recommendation, but when adequate hygiene cannot be assured in household setting, CHX should be used

A Lot Quality Assurance Sampling (LQAS) technique was applied to conduct survey in Parsa district in July 2011.

2.1. Concept and Use

LQAS was developed in the 1920s for quality control of industrial production goods. The basic principle is that a line manager/supervisor takes a small random sample of a recent batch, or lot, of goods from a production unit such as an assembly line. If the number of defective goods in a sample exceeds a pre-determined number, then the lot is rejected; otherwise it is accepted. The pre-determined (allowable) number is called the "decision rule." This allowable number is based on a production standard and the sample size. Recently, the industrial monitoring experience was transferred to monitor the quality of health indicators and to improve supervision of the field area.

2.2. Purpose of LQAS

The LQAS sampling method was used in the LIBON project to collect baseline data on project-relevant health indicators, to determine whether the supervision areas were above or below average coverage on specific indicators, to determine the indicators that were well performing and those that were not within a given supervision area, and to determine how supervision areas within the total project area compared with another area.

2.3. Sample Size

Sample sizes were calculated with the following formula:

> $n = z^2(pq)/d^2$; where n = sample size; z = statistical certainty chosen; p = estimated prevalence/coverage rate/level to be investigated; q = 1-p; and d = precision desired.

The value of p was defined by the coverage rate that requires the largest sample size (p= 0.5). The value of d was dependent on the precision, or margin of error, desired (in this case d=0.1). The statistical certainty was chosen to be 95% (z=1.96). Given the above values, the necessary sample size turns out to:

> $n = (1.96 \times 1.96)\ (0.5 \times 0.5)/(0.1 \times 0.1) = (3.84)(0.25)/0.01 = 96$

As the value of "p" is not known, we took a conservative approach and set p=0.5.
The estimate of confidence limits for the survey results was calculated using the following formula:

> 95% confidence limit = p ± z (square root of $\{pq/n\}$); where p = proportion in population found from survey; z = statistical certainty chosen (for 95% certainty, z = 1.96); q = 1-p; and n = sample size.

2.4. Sampling Frame

For the purpose of the LQAS Survey, Parsa district was divided into 13 SAs (12 Ilakas of Parsa DHO and 1 district municipality - Birgunj).

A sample size of 19 households (HH) was selected per SA for this assessment. The reason for choosing 19 is that any sample that is less than 19 will have α and β errors greater than 10%, which is not desired. Similarly, increasing the sample size to greater than 19 creates more work and does not necessarily reduce the margin of error. In assessing coverage, we have aggregated all the samples taken from each SA in order to obtain a large enough sample size as required to estimate the proportion in each population subgroup.

The total sample size for Parsa for CHX was 494. It was calculated as 247 mothers (19 HHs x 13 SAs that is MoHP's Ilaka) from the module 1 – recently delivered women (RDW) having 0-5 months child and in the same way next 247 RDW from module 2 – RDW having 0-11 months child.

2.5. Threshold and Decision Rule

Initial thresholds/benchmarks for assessing the indicators were selected using the average proportion obtained by aggregating the data of all 13 SAs in Parsa district.

2.6. Survey Questionnaire

The survey questionnaire were used from Family Health Division which was used by Nepal Family Health Program II in next three CHX program piloting districts namely Banke, Jumla and Bajang. The questionnaire was already filed tested in Parsa district. The questionnaire is attached in the annex.

2.7. Team Composition and Field Plan

The district teams were requested to select the supervisors and enumerators ensuring that they would include an CB-IMCI focal person, a statistician, an EPI supervisor, a FP supervisor, and in-charge of Ilakas of District Public Health Offices Parsa.

From the pool of representatives from DPHO, NGO, and Plan Nepal teams consisting of two persons (one from each group) were formed. The team is mixed with Government staff and NGOs/Plan staff to minimize the vested interests and subjective errors.

2.8. Training of Enumerators and Supervisors

The three-days training was conducted for DPHO, NGO/partner and Plan Staff of Parsa district which included dummy practice of the questionnaire filling including real field practices in the ward which is not included in the real sample. There was sharing of the field practice and misunderstanding and make consensus in the plenary for common understanding among all the team members and supervisors.

2.9. Data Collection

A standard procedure was applied for data collection. First, a sampling frame was constructed for each field area consisting of 2-9 VDCs, their 9 wards with population sizes. Secondly, dividing the total population size of a field area by the LQAS sample size of 19 created a sampling fraction. Third, a random number between 1 and the sampling fraction was selected by standard random table. The ward having the corresponding person in the sampling frame's cumulative population column was selected as the first sample. Adding the sampling fraction to the selected sample identified the next ward. All remaining samples were selected by continuing the addition of the sampling fraction to the preceding sum.

Identifying locations for interview:

Step 1: List communities and their total population
Step 2: Calculate the cumulative population
Step 3: Calculate the sampling interval
Step 4: Choose a random number
Step 5: With an initial random number and the sampling interval, identify communities for the 19 sets of interviews

After the selection of community; interviewers visit that area and take the information from the key informants or self assessment in that location. If there are more than 30 households, they are subdivided into two or more (almost equal HHs) groups which is manageable to clearly identify the location. Then select one location of these sections randomly. If the selected area is still too large, subdivide it again into two or more equal section and select one section at random. It is continued until one small section with less than or equal to thirty households. Then, draw a map of the section becomes with the help of key informant and number each household in the selected section on the map or door to door visit. Then use random number table and select the first household.

Household selection: assigning numbers

IF:	THEN:
A complete household list is available (from census, or map)	-) Assign a number to each house … work is done!
If the community size is about 30 households or less	-) Make a household list or map with the location of each household with the help of a key informant from the community -) And then, assign a number to each house … work is done!
If the community size is more than about 30 households	-) Subdivide the community into 2-5 sections with about the same # of households in each section -) Select one section at random -) Make a house list or map with the location of each household with the help of a key informant -) Then, assign a number to each house … work is done!

Household selection

- Once all households are numbered, pick a random number (using random tables) and select the first household in the selected community
- If more than one house is needed in the selected community, pick another random number to select the second household in the selected community

After the selection of household they visit that house and knock at the door of selected house and share the objective of survey to the family member(s) and ask whether they have a child age 0-11 and 0-5 months with mother or not. If there is a single child of 0-11 and 0-5 months then ask question and take information with mother after getting permission. If there are two or more children of 0-11 and 0-5 months then randomly select one child by using random table. If the house does not meet criteria then they move to next-nearest front door until they get a child aged 0-11 and 0-5 months with mother. If the respondent of the household is located far way for more than 30 minutes walking distance, then they visit the next-nearest front door.

Selecting a respondent

If the type of respondent you are looking for:	THEN:
Is at the household you selected	Interview that person IF she consents
Does not live at the household selected	They go to the next-nearest household from the front entrance and check the next-nearest household … continue this process until they find the respondent type you they looking for
Lives at that household, BUT is absent and far away (more than 30 minutes away)	They leave that house and select the next house.
If the type of respondent you are looking for:	THEN:
Lives at that household, is absent BUT is nearby (within 30 minutes)	They go find the respondent with the help of a guide from the community … IF they cannot find the person in the next 30 minutes, then GO to the next-nearest household from the front entrance of the household of the person they cannot find

Questionnaires were completed during the interview. At every end of the day interviewers themselves checked the filled questionnaires for quality of data. The Director Family Health Dr. Naresh Pratap

Rana, Prof. Chitra Kumar Gurung from IOM, Project Coordinator-LIBON project, Monitoring and Evaluating Officer and Health Coordinator, Plan Nepal also visited some of the study areas to supervise the fieldwork. The data were collected during June to July 2011.

2.10 Data cleaning and analysis

Filled-in questionnaires were brought to central office of RUCODES. Each filled questionnaire has been edited and coded for data entry. Data was entered and processed using Statistical Package for the Social Sciences (SPSS) software packages. Data entry was done directly from the completed questionnaires. The data was validated by a computer processing team consisting of a computer programmer and data entry personnel. The computer programmer constantly supervised and monitored the data entry activities. The data set was cleaned and prepared for output generation. Data has been analyzed using simple frequency tables and cross tabulations. Tables were designed and finalized in consultation with the Technical staff of LIBON project of Plan Nepal. Data are presented in the form of tables, pie charts and bar graphs.

Chapter 3: Characteristics of the Respondents

This chapter deals with the information regarding the socio-demographic and economic characteristics of the recently delivered women RDW.

Table 3.1: Percent distribution of RDW by level of education

Level of education	**RDW having 0-5 months child**
	Parsa (n=247)
	2011 July
No schooling	68.8%
Informal education	3.6%
Primary	14.6%
Class VI to X	12.6%
Class XI and above	2.8%

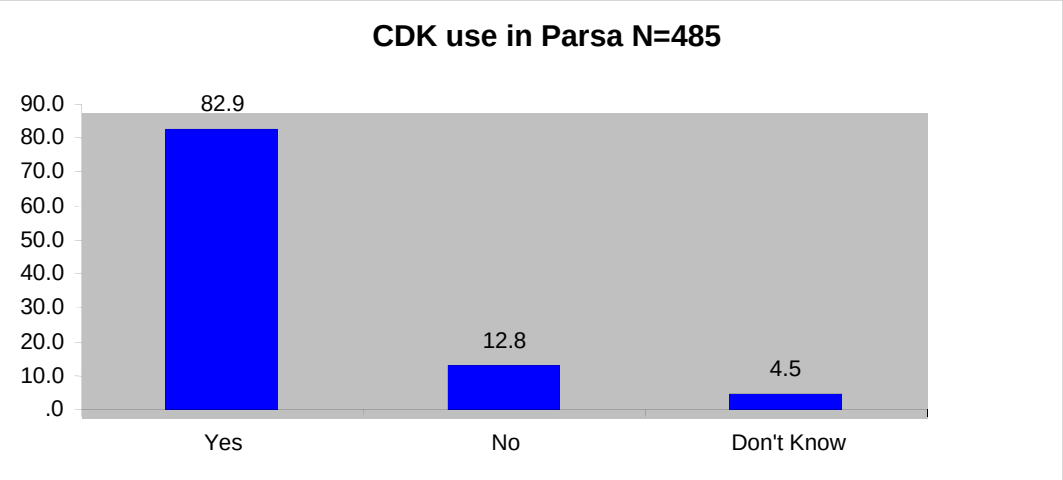
Chapter 4: Umbilicus Care Practices of Newborns:

This chapter deals with the utilization clean delivery kit by RDW during their last pregnancy. There is 82.9% of RDW used clean delivery kit in the their last child birth either in home or institutional delivery. (Table # 4.1 and Figure 4.2).

Table 4.1: Percent distribution of RDW who used of Clean Delivery Kit (CDK) during their last child birth

Used CDK		
	Frequency	Percent
Yes	402	82.9
No	62	12.8
Don't Know	21	4.3
Total	485	100.0

Figure 4.2: Percent distribution of RDW who used of Clean Delivery Kit (CDK) during their last child birth



The mean time of umbilicus cord cut after the newborn birth is 19 minutes, median is 15 minutes and mode is 30 minutes and the standard deviation is 14.7 minutes. The mean time for CHX applied after birth is 33 minutes.

Table 4.3: The time period of umbilicus cord of newborn

	Time period of cord cut after birth (in minute)	Time period of CHX applied after birth (in minute)
Mean	19.2	33.0
Median	15.0	30.0
Mode	30.0	30.0
Standard Deviation	14.8	28.6

Among the 489 RDW, 417 (85.3%) said that they applied something for the newborn umbilicus stump after the cord cut. Among the 417 RDWs, 82.7% of RDW applied chlorhexidine, 12.2% applied some short of ointment or powder and 1% oil. There are still one case applied cow dung which is very harmful to newborn. (Table 4.4 and 4.5 and figure 4.6)

Table 4.4: Percent distribution of RDW by who applied something in umbilicus stump after cutting cord of their newborn in last child birth

	Frequency	Percent
Yes	417	85.3
No	41	8.4
Don't Know	31	6.3
Total	489	100.0

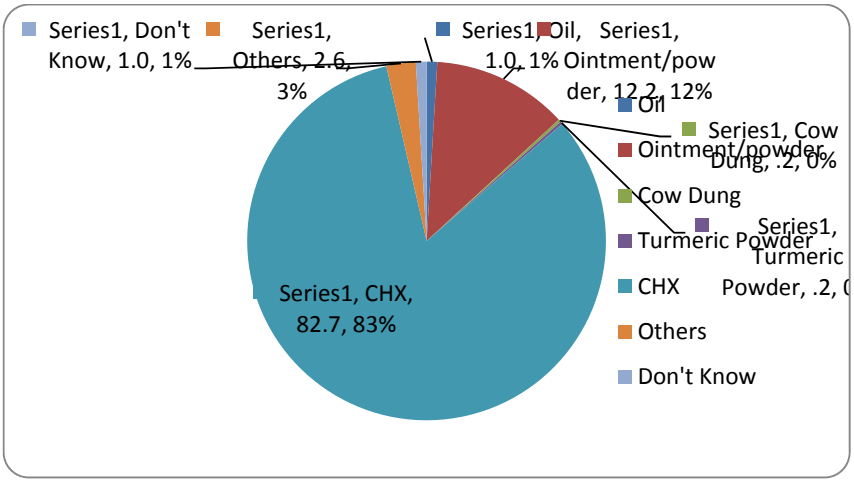
Table 4.5: Percent distribution of RDW by type of things applied in umbilicus stump after cutting cord of their newborn in last child birth

Things applied after cutting cord		
	Frequency	Percent
Oil	4	1.0
Ointment/powder	51	12.2
Cow Dung	1	.2
Turmeric Powder	1	.2
CHX	345	82.7
Others	14	2.6
Don't Know	7	1.0

Total	417	100.0

Figure 4.6: Percent distribution of RDW by type of things applied in umbilicus stump after cutting cord of their newborn in last child birth

Things applied after cord cut (N=417)

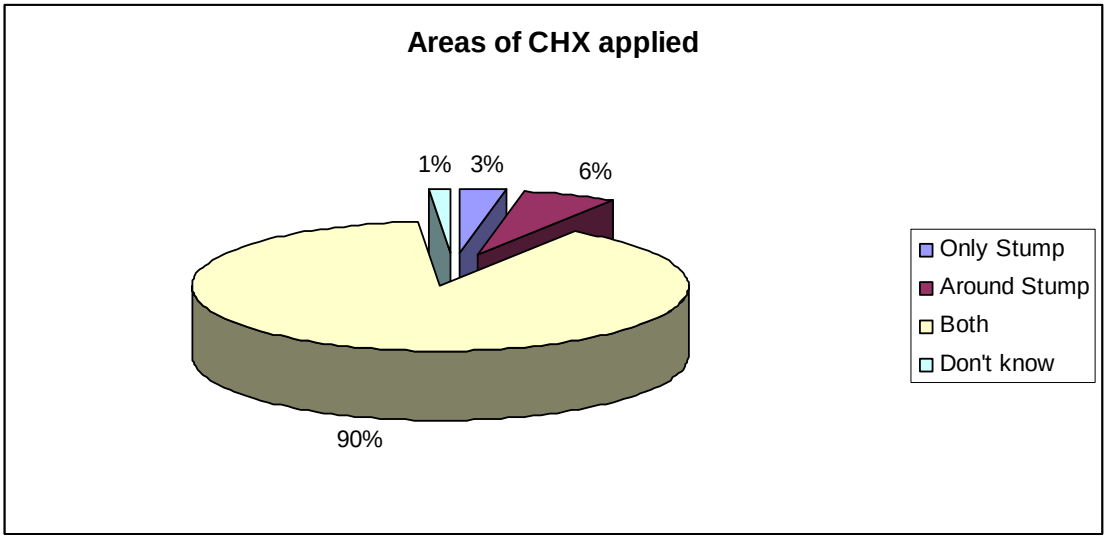


In Parsa, 89% of newborn applied the CHX on the umbilicus stump and its surroundings areas. Only 3.1% newborns were applied only on the stump whereas 6% applied around the stump. (Table 4.7 and Figure 4.8)

Table 4.7: Percent distribution of RDW by areas of application of CHX in their last chid.

	Frequency	**Percent**
Only Stump	12	3.1
Around Stump	22	6.0
Both	307	89.0
Don't know	5	1.4
Total	345	100.0

Figure 4.8: Percent distribution of RDW by areas of application of CHX in their last chid.



About 94.4% RDW washed their hand before applying CHX to the newborn in Parsa districts. (Table # 4.9)

Table 4.9: Percent distribution of RDW who wash hand before applying CHX

Washing hand by birth attendants before applying CHX		
	Frequency	**Percent**
Yes	328	94.4
No	1	.3
Don't Know	16	4.5
Total	345	100.0

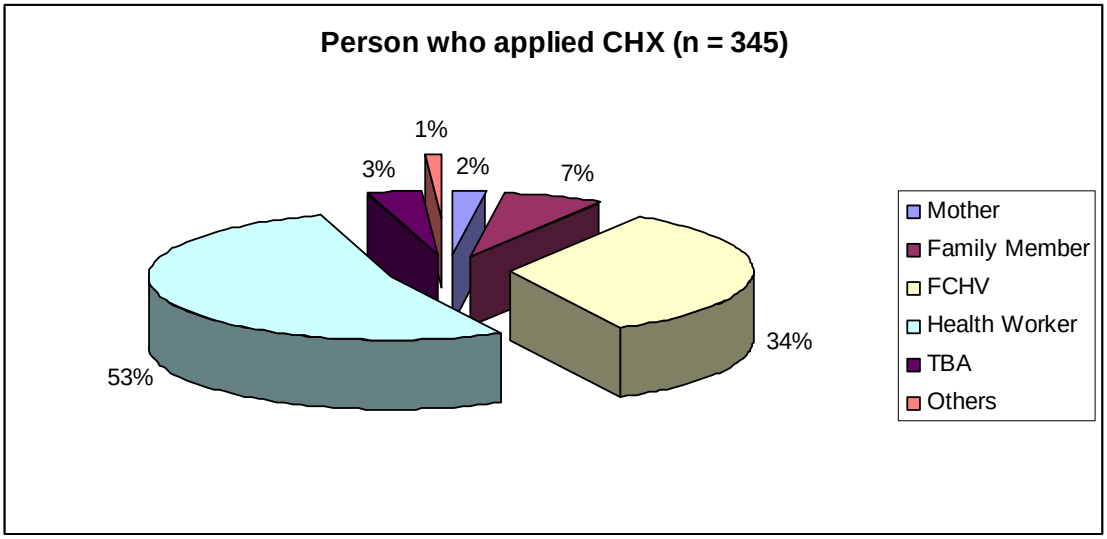
Among 345 newborns who were applied CHX, 99.3% were applied CHX within 2 hours of newborn births. It is a standard time to apply the CHX.

Table 4.10: Percent distribution of newborns as of the time period of CHX applied before applying CHX

	Frequency	Percent
CHX applied within 2 hours of birth	342	99.3
CHX applied after 2 hours of birth	3.0	0.7
Total	345	100

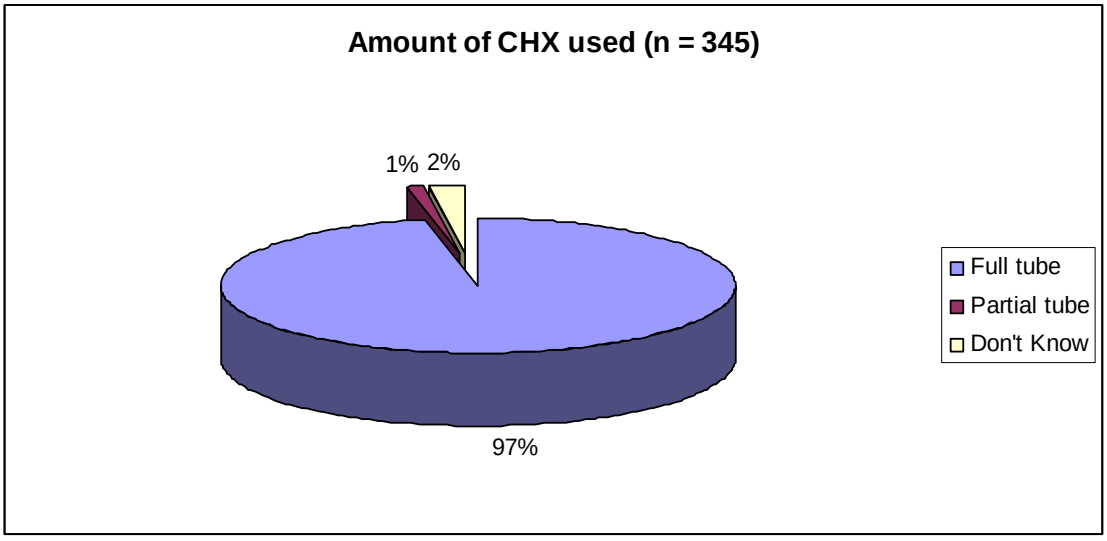
Among the 345 newborns who were applied the CHX, 53% (182) was applied by health workers, 34% (116) by FCHVs, 7% (23) by family members, 3% (12) by TBA and 2% (8) by mother.

Figure 4.11: Percent distribution of newborns who applied CHX



The Chlorhexidine hydrochloride ointment 4 gm in a tube is supplied the program pilot districts of Nepal. It is a product of Lomus Pharmacuticals of Nepal and brand name is “Kawach”. “Kawach” means a protecting device from defensive armours against the attack by enemies during the war in ancient time in Nepali language. The 4 gm (full tube) should be used in one time after cutting of cord within 2 hours. In the Parsa district, out of 345 CHX users, 97% used full tube of CHX and only 2% used partial tube. The reasons for partial tube used 2 respondents said the tube is more than enough and one respondent reported being unaware to use full content of the tube.

Figure 4.12: Percent distribution of newborns as of amount of CHX applied



Almost 100 percent applied the CHX one time only (see table 4.5). It is the protocol to apply the CHX only one time on the umbilicus stump and then keep it dry and clean as of WHO recommendation.

Table 4.13: Percent distribution of newborns as of times of CHX applied

How many times CHX applied		
Times of CHX applied	Frequency	Percent

1	343	99.5
5	1	.2
8	1	.2
Total	345	100.0

Among 345 respondent who said their newborns where applied CHX, 331 (96.1%) said that they kept the umbilicus stump without touching the cloths (see table 4.14).

Table 4.14: Percent distribution of newborns as of keeping umbilicus stump without touching cloths after CHX applied

After CHX applied stump was kept without touching with cloths		
	Frequency	Percent
Yes	331	96.1
No	9	2.7
Don't Know	4	1.2
Total	345	100.0

Among 481 RDWs, 83% (399) received the CHX during their last pregnancy (table 4.15).

Table 4.15: Percent distribution of RDWs who received CHX in their last pregnancy

Did you get or buy CHX in last pregnancy		
	Frequency	Percent
Yes	399	83.0
No	82	17.0
Total	481	100.0

Among 399 RDWs who received CHX in their last pregnancy, 314 (78.6%) received from FCHVs followed by health facilities 69 (17.3%).

Table 4.16: Percent distribution of RDWs from whom/where did they receive or buy the CHX in their last pregnancy

Where did you get the CHX		
	Frequency	Percent
FCHV	314	78.6
Health Facility	69	17.3
Shop - CHX separately	7	1.8
Shop - CHX with CHDK	4	1.0
Others	4	1.0
Total	399	100.0

The FCHV and health workers explained the importance of CHX to pregnant women during the supply of CHX in their last pregnancy. Out of 494 RDWs, 76.5% (378) reported that CHX prevents umbilicus stump infection and 19.6% (97) said it prevents newborn deaths.

Table 4.17: Percent distribution of RDWs who received advices from health workers and FCHVs on the importance of CHX application during in their last pregnancy orientation

Why advises were you told to apply CHX

Reasons	Frequency	Percent
Prevent umbilicus stump infection	378	76.5
Prevent Death	97	19.6
Others	7	1.4
No any reason told	4	0.8
Don't remember	8	1.6
	494	100

Among 399 RDWs receiving CHX in their last pregnancy where asked when did you get the CHX. The 65.2% (260) reported that they got CHX in the 8th month (mode and median) of pregnancy period. The mean is 8.18 month with standard deviation of 0.849 months (23 days). The CHX should be given to pregnant women during the 8th months gestation as per CHX guidelines. 29.6% (118) RDW received the CHX in 9th month of gestation in their last pregnancy. (table # 4.18)

Table 4.18: Percent distribution of RDWs as of time period of CHX received during in their last pregnancy

When you received the CHX during pregnancy	
N	399
Mean (months)	8.18
Median (months)	8
Mode (months)	8
Standard deviation (months)	.849

When you received the CHX during the last pregnancy		
Pregnancy period	Frequency	Valid Percent
1	1	.3
3	2	.5
4	2	.5
6	8	1.9
7	6	1.6
8	260	65.2
9	118	29.6
10	1	.3
Total	399	100.0

Among the 345 RDWs whose newborns were applied with CHX, 99.2% reported washing hand before applying the CHX to newborn, 86% applied by fingers, 85.2% kept the CHX applied stump without touching cloths and 66.2% applied nothing in the umbilicus stump except CHX and kept it clean and dry.

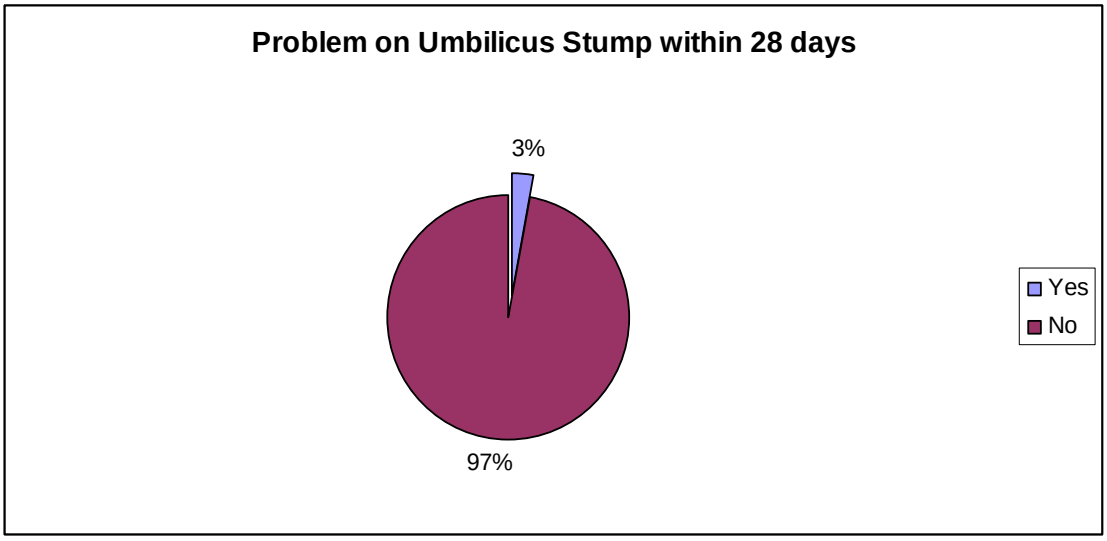
Table 4.19: Percent distribution of RDWs as of process of CHX application during in their last pregnancy

The Process of CHX application

n=345 (multiple answers)	Frequency	Percent
Hand washing before applying CHX	342	99.2
Apply CHX on and around the stump by finger	297	86.0
After CHX applied stump was kept without touching with cloths	294	85.2
Nothing to apply anything except CHX then kept clean and dry	228	66.2

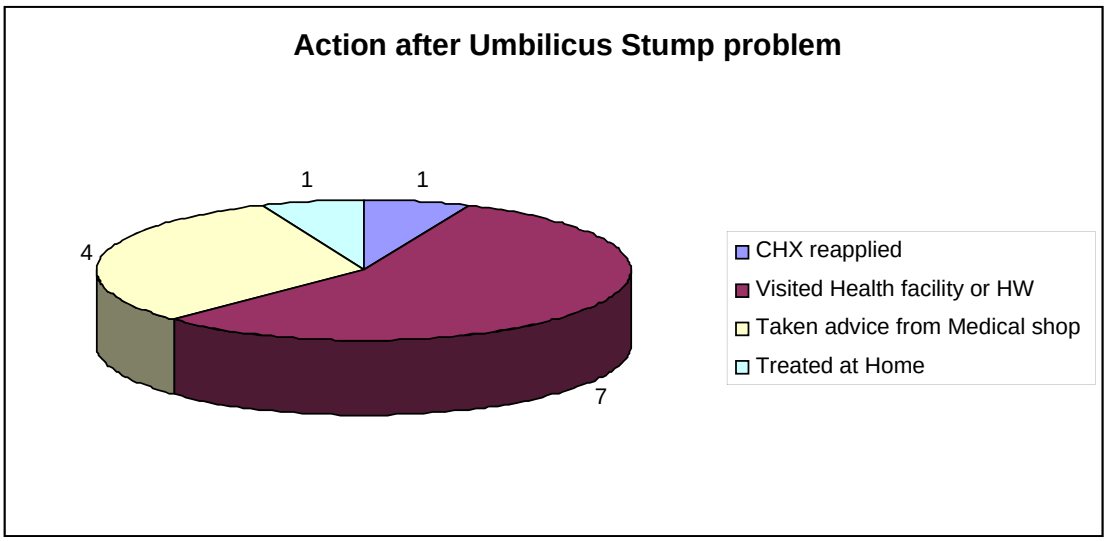
Among the 488 newborns, only 2.7% (13) had some problem on the umbilicus. 11 have umbilicus infections where as 2 have delay fall down of stump. After infection of the umbilicus stump, the newborn reapplied the CHX in one case, 7 visited to health facility or health workers, 4 took advices from medical shop and one treated at home.

Figure 4.20: Percent distribution of newborns whose umbilicus stump has some problem



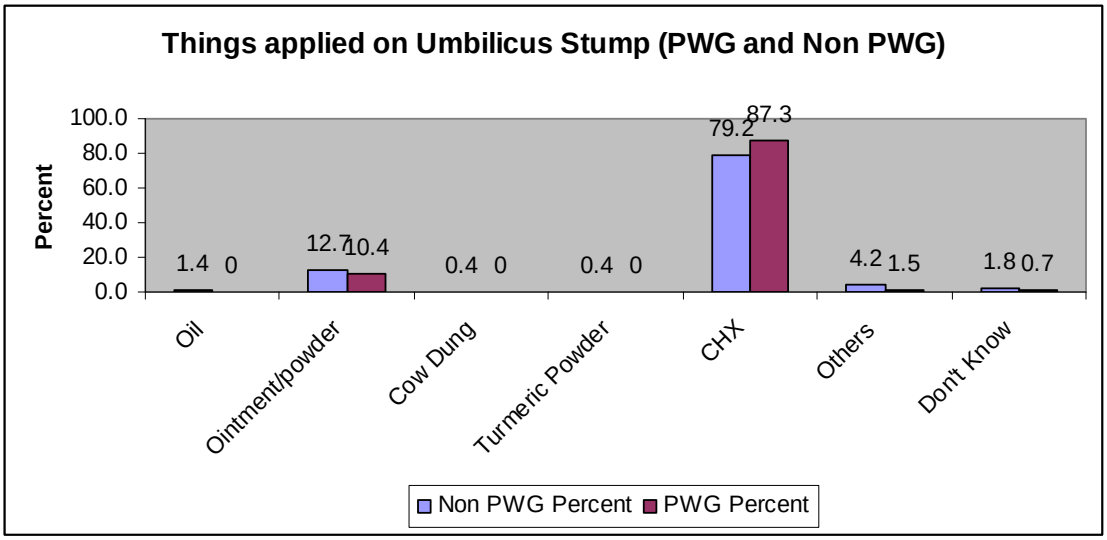
Any problem in stump within 28 days of child birth		
n = 488	Frequency	Percent
Yes	13	2.7
No	475	97.3
Total	488	100.0

Figure 4.21: Number distribution of RDWs action taken after newborns' umbilicus stump has some problem



The application of CHX to newborn's umbilicus stump of member of pregnant women group (PWG) is 87.3% where as in non PWG members it is only 79.2%. The PWG members did not practise harmful application on umbilicus stump like cow dung, oil and turmeric.

Figure 4.22: Percent distribution of newborns applying various things on umbilicus stump among PWG and Non PWG



Out of 486 RDWs, there 31.5% are pregnant women group (PWG) members while 68.5% are not the members of PWG as shown in the table below.

Table 4.23: Percent distribution of RDWs by member of PWG

Are you member of pregnant women group?		
Yes	153	31.5
No	333	68.5
Total	486	100.0

Table 4.24: Comparison between Pregnant Women Group (PWG) member and CHX applied:

		CHX applied		
		Yes	No	Total
PWG member	Yes	36	12	48
	No	87	38	125
	Total	123	50	

The table is shows that odd ratio is 1.3 which means 1.3 times more CHX is applied among the newborns of PWG members than non-PWG members in Parsa.

Conclusion:

Within one year of application of chlorhexidine ointment on umbilicus stump of newborns pilot programming in Parsa district, the coverage is 82.7% (345/417). The compliance (application of whole tube of Kawach at single event in the cord stump and surrounding areas of newborn within 2 hours of cord cut among those who applied Kawach) is almost to coverage 66.4% (229/345). The cost can be minimised by integrating the training of CHX with CBNCP training. The distribution can be increased through joint collaboration by supplying from health facilities, hospitals and birthing centres and at community by FCHVs in the pregnant women group meeting.

Recommendation:

The application of chlorhexidine ointment on umbilicus stump of newborns programming should be scaled up to other districts of Nepal by integrating other programs by existing government health system and scaling up the pregnant women groups approach for high coverage among marginalized communities.

Annex-1: Sample frame of Parsa district

Ilaka Code	Record no.	Ilaka Name	LQAS #	VDC_Name	Ward
1	286	Thori	1	Nirmal Basti	1
1	287	Thori	2	Nirmal Basti	2
1	288	Thori	3	Nirmal Basti	3
1	289	Thori	4	Nirmal Basti	4
1	290	Thori	5	Nirmal Basti	4
1	291	Thori	6	Nirmal Basti	5
1	292	Thori	7	Nirmal Basti	6
1	293	Thori	8	Nirmal Basti	6
1	294	Thori	9	Nirmal Basti	6
1	295	Thori	10	Nirmal Basti	7
1	296	Thori	11	Nirmal Basti	8
1	297	Thori	12	Thori	1
1	298	Thori	13	Thori	1
1	299	Thori	14	Thori	3
1	300	Thori	15	Thori	5
1	301	Thori	16	Thori	6
1	302	Thori	17	Thori	7
1	303	Thori	18	Thori	8
1	304	Thori	19	Thori	9
2	305	Sedhwa	1	Bijbaniya	3
2	306	Sedhwa	2	Bijbaniya	7
2	307	Sedhwa	3	Jeetpur	2
2	308	Sedhwa	4	Jeetpur	6
2	309	Sedhwa	5	Jeetpur	9
2	310	Sedhwa	6	Mahadev patti	2
2	311	Sedhwa	7	Mahadevpatti	5
2	312	Sedhwa	8	Mahadevpatti	7
2	313	Sedhwa	9	Pidari Guthi	1
2	314	Sedhwa	10	Pidari Guthi	6
2	315	Sedhwa	11	Pidari Guthi	8
2	316	Sedhwa	12	Sankarsaraiya	3
2	317	Sedhwa	13	Sankarsaraiya	6
2	318	Sedhwa	14	Sedhwa	1
2	319	Sedhwa	15	Sedhwa	6
2	320	Sedhwa	16	Subarnapur	2
2	321	Sedhwa	17	Subarnapur	6
2	322	Sedhwa	18	Supauli	1
2	323	Sedhwa	19	Supauli	7
3	324	Nichuta	1	Auraha	5
3	325	Nichuta	2	Auraha	9
3	327	Nichuta	4	Gaadi	3
3	328	Nichuta	5	Gaadi	7
3	329	Nichuta	6	Kauwabankataiya	4
3	330	Nichuta	7	Lakhanpur	1
3	326	Nichuta	7	Dewarbana	3
3	331	Nichuta	8	Lakhanpur	7
3	332	Nichuta	9	Mahuwan	2
3	333	Nichuta	10	Mahuwan	8
3	334	Nichuta	11	Masihani	3

Ilaka Code	Record no.	Ilaka Name	LQAS #	VDC_Name	Ward
3	335	Nichuta	12	Masihani	8
3	336	Nichuta	13	Nichuta	4
3	337	Nichuta	14	Nichuta	8
3	339	Nichuta	16	Paterwa Sugauli	6
3	340	Nichuta	17	Sonbarsa	1
3	341	Nichuta	18	Sonbarsa	5
3	342	Nichuta	19	Sonbarsa	8
3	388	Nichuta	115	Paterwa Sugauli	3
4	343	Bagahi	1	Bagahi	2
4	344	Bagahi	2	Bagahi	6
4	345	Bagahi	3	Basdilwa	1
4	346	Bagahi	4	Basdilwa	5
4	347	Bagahi	5	Basdilwa	8
4	348	Bagahi	6	Belwa Parsauni	2
4	349	Bagahi	7	Belwa Parsauni	4
4	350	Bagahi	8	Belwa Parsauni	7
4	551	Bagahi	9	Belwa Parsauni	9
4	352	Bagahi	10	Birwaguthi	1
4	371	Bageshwori	10	Harpur	8
4	353	Bagahi	11	Birwaguthi	2
4	505	Bagahi	11	Maniyari	1
4	354	Bagahi	12	Biruwaguthi	3
4	355	Bagahi	13	Biruwaguthi	5
4	356	Bagahi	14	Biruwa Guthi	8
4	357	Bagahi	15	Chorni	3
4	398	Bagahi	16	Chorni	7
4	359	Bagahi	17	Chorni	8
4	360	Bagahi	18	Chorni	9
4	361	Bagahi	19	Lal Parsa	5
5	362	Bageshwori	1	Bagbana	4
5	363	Bageshwori	2	Bagbana	7
5	364	Bageshwori	3	Bagbana	9
5	365	Bageshwori	4	Bageshwori Tritona	2
5	366	Bageshwori	5	Bageshwori	6
5	367	Bageshwori	6	Bahuwari Pidari	1
5	368	Bageshwori	7	Bahuwari Pidari	5
5	369	Bageshwori	8	Bahuwari Pidari	9
5	370	Bageshwori	9	Harpur	4
5	372	Bageshwori	11	Madhuban Mathal	1
5	373	Bageshwori	12	Madhuban Mathal	4
5	374	Bageshwori	13	Madhuban Mathal	7
5	375	Bageshwori	14	Panchrukhi	2
5	376	Bageshwori	15	Panchrukhi	6
5	377	Bageshwori	16	Sakhwa Parsauni	1
5	378	Bageshwori	17	Sakhwa Parsauni	4
5	379	Bageshwori	18	Sakhuwa Parsauni	7
5	380	Bageshwori	19	Sakhuwa Parsauni	9
6	381	Bishrampur	1	Bahuawra Bhatta	1
6	382	Bishrampur	2	Bahuawra Bhatta	4
6	383	Bishrampur	3	Bahuawra Bhatta	7
6	384	Bishrampur	4	Bairiya Birta Da.Pu	3

Ilaka Code	Record no.	Ilaka Name	LQAS #	VDC_Name	Ward
6	385	Bishrampur	5	Bairiya Birta Da.Pu	6
6	386	Bishrampur	6	Bairiya Birta Da.Pu	9
6	387	Bishrampur	7	Bishrampur	4
6	388	Bishrampur	8	Bishrampur	6
6	389	Bishrampur	9	Gamhariya	1
6	390	Bishrampur	10	Gamhariya	6
6	391	Bishrampur	11	Nagardaha	3
6	392	Bishrampur	12	Nagardaha	9
6	393	Bishrampur	13	Ramnagari	7
6	394	Bishrampur	14	Udayapur Ghurmi	3
6	395	Bishrampur	15	Udaypur Ghurmi	6
6	396	Bishrampur	16	Udaypur Ghurmi	9
6	397	Bishrampur	17	Bahuratar	3
6	398	Bishrampur	18	Bhauratar	6
6	399	Bishrampur	19	Bhauratar	8
7	400	Bhikhampur	1	Bhikhampur	1
7	401	Bhikhampur	2	Bhikhampur	3
7	402	Bhikhampur	3	Bhikhampur	5
7	403	Bhikhampur	4	Bhikhampur	6
7	404	Bhikhampur	5	Bhikhampur	9
7	405	Bhikhampur	6	Ghoddaur Pipra	2
7	406	Bhikhampur	7	Ghoddaur Pipra	5
7	407	Bhikhampur	8	Ghoddaur Pipra	8
7	408	Bhikhampur	9	Ghoddaur Pipra	9
7	409	Bhikhampur	10	Jagarnathpur Sira	1
7	410	Bhikhampur	11	Jagarnathpur Sira	2
7	411	Bhikhampur	12	Jagarnathpur Sira	4
7	412	Bhikhampur	13	Jagarnathpur Sira	6
7	413	Bhikhampur	14	Jagarnathpur sira	7
7	414	Bhikhampur	15	Jagarnathpur sira	8
7	415	Bhikhampur	16	Janaki Tola	1
7	416	Bhikhampur	17	Janaki Tola	4
7	417	Bhikhampur	18	Janaki tola	6
7	418	Bhikhampur	19	Janaki tola	8
8	419	Langadi	1	Vishwa	3
8	420	Langadi	2	Vishwa	8
8	421	Langadi	3	Dhobini	3
8	422	Langadi	4	Dhobini	8
8	423	Langadi	5	Hariharpur	3
8	424	Langadi	6	Hariharpur	8
8	425	Langadi	7	Jaymangalapur	2
8	426	Langadi	8	Jaymangalapur	6
8	427	Langadi	9	Langadi	2
8	428	Langadi	10	Langadi	7
8	429	Langadi	11	Mirjapur	3
8	430	Langadi	12	Mirjapur	8
8	431	Langadi	13	Mudali	3
8	432	Langadi	14	Mudali	7
8	433	Langadi	15	Sambhauta	1
8	434	Langadi	16	Sambhauta	5
8	435	Langadi	17	Sambhauta	8

Ilaka Code	Record no.	Ilaka Name	LQAS #	VDC_Name	Ward
8	436	Langadi	18	Tulsibarba	3
8	437	Langadi	19	Tulsibarba	8
9	438	Pokhariya	1	Basantapur	2
9	439	Pokhariya	2	Basantapur	4
9	440	pokhariya	3	Basantapur	6
9	441	pokhariya	4	Basantapur	8
9	442	Pokhariya	5	Bairiya Birta Na. Ta.Ja	2
9	443	Pokhariya	6	Bairiya Birta Na. Ta.Ja	5
9	444	Pokhariya	7	Govindapur	1
9	445	Pokhariya	8	Govindapur	7
9	446	Pokhariya	9	Hariharpur Birta	3
9	447	Pokhariya	10	Pokhariya	1
9	448	Pokhariya	11	Pokhariya	3
9	449	Pokhariya	12	Pokhariya	5
9	450	Pokhariya	13	Pokhariya	7
9	451	Pokhariya	14	Sibarba	1
9	452	Pokhariya	15	Sibarba	4
9	453	Pokhariya	16	Sibarba	7
9	454	Pokhariya	17	Sibarba	9
9	455	Pokhariya	18	Srisiya Na Ta Ja	4
9	456	Pokhariya	19	Srisiya Na Ta Ja	9
10	457	Pakaha	1	Bhedihari	3
10	458	Pakaha	2	Bhedihari	6
10	459	Pakaha	3	Bedihari	9
10	461	Pakaha	5	Dhore	1
10	460	Pakaha	6	Biranchi Barba	4
10	462	Pakaha	6	Dhore	5
10	463	Pakaha	7	Dhore	9
10	464	Pakaha	8	Lahawar Thakri	6
10	664	Pakaha	8	Lahawar Thakri	6
10	465	Pakaha	9	Lahawar Thakri	9
10	465	Pakaha	9	Lahawar Thakri	9
10	466	Pakaha	10	Pakaha Mainpur	6
10	467	Pakaha	11	Prasauni Bhatta	1
10	468	Pakaha	12	Prasauni Bhatta	4
10	469	Pakaha	13	Prasauni Bhatta	7
10	470	Pakaha	14	Parsurampur	4
10	471	Pakaha	15	Sabaithwa	1
10	472	Pakaha	16	Sabaithwa	5
10	473	Pakaha	17	Sabaithwa	9
11	476	Srisiya	1	Alau	1
11	477	Srisiya	2	Alau	4
11	478	Srisiya	3	Alau	6
11	479	Srisiya	4	Alau	9
11	480	Srisiya	5	Amar Patti	5
11	481	Srisiya	6	Amar Patti	9
11	482	Srisiya	7	Bindabasini	6
11	483	Srisiya	8	Bindabasini	9
11	484	Srisiya	9	Harpatgunj	4
11	485	Srisiya	10	Harpatgunj	9
11	486	Srisiya	11	Jhauwa Guthi	4

Ilaka Code	Record no.	Ilaka Name	LQAS #	VDC_Name	Ward
11	487	Srisiya	12	Jhauwa Guthi	7
11	488	Srisiya	13	Ramgadwa	1
11	489	Srisiya	14	Ramgadwa	6
11	490	Srisiya	15	Srisiya Kahlwa Tola	2
11	491	Srisiya	16	Srisiya Kahlwa Tola	6
11	492	Srisiya	17	Srisiya Khalwa Tola	9
11	493	Srisiya	18	Sugauli Birta	4
11	494	Srisiya	19	Sugauli Birta	6
12	495	Birgunj	1	Bhawanipur	2
12	496	Birgunj	2	Bhawanipur	4
12	497	Birgunj	3	Bhawanipur	5
12	498	Birgunj	4	Bhawanipur	7
12	499	Birgunj	5	Bhawanipur	9
12	500	Birgunj	6	Lipnibirta	2
12	501	Birgunj	7	Lipnibirta	3
12	512	Birgunj	8	Prasauni Birta	6
12	502	Birgunj	8	Lipni Birta	5
12	513	Birgunj	9	Prasauni Birta	8
12	503	Birgunj	9	Lipni Birta	6
12	504	Birgunj	10	Lipni Birta	8
12	506	Birgunj	12	Maniyari	3
12	507	Birgunj	13	Maniyari	5
12	508	Birgunj	14	Maniyari	7
12	509	Birgunj	15	Maniyari	8
12	510	Birgunj	16	Prasauni Birta	1
12	511	Birgunj	17	Prasauni Birta	3
13	514	Birgunj NP	1	Birgunj U.M.N.P	1
13	515	Birgunj NP	2	Birgunj U.M.N.P	2
13	516	Birgunj NP	3	Birgunj UMNP	3
13	517	Birgunj NP	4	Birgunj U.M.N.P	4
13	518	Birgunj NP	5	Birgunj U.M.N.P	6
13	519	Birgunj NP	6	Birgunj UMNP	9
13	520	Birgunj NP	7	Birgunj UMNP	10
13	521	Birgunj NP	8	Birgunj UMNP	11
13	522	Birgunj NP	9	Birgunj UMNP	13
13	523	Birgunj NP	10	Birgunj UMNP	13
13	524	Birgunj NP	11	Birgunj UMNP	14
13	525	Birgunj NP	12	Birgunj UMNP	14
13	526	Birgunj NP	13	Birgunj UMNP	15
13	527	Birgunj NP	14	Birgunj UMNP	16
13	528	Birgunj NP	15	Birgunj UMNP	16
13	529	Birgunj NP	16	Birgunj UMNP	17
13	530	Birgunj NP	17	Birgunj UMNP	18
13	531	Birgunj NP	18	Birgunj UMNP	19
13	532	Birgunj NP	19	Birgunj UMNP	19

To be used for confidential interview only

A SURVEY ON COVERAGE OF CHX AND OTHER MNH ACTIVITIES AT COMMUNITY LEVEL-2011
QUESTIONNAIRE FOR RECENTLY DELIVERED WOMEN WITH LESS THAN 6 MONTHS
(MOHP/ PLAN NEPAL)

FA no. ☐☐ LQAS ☐☐ Record no ☐☐☐

INTRODUCTION AND CONSENT

Namaste! My name is _____. I am from DPHO, Parsa or Plan Nepal, which is conducting a study for the Ministry of Health and Population/Government of Nepal. The MOHP has been helping pregnant women, mothers, and newborns in this district with the objectives of improving maternal, and child health status. We are here to find out about the health of mothers and newborns to help you and your community to keep mothers and children healthy. We would very much appreciate your participation in this survey. This information will help the MOHP to improve its program in the districts. The survey usually takes around one hour. I assure you that your name will not be shared with anyone else and your answers to my questions will be combined with answers from many other people so that no one will know that the answers you give me today belong to you. Your privacy is protected, and I assure that your answers will be kept confidential.

Your participation in this survey is voluntary and you can choose not to answer any individual question or all of the questions. However, we hope that you will participate in this survey since your views are important.

May I proceed with the questions?

RESPONDENT AGREES TO BE INTERVIEWED……	1 → START INTERVIEWING
RESPONDENT DOES NOT AGREE TO BE INTERVIEWED…..	2 → THANK THE RESPONDENT & END INTERVIEW

1) District:_____……	
2) Name & code of VDC: _____.....	☐☐
3) Ward Number …….....	☐☐
4) Village/ Town name:_____	
5) LQAS number. …….....	☐☐
6) Household Number.....……..	☐☐☐☐
7) Name of the household head:_____	
8) Name of the respondent:_____	

Interview Visits	1	2	3
Date [DD/MM/YY]	/ /	/ /	/ /
Interviewer's Name:			
Result	☐	☐	☐
Next Visit : DATE [DD/MM/YY]	/ /	/ /	

TIME			

*Result Codes:

1 = Interview completed 2 = Respondent refused to be interviewed 3 = Time and date set for later	4 = Respondent not at home 5 = Other (specify): _____

a) Section 9: Immediate Newborn Care

Interviewer: "Now, I would like to ask you about less than 6 months child's related questions about the care of your child after delivery."

Q. #	Question	Codes	Go to Q.
901	Check Q A and circle the appropriate response below: The recent delivery resulted in a live birth……..1 The recent delivery resulted in a still birth……..2		End
Interviewer: "Now, I would like to ask you some specific questions pertaining to the baby immediately following the delivery."			
902	Was a Clean Home Delivery Kit used during delivery? (Show CHDK)	Yes ..... 1 No ..... 2 Don't know 8	907
903	What instrument was used to cut (name)'s umbilical cord?	New Blade ..... 1 Boiled Blade ..... 2 Unboiled used blade..... 3 Knife ..... 4 Grass Cutter (hansiya) ..... 5 Weapon (khukuri) ..... 6 Scissor..... 7 Other (specify) _____.....96 Don't know 98	
904	Was the instrument used to cut the cord boiled prior to use?	Yes ..... 1 No ..... 2 Do not know/ cannot remember 8	
905	What was used to tie the cord?	New string or thread ..... 1 Boiled string or thread ..... 2 Unboiled used string or thread ..... 3 Other (specify)_____.....6 Don't know 8	
906	On what surface was the cord cut on?	Plastic disc .....1 Metal coin .....2 Wood.....3 Other (specify)_____.....6 Nothing. .....7 Don't know 8	
907	How long after the birth of the baby the cord was cut?	Minutes..... . ▯ ☐☐ Don't remember.....998	
908	Did the person who handled the baby, assisting	Yes 1	

Q. #	Question	Codes	Go to Q.
	with the delivery, washed hands with soap and water first?	No ..... 2 Don't know 8	
909	Did anybody apply anything on the stump after the baby's cord was cut?	Yes ..... 1 No ..... 2 Don't know 8	} 911
910	What did they apply after the cord was stumped ? Prompt: Anything else? (CIRCLE ALL RESPONSES GIVEN)	Oil ..... 1 Ash..... 2 Sindoor..... 3 Powder ..... 4 Animal dung ..... 5 Turmeric/turmeric powder..... .....6 Ghyu ..... 7 Kawach..... ...8 Other Ointment---------- --9 Other (specify) _____ ..96 Don't know 98	→912
911	After the cord of your baby was cut was Chlorhexidine (CHX and brand name in Nepal is Kawach) applied on the umbilical cord stump? SHOW KAWACH TUBE	Yes ...……..…….…. 1 No ……..…….. 2 Don't Know.....8	920 920
912	How long after the cord cut, was Kawach first applied?	Immediately after cord was cut.....996 Minutes …….....▫▫▫ Don't Know.....998	
913	Who applied Kawach on the umbilical cord stump of your baby?	Mother…….....1 Family member.....2 FCHV…….....3 Health worker.....4 TBA…….....5 Other (specify)_____.....6	
914	Did the person applying Kawach wash hand with soap and water before applying Kawach?	Yes ...……...…. 1 No …….….. 2 Don't Know.....8	
915	Was Kawach applied on stump only or also in the surrounding area of the stump?	Stump only ...……...…. 1 Surrounding area only……...….. 2 Both in stump and surrounding area.....3 Don't Know.....8	
916	Was the whole amount of the Kawach in the tube applied at a time on your baby's stump or only some amount from the tube applied?	Whole content of the tube.....1 Part of the content of the tube..... .....2 Don't Know.....8	918 918
917	Why was the whole amount of Kawach in the not applied at a time? Probe: Any other reason? (CIRCLE ALL RESPONSES GIVEN)	Tube cream is more for one application...1 Thought more than one application is effective.....2 Did not know that whole content of the tube has to be applied once.....3 Other (specify)_____.....6 Don't Know.....8	
918	How many times Kawach was applied on umbilical stump of your baby?	Times..... .▫ Don't Know.....8	
919	After applying Kawach, was the cord stump kept untouched by clothes for some time?	Yes ...……...…. 1 No …….... 2	

Q. #	Question	Codes	Go to Q.
		Don't Know.....8	
920	During your last pregnancy, were you given or did you buy Kawach?	Yes …….. 1 No ……. 2	925
921	Where did you obtain Kawach from?	FCHV.....1 Health facility.....2 Bought from a shop separately.....3 Bought from a shop in a CHDK.....4 Other (Specify)_____.....6	
922	What reasons were you told for using Kawach? Probe: Any other reason? (CIRCLE ALL RESPONSES GIVEN)	To prevent infection of umbilical cord.....1 To reduce risk of death.....2 No reason was told.....3 Other (specify)_____.....6 Don't remember.....8	
923	At what month of pregnancy did you receive Kawach?	Months..... ▫ (currently running month)	
924	Did the person giving you Kawach tell you the following while giving you Kawach ?	YES / NO	
	Told to wash hand with soap and water before applying Kawach	1 / 2	
	Told to spread Kawach by finger	1 / 2	
	Told to, keep the stump untouched by clothes for sometime after applying Kawach	1 / 2	
	Told not to apply anything on the cord stump other than Kawach but keep it dry and clean	1 / 2	
925	Check Q 910, 911, 922 and 923:	Received Kawach but did not apply….....1 Received Kawach and applied.....2 Not received Kawach and not applied.....3 Not received Kawach but applied.....4	927
926	You had received Kawach from ..... (source from Q 921) but you did not apply on the cord stump of your baby. Why did not you apply Kawach on your baby's stump?	Delivered at a health facility.....1 Family members/others were against of it.....2 Forgot to apply.....3 Lost Kawach.....4 Did not think it was useful or necessary.5 Other (Specify)_____.....6 Don't know.....8.	
927	Was there any problem on the cord stump of your baby within 28 days of birth?	Yes ...…….….. 1 No ……..... 2	930
928	What type of problems were seen? Probe: Any other problem?	Infection on the cord stump.....1 Delay in cord fall.....2 Other (Specify)_____.....6	
929	What did you do when the baby had problem in cord stump?	Used Kawach again.....1 Visited a health facility/health worker...2 Consulted a pharmacy.....3 Home remedy.....4 Other (Specify)_____.....6 Did nothing.....7	
930	How many days after the cord was cut, it fell?	Days..... ▫▫ Don't Know……..…..…..98	
931	In your opinion why Kawach should be applied	To prevent infection of	

Q. #	Question	Codes	Go to Q.
	on the baby's stump after cutting the umbilical cord? Probe: Any other reason? (CIRCLE ALL RESPONSES GIVEN)	umbilical cord.....1 To reduce risk of death.....2 FCHV/health worker advised to apply...3 Other (specify)_____.....6 Don't know.....8	
932	Are you member of PWG during pregnancy?	Yes ..... 1 No 2	

Thank you for your time and cooperation in answering my questions. The information that you have provided will help us to improve the health of women and children throughout Nepal.

Annex-3: Chlorhexidine operational Research Time Line of Parsa district

Activities	Date	Remarks
Approval from Nepal Health Research Council (NHRC) for program piloting of the CHX	Jan 22, 2009	
Development of concept paper	Jun 30, 2009	
Approval from USAID Nepal	July 17, 2009	E-mail of Deepak Paudel USAID Nepal
District selection letter from Child Health Division (CHD) to Plan Nepal	July 29, 2009	
CHX TWG recommend for program piloting to Department of Health Services (DoHS) for approval	August 4, 2009 (20 Shrawan 2066)	CHX TWG
MOHP approved for piloting for four districts including Parsa (other districts are Banke, Bajhang and Jumla)	Nov 4, 2009 (18 Kartik 2066)	approved by Director General of DoHS, MOHP
CHX orientation	13 Oct 2009	
CHX – TOT	14 Oct 2009	
CHX training to hospital staff	19, 20 and 22 Nov 2009	
CHX distribution	19 Nov 2009 onwards	
CHX training to HW	Jan 2010	
CHX training to VHW/MCHW	Nov & Dec 2009	
CHX training to FCHV (integration with CB-NCP training)	25 Jan 2010 – 1 Sept 2010	
CHX social market in CHDK in Parsa by CRS CHX data collection for final evaluation 494 RDWs CHX data finding sharing at national level stakeholders Final evaluation report	8 to 16 Feb 2010 July 2011 Sept 23, 2011 Oct 2011	In 100 Outlets as per attached file list

Major findings of Chlorhexidine (Kawach) coverage and compliance study 2011, Parsa district

Background:

Current neonatal mortality rate of 33 per 1000 live births in Nepal translates to around 23,000 neonatal deaths per annum. Studies have shown that immediate cleansing of umbilical cord with 4 *per cent* Chlorhexidine (CHX) reduces the cord infection and reduces neonatal mortality by about 23 *per cent*. After the results of a study to compare efficacy of Chlorhexidine lotion versus aqueous and another study to examine acceptability and case in the use of two different CHX formulations (liquid or lotion) for prophylactic application on freshly cut umbilical cord stumps in Nepal the Department of Health Services (DoHS) endorsed a pilot CHX program in four districts (Banke, Bajhang, Jumla and Parsa).

In Parsa district, program was initiated through district level orientation on Oct 2009 and continued provide trainer of training to district supervisors and health facility staff as well as training to Village Health Worker and Maternal and Child Health Worker separately. The CHX training program is aligned with Community Based Newborn Care Program training package at Female Community Health Volunteer has completed on September 2010.

Study objectives and methods: The overall objective of the study was to measure the coverage and compliance of Kawach at community level in Parsa district. The data was collected through Lot Quality Assurance Sampling

(LQAS) technique.

Total 494 (13 SAs X 38) recently delivered women (RDW) defined as married women of age group 15-49 who had given a live birth and were living in the family with the baby were interviewed using a structured questionnaire in the district. Systematic random sampling design was used through LQAS methods by dividing the areas into 13 supervision areas (SAs) where 38 RDWs were interviewed per supervision area in July 2011.

Major findings:

Antenatal and delivery care: 98 *per cent* RDW of Parsa district were immunized against tetanus toxoid vaccine, and similar 78 *per cent* of RDW had taken iron/folic acid tablets during their most recent pregnancy. More than 60 per cent of the RDW of Parsa had delivered by skilled provider (doctor or nurse or HA or AHW or ANM).

Table: other findings of Kawach

Indicators (as percent of)	Parsa
Person who applied Kawach on the umbilical cord stump	
Health worker	52.8
FCHV	33.7
RDW (2.2)/family members (6.8)	9.0
Others (TBA 3.4)	4.6
Person applying Kawach (CHX) washed hand (among home deliveries)	94.4
Newborn who received Kawach application both in stump and surrounding area	89.0
Newborn who received full tube of Kawach application	96.4
Newborns who received Kawach application on time only	99.5

About 88.2 *per cent* person had washed their hand by birth attendant before touching new born. Similarly, 94.4 *per cent* had washed their hand before apply CHX and 96.4 *per cent* full tube of Kawach is apply to newborn baby.

Umbilical cord care: About 83.0 *per cent* RDW of Parsa district reported to have their newborns' umbilical cord cut with safe instruments Child Delivery Kit (CDK). RDWs reported 78.6 *per cent* got CHX by Female Community Health Volunteer (FCHV), 17.3 *per cent* by health facilities, 1.8 *per cent* from shop-CHX separately, 1.0 *per cent* from shop-CHX with CDK and remaining 1.0 *per cent* by others.

The large volume of pregnant women 65.2 *per cent* were received CHX in eight months of her pregnancy period and 29.6 *per cent* in nine months.

Coverage and compliance of Kawach: The application of Kawach in the stump of newborns was 82.7 *per cent* in Parsa district. The compliance (application of whole tube of Kawach at single

event in the cord stump and surrounding areas of newborn within 2 hours of cord cut among those who applied Kawach) is almost to coverage 66.4%.

Comparison between Pregnant Women Group (PWG) member and CHX applied:

		CHX applied		
		Yes	No	Total
PWG member	Yes	36	12	48
	No	87	38	125
	Total	123	50	

The table is shows that odd ratio is 1.3 times more CHX applied by PWG member than non-PWG member.

Conclusion:

Within one year of application of chlorhexidine ointment on umbilicus stump of newborns pilot programming in Parsa district, the coverage is 82.7% (345/417). The compliance (application of whole tube of Kawach at single event in the cord stump and surrounding areas of newborn within 2 hours of cord cut among those who applied Kawach) is almost to coverage 66.4% (229/345). The cost can be minimised by integrating the training of CHX with CBNCP training. The distribution can be increased through joint collaboration by supplying from health facilities, hospitals and birthing centres and at community by FCHVs in the pregnant women group meeting.

Recommendation:

The application of chlorhexidine ointment on umbilicus stump of newborns programming should be scaled up to other districts of Nepal by integrating other programs by existing government health system and scaling up the pregnant women groups approach for high coverage among marginalized communities.

Annex 12: Nepal LIBON Project – Special Reports and Presentations

Nepal LIBON Project's Pregnant Women's Groups (PWG) approach was presented at: (a) Global Health Conference (GHC) in 2009 and (b) American Public Health Association (APHA) in 2011. An article on PWGs was also published in the Indian Journal of Medical Research (IJMR) in January 2011. In addition, Plan Nepal created documents on the impact of the project for publicity and dissemination purposes.

(a) GHC 2009

Plan Nepal
Pregnant Women's Groups and the Impact on Newborn's Mortalities in Bara District, Nepal
Presented at the 36th Annual International Conference on Global Health
"New Technologies + Proven Strategies = Healthy Communities"
May 26-30, 2009, Washington DC, USA

Bhagawan Das Shrestha, MPH, Project Coordinator Local Innovation for Better Outcomes for Neonates (LIBON) Project,
Plan Nepal

Web link http://www.globalhealth.org/conference_2009/view_top.php3?id=954
"D5: Better Beginnings: Improving Neonatal Outcomes / Bhagawan Das Shrestha Presentation"
http://www.globalhealth.org/conference_2009/presentations/d5_shrestha.pdf

Background
Nepal's under-five, infant and neonatal mortality rates are 61, 48 and 33 per 1,000 live births, respectively (DHS 2006). Over 80% of women in the Bara District, central Terai region, deliver at home without a skilled birth attendant. In 2001 Plan Nepal began a USAID-funded Child Survival project in partnership with the Nepal Ministry of Health and Population (MOHP) and Non-Governmental Organizations in Bara District to reduce the maternal and under-five child mortality rates in all 98 Village Development Committees (VDC). This impact study was conducted in June 2006. That project had 4 components:

1. Behavioral: Mothers of CU5 will be practicing healthy behaviors and seeking medical care from trained providers. The vehicle for this IEC/BCC component was Pregnant Women's Groups or **PWG's** (there were over 430 by 2006).
2. Increased access to services: Communities and families will have increased access to health education, quality care and essential medicines.
3. Quality of care by service providers (MoH and FCHV's) will be practicing appropriate integrated management of sick children, deliver quality family planning and maternal and newborn preventive care.
4. Institutional strengthening.

Intervention
The objective of this sub-study on Component 1 was to examine the relationship between Pregnant Women's Groups (PWG) members and non-members on maternal and under-five child mortality rates in the perinatal (from 28 weeks of gestation to 7 days of birth), neonatal (0-28 days), and infant period (1 year). The PWG are led by a cadre of respected and trained Female Community Health Volunteers (FCHV) who are officially recognized by the Nepal MOHP.

Consenting pregnant women joined a PWG nearest to their home and met monthly to learn about maternal and newborn care and danger signs of newborn, during pregnancy, delivery and post partum. Mothers who joined the PWG received iron and folic acid tablets, two TT injections, and developed a birth delivery plan (transportation, money and 3 persons for blood transfusion) that encouraged antenatal visits and delivery in a health clinic with a skilled birth attendant. In some PWGs, members of the PWG voluntarily contributed to a fund for transportation to a clinic in which members could borrow in emergencies. Pregnant women in the district who did not join a PWG were compared to pregnant women who attended PWG meetings prior to delivery.

Methodology
The design was a cross-sectional comparative study and the data were collected by the *Motherhood Method* – a variant of Participatory Community Survey (Maskey and DesChene, 2005). The study population was 110,000 women of reproductive age and 80,000 children under-five. The data were collected for 2 years from July 2003 to July 2005. The 2001 Nepal National Demographic and Health Survey report was used for baseline mortality data.

2001 NDHS national mortality rates		**2006 NDHS national data mortality rates**	
IMR	61 /1000 live birth	IMR	48 /1000 live birth
NMR	39 /1000 live birth	NMR	33 /1000 live birth
MMR	539 /100,000 total birth	MMR	281 /100,000 total birth

Results
There was a 50–60 percent statistically significant reduction in the maternal, infant, neonatal, and early neonatal mortality rates over a 5-year period (2001-2006) in members of PWG compared to non-members in Bara District. PWG members that are linked with a referral network to health facilities have better health outcomes compared to pregnant women who did not attend PWG meetings.

Comparison of Mortality Rates in PWG and Non-PWG Members:

Mortality rates	**PWG**	**Non-PWG**	**Odds Ratio (95% CI)**	**p-value**
IMR / 1,000 LB	25.2	57.9	2.38 (1.92-2.95)	<0.0001
NMR / 1,000 LB	18.9	39.6	2.14 (1.67-2.74)	<0.0001
ENMR/ 1,000 LB	16.8	34.8	2.10 (1.63-2.75)	<0.0001

PMR/ 1,000 LB	26.1	53.4	2.11 (1.71-2.60)	<0.0001
MMR / 100,000	279.7	608.7	2.18 (1.14-2.93)	<0.02

ENMR: Early neonate mortality rate – First week of life (0-7 days)
PMR: Perinatal Mortality Rate –28 week of gestation to 7 days of life

Conclusion:
The simultaneous empowerment of Pregnant Women Groups and the upgrading of the health facilities, both linked to the monthly data analysis and planning meetings at local levels, was very successful to reduce infant and neonatal mortality rates. These results contributed to the design (by the Nepalese government) of a nationwide Community Based Newborn Care Package. Moreover, Plan was awarded a follow-up project from USAID to expand this approach in the districts of Sunsari and Parsa of the Eastern and Central Terai respectively.

Recommendation:
- **Repeated** monthly dissemination of the **key Child Survival messages** directly to Mother's Groups with group support
- **Pregnant women self-monitoring** of the utilization of the health services by using a **Behavioural Mapping**
- Replicate in similar areas with high home birth rates

Success Factors
In sum the real lessons learned from this activity have been:
1) The importance of regular monthly review meetings at the sub-district and district health facilities to keep the staff motivated and maintain updated health status records and;
2) The effectiveness of targeted group - pregnant women's groups (PWG) education and pregnant women self monitoring at behavioral mapping.

Challenges
- To replicate the PWG approach to scattered community is a challenge.

Outcomes
1) The results from Bara influenced the Nepal MOHP to develop a Community Based Newborn Care Package.
2) The Nepal MOHP and Plan Nepal are currently working to reduce neonatal mortality in Parsa and Sunsari Districts with the support from USAID and Plan USA through the Local Innovation for Better Outcomes of Neonates (LIBON) project 2008 -2011. and
3) Plan is currently working with JHU and NFHP to look at community-distributed chlorhexidine for neonatal sepsis; Operational Research will begin in June 2009.

(b) APHA 2011

Plan Nepal

Peer-support groups and community volunteers improve newborn care in rural communities

Bhagawan Das Shrestha, MPH, Project Coordinator
Sher Bahadur Rana, Health Coordinator
Local Innovation for Better Outcomes for Neonates (LIBON) Project,
Plan Nepal

BACKGROUND. In Nepal, neonatal mortality has remained high and stagnant. THE PROJECT. Since 2007, Plan International, a child-centered humanitarian organization, has implemented a USAID-funded Child Survival project in the Sunsari and Parsa districts (tot pop 1,200,000) to reduce the morbidity and mortality among neonates. One project strategy was to link female community health volunteers (FCHVs) with the formal government health system through the Pregnant Women's Group (PWG). PWGs are peer-support organizations comprising 8-15 neighboring pregnant women who meet monthly with the facilitation of the FCHV and the government front-line health worker; they discuss their pregnancies, danger signs, how to prepare for delivery and basic newborn care. FCHVs raise awareness on immediate care and danger signs of newborns, carry out home visits to newborns, and provide early case management and referral of sick newborns to government health workers. RESULTS. The project helped organize 361 PWGs and a similar number of FCHVs. In three years (2007 to 2010), the project achieved (1) an increase of 22 percent points in skilled birth delivery (from 45 % to 67%); (2) an increase of 17 percent points in detection and treatment of neonates with possible bacterial infection (from 36% to 53%); (3) an increase of 24 percent points of pregnant women with four prenatal visits (from 29% to 53%). CONCLUSIONS. Based on this and similar experience, the Ministry of Health has expanded a community-based newborn program to thirteen more districts.
LEARNING OBJECTIVES. To discuss the importance of peer support groups and community volunteers to prevent maternal and neonatal mortality in developing countries.

Session 4126: Working with Communities in Low Income Countries to Improve Maternal and Child Health: Using Local Resources and Technology (ID=33528)

Please contact Bhagwan Das Shrestha (bhagawan_das.shrestha@plan-international.org) for copies of the presentation

Indian Journal of Medical Research January 2011 (page # 68):

Indian J Med Res 133, January 2011, pp 64-69

Field test results of the motherhood method to measure maternal mortality

Mahesh K. Maskey[1], Kedar P. Baral[2], Rajani Shah[3], Bhagawan D. Shrestha[4], Janet Lang[5,*] & Kenneth J. Rothman[6]

[1]Nepal Public Health Foundation, Kathmandu, [2]Patan Academy of Health sciences, [3]CTEVT, Bharatpur, [4]Plan Nepal, Nepal, [5]Watson Institute for International Studies, Brown University, Providence RI, USA & [6]RTI Health Solutions, Research Triangle Park, NC & Boston University School of Public Health, USA

Received March 31, 2010

***Background & objectives*: Measuring maternal mortality in developing countries poses a major challenge. In Nepal, vital registration is extremely deficient. Currently available methods to measure maternal mortality, such as the sisterhood method, pose problems with respect to validity, precision, cost and time. We conducted this field study to test a community-based method (the motherhood method), to measure maternal and child mortality in a developing country setting.**

***Methods*: Motherhood method was field tested to derive measures of maternal and child mortality at the district and sub-regional levels in Bara district, Nepal. Information on birth, death, risk factors and health outcomes was collected within a geographic area as in an unbiased census, but without visiting every household. The sources of information were a vaccination registry, focus group discussions with local health workers, and most importantly, interview in group setting with women who share social bonds formed by motherhood and aided by their peer memory. Such groups included all women who have given birth, including those whose babies died during the measurement period.**

***Results*: A total of 15161 births were elicited in the study period of two years. In the same period 49 maternal deaths, 713 infant deaths, 493 neonatal deaths and 679 perinatal deaths were also recorded. The maternal mortality ratio was 329 (95%CI:243-434)/100000 live birth, infant mortality rate was 48(44-51)/1000LB, neonatal mortality rate was 33(30-36)/1000LB, and perinatal mortality rate was 45(42-48)/1000 total birth.**

***Interpretation & conclusions*: The motherhood method estimated maternal, perinatal, neonatal and infant mortality rates and ratios. It has been field tested and validated against census data, and found to be efficient in terms of time and cost. Motherhood method can be applied in a time and cost-efficient manner to measure and monitor the progress in the reduction of maternal and child deaths. It can give current estimates of mortalities as well as averages over the past few years. It appears to be particularly well-suited to measuring and monitoring programmes in community and districts levels.**

Key words Maternal mortality - millennium development goal - motherhood method - Nepal - sisterhood method
Present address: Balsillie School of International Affairs, Waterloo, Ontario, Canada

The current estimate of global maternal deaths is 342900[1]. Almost all of these occur in developing countries. Among the six countries accounting for more than 50 per cent of all maternal deaths, two South Asian countries, India and Pakistan occupy 1st and 3rd position[1]. Over the past decade, reduction in maternal deaths has attained a high priority in global health movements. The fifth Millennium Development Goal (MDG5) of improving maternal health has set a target of reducing the maternal mortality ratio by 75 per cent between 1990 and 2015[2].

The most widely used measure of maternal mortality is the maternal mortality ratio, which is the ratio of the number of maternal deaths to the number of live births. It reflects (but is not identical to) the risk of maternal death once a woman has become pregnant. The 10th Revision of the International Classification of Diseases (ICD-10) defined a maternal death as "the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes"[3]. Maternal deaths are divided into direct and indirect obstetrical deaths. In practice the distinction between an accidental and incidental death or a direct and indirect death is problematic, and a precise cause of death may not be known despite knowledge of pregnancy. ICD-10 has, therefore, introduced an alternative definition of maternal death, the pregnancy related death, which emphasizes timing of death rather than the cause to which the death is attributed[3]. Many maternal mortality surveys, such as the sisterhood method[4] typically measure pregnancy-related deaths as maternal deaths, since the cause of death is not elicited in such surveys.

The methods for measuring maternal mortality can be grouped into two categories: empirical and analytical.. A vital registration system, a facility-based health services records, and a census can be regarded as routine opportunity empirical measurement while population based surveys like sisterhood method and demographic surveillance systems can be considered as special opportunity empirical measurements[3]. Main analytical approaches are Birth and Death Record Linkage, Capture-recapture methods for correcting under-reporting of maternal deaths, and statistical modeling used by UN systems[3]. There could be composite approaches also such as Reproductive Age Mortality Study (RAMOS) and the Motherhood Method.

In most developing countries, vital registration of medically-certified births and deaths is non-existent or incomplete, and validity or feasibility of other purely records-based approaches is questionable. A reproductive age mortality study (RAMOS) uses multiple sources such as records from hospital, police, public-health department and vital data registries to identify and investigate the cause of deaths for each woman of reproductive age in a defined population. Interviews with household members and health care providers provide a basis to classify the deaths as maternal or otherwise. The RAMOS approach is considered to be the most complete estimation of maternal mortality, but it can be complex, because information regarding the number of births must come from separate sources[4]. RAMOS is generally less expensive than population based surveys or a complete census. All these types of studies are subject to under-ascertainment problems, despite their intensive use of resources[5,6].

The sisterhood method is either indirect or direct. In recent years, the direct sisterhood method has been used for calculating the maternal mortality ratio (mmr) over a time reference of 0-6 or 0-13 years ration[7]. This approach uses 11 questions and more respondents. Surveyed participants provide information about their sisters – the number who reach adulthood, the number that have died, the age at death, the year in which the death occurred, and whether the death was during pregnancy, childbirth or shortly afterwards. Maternal mortality estimates from the sisterhood method have been useful in situations in which there is no other reliable measurement of the level

of maternal mortality and limited resources hinder other approaches for measuring maternal deaths. But, it has many limitations. Although the direct method does not rely on assumptions about the patterns of fertility, it is less appropriate for settings with low fertility (total fertility rate <3) or a high level of migration; insufficient precision renders it less effective in comparing geographic areas (*i.e*. comparing sub-national estimates), studying trends, evaluating programme impact or allocating resources. Its use for measuring and monitoring the progress of intervention programmes aimed at reducing maternal mortality is particularly constrained owing to the fact that it cannot provide current estimates.

Some of these limitations can be overcome with the motherhood method. It is a direct technique for deriving local population-based estimates of maternal mortality, which can also be used as multi-stage cluster-sample estimates for larger populations. The method involves estimating the same information within a geographic area as would be collected in a census, but without visiting every household. It is a targeted census of births and deaths within a defined study period.

It is an evolutionary variant of the Participatory Community Survey method, which was developed to measure neonatal tetanus and the perinatal mortality rate in rural Nepal[8,9]. It shares features with the Boerma and Mati's "networking" approach[10] of eliciting maternal deaths and MIMF (Maternal death from Informants and Maternal death Follow-on review)[11], which relies on interviews with individual mothers. It differs, however, in eliciting deaths through group discussion of listed mothers and community health care providers. It derives information about the numerator and denominator of the measure of interest directly from groups of women within the study area who share motherhood status by virtue of having given birth. To implement the method, the local health volunteers assist in facilitating group discussions related to maternal and child health. Information on total births and maternal death during pregnancy, childbirth or puerperium is elicited through immunization registries, group discussions (FGD), peer memory, memory aids and interview-based diagnosis (verbal autopsy). In this study we field tested this method to measure maternal and child mortality in a district in Nepal.

Material & Methods

After pretesting the method in a small, relatively well-off community of about 8000 population[12] which gave an estimate of MMR 140/100000, the method was tested in a larger sample of 15161 births in the Bara district of Nepal, where a child survival programme impact study was being conducted[13]. The sample size was expected to provide estimate of MMR within 30 per cent of margin of error. This study employed the pregnant women group (PWG) approach as a means to improve the maternal and child health status of the community[14]. The aim of the PWG approach is to empower the group in such a way that members are able to demand quality basic health services from governmental and non-governmental health care providers. The volunteers and participating women make all the decisions required to form and operate the group. The PWG comprised 7-15 pregnant women living in the same village or wards. They met once a month to discuss issues related to mother and child health. The female community health volunteers (FCHVs) facilitated these meetings.

Bara district is located in central terai plain of Nepal adjoining border with India. It has 98 village development committees and one municipality with one district hospital, three primary health care centers, 11 health posts and 84 sub-health posts. The total population projected for 2005 (based on 2001 census) was approximately 615,933. Of these, 130,578 were women of reproductive age (15-49 yr) and 98,241 were infants and children under five. It is a low human development index (HDI) district and has poor health indicators. The literacy gap between females and males was substantial, 14 and 42 per cent respectively. Muslims are second largest ethnic group in Bara[15].

For the implementation of project, the district was divided into seven sectors. From each sector, seven Village Development Committees (VDCs), the administrative units having on an average six thousand population, were randomly selected making a total of 49 VDCs (50% of all VDCs in the Bara district, a total of 441 wards). Information regarding births, maternal death, infant death and PWG status over a study period of 2 yr from 17 July 2003 to 16 July 2005, was collected retrospectively from these VDCs in a survey period of approximately 12 wk. The data were checked every day for omissions and errors and corrected in the field by revisits when necessary. In this study, a sub-sample of 49 wards was randomly selected, one from each VDC, to conduct a census to validate the information obtained from the motherhood method.

Two days training was provided to supervisors and enumerators, and pre-testing and practice was done outside the study location to enable them to elicit required information from BCG and TT vaccination registries and from the group discussion. The study team prepared a list of mothers who had given birth in the study period by collecting information from local BCG and TT vaccination registries. BCG vaccination is given in the first week of birth to immunize against tuberculosis. In rural areas the vaccination may be delayed by a month or more, so some babies who die early in the neonatal period may not be listed in the registry. Because hospitals may vaccinate babies with BCG without recording the information in the local BCG registry, and because some deliveries take place at the homes of relatives, local BCG registries may have incomplete information about local births. These limitations of BCG registries were partially compensated for by augmenting the list from TT vaccination registries. Mothers who had taken even a single dose of TT in pregnancy were included in the list because the objective was to identify the pregnancy status of the study subjects. To capture most of the births that would fall within the study period, TT vaccination information was collected from 17 April 2003 through 16 July 2005, three months before the study period. Mothers who received in these three months their first dose of TT while they were in the last trimester of pregnancy were likely to complete their pregnancy at the beginning of the study period, whereas those receiving vaccine during the first or second trimester were likely to complete their pregnancy later during the study period.

The augmented list was given to the female community health volunteers to pass on to the mothers. The study objectives were explained to each mother, and those who gave consent to participate were asked to assemble at a fixed time and place for the group discussion. The typical group comprised 10-15 mothers and the local health workers. The focus group discussion with the mothers and local health workers emphasized the pregnancy outcomes of these mothers and checked whether they were within the study period. Deliveries outside the study period were excluded from the list of counted pregnancies.

At the group discussion, the mothers on the list were asked the date of birth of their baby or babies. Most could recall the exact birth date, although some could remember only month and year. The listed information was considered correct if mother's information corroborated it. The group discussion also elicited information about maternal deaths, infant deaths, stillbirths and abortions. Some mothers had better recall about these events than others. Any conflict in group's opinion was resolved by interviewing the woman in question or another household member. Those who could not come to the group discussion were visited in their own household. For mothers who had died within the study period, a close relative (mother, mother-in law, or husband) was interviewed to ascertain whether the death was a maternal death.

The results were validated by conducting a census of remaining households not included in the list of study births. The census data were used to estimate the sensitivity and specificity of the

method for ascertaining births and deaths. Overall it took 6 wk to collect data from 49 VDCs, including FGD and census in 49 wards. There were seven groups, each with four data collectors with 3 enumerators and one supervisor. On an average one group took five days to cover one VDC.

The total cost of the evaluation was $ 10,896. The allowance for FCHV was $ 905 (Rs 2.05 x 49vdc x 9 wards x 1 day). It was found that doing a census was 10 times more costly than collecting data from motherhood method, (per unit cost $ 50.5 and $ 4.4).

Results

Of the 15,161 births (14,916 live births, 245 still births), there were 97 twin births, one triplet birth and 128 births from mothers who had given birth previously during the study period. Seven hundred thirteen babies died in infancy, of whom 493 (69%) died in the neonatal period and 434 (61%) in the early neonatal period. The number of maternal deaths was 49. Table I presents the distribution of births and deaths in all the 441 wards of the sampled 49 VDCs, the validation data of the census and motherhood method in 49 wards and the findings in the remaining 392 wards. In the 49 wards, the Census recorded 1,995 live births, 25 stillbirths, 93 infant deaths, 77 perinatal deaths and 6 maternal deaths. The motherhood method elicited 1,990 live births, 25 stillbirths, 93 infant deaths, 77 perinatal deaths and 6 maternal deaths in the same wards. The only discrepancy was five live births recorded from the census that were missed by the motherhood method. Among the 392 remaining wards, there were 12,921 live births, 220 still births, 620 infant deaths and 43 maternal deaths during the same period.

Mortality rates were computed for mothers who were and were not part of the PWG, with 95 per cent confidence intervals (Table II). Overall, the maternal mortality ratio (MMR) was 329/100000 live births (LB), the infant mortality rate (IMR) was 48/1000 LB, the neonatal mortality rate (NMR) was 33/1000 LB, and the early neonatal mortality rate was 29/1000 LB. The perinatal mortality rate (PMR) and stillbirth rate (SBR) were calculated with total births in the denominator and were 45/1000 TB and 16/1000 TB respectively.

The results compared well with national data. A comparison with the census results in 49 wards showed 100 per cent agreement with MM in detecting maternal and child deaths. There was about a 0.25 per cent under-reporting of births. The maternal, infant, neonatal and perinatal indicators in PWG women were lower than the non-PWG women and the national statistics.

Discussion

Field-testing of the motherhood method in a district with a population of about 600,000 demonstrated that maternal mortality can be directly measured if the BCG and TT vaccination registers are in place and local health workers or volunteers and the mothers themselves in the wards are properly mobilized and supervised for data collection. The possibility of missing maternal deaths in early pregnancy and those related to abortion being reported as non maternal deaths cannot be ruled out, but such under-reporting can be reduced by collecting the information about all female deaths and then using a careful verbal autopsy in the group settings. Proper motivation of community key informants, health volunteers, and mobilizers is crucial for the accuracy of data.

The findings show that the motherhood method can be applied in a time and cost-efficient manner to measure and monitor the progress in the reduction of maternal and child deaths. It approximated census-based measurement while at the same time remaining relatively immune to the problem of omission and misclassification of numerator and denominators in census studies. It can give current estimates of maternal mortality as well as averages over the past few years. It appears to be particularly well-suited in measuring and monitoring programmes in sub-national regions and districts.

The mix of 'outsider' field assistants and 'insider' local health volunteers used appears to have been able to keep information errors down, thus improving accuracy of information and increasing time efficiency of interview. It appeared that the group discussion effectively counteracted the disinclination of mothers to talk about the death of their child, and enhanced collective memory for recalling details related to maternal and child mortality. Where confidentiality was indicated, interviews were conducted with mothers or family members in absence of local health workers.

The motherhood method also appears to be robust regarding problems induced by migration. The group discussion could elicit which mothers migrated to the village to live or came to their mother's home for delivery.

The method has its limitations. It requires proper training of field assistants to moderate the group discussion among mothers and health volunteers. Motivation of key community informants and health volunteers is crucial to the accuracy of data, and mothers need to be aware of the need for accuracy. Although the method is efficient, the effort in collecting data depends on the duration of the study period, the longer the study period, the greater the potential for inaccurate recall. It is likely that some maternal deaths related to 'hidden pregnancy', particularly among teens be missed. Reporting of maternal deaths in early pregnancy and those related to abortion as non-maternal deaths may occur. Collecting information about all female deaths and the careful application of verbal autopsies in the group setting may reduce such misclassification. The method would need further adaptation to measure births and deaths in urban areas.

The International Conference on Population and Development +5 program of Action (1999) "calls upon United Nations and donors to support developing countries in undertaking census and surveys and to develop innovative and cost effective solution for improving estimates of maternal mortality"[16]. For economically poor countries, measuring maternal mortality has been viewed as "notoriously difficult and complex" and characterized as nearly hopeless by agencies such as the WHO, who maintained that "the problem of measuring maternal mortality is most acute precisely where it is least likely to be accurately measured[17]". Our experience in Nepal needs more refinement, and validation at the national level. The present results provide the ground to take initiatives for development and validation of similar methods, and ultimately for the development of a commonly agreed upon methodology in other developing countries, especially in South Asia.

Acknowledgment

Authors are grateful to Plan Nepal for granting permission to use motherhood method to assess the impact of Pregnant Women Group Approach in the Child Survival Project in Bara district, Nepal.

References

1. Hogan MC, Foreman KJ, Naghavi M, Ahn SY, Mengru W, Makela SM, *et al*. Maternal mortality for 181 countries, 1980-2008: a systematic analysis of progress towards Millennium Development Goal 5. *Lancet* 2010; *375* : 1609-23.

2. Government of Nepal and United Nations Country Team. *Progress Report 2002 Millennium Development Goals, Nepal*; 2002. Available from: *www.searo.who.int/LinkFiles?MDG_Report_nep.pdf*, accessed on January 3, 2009.

3. Graham WJ, Ahmed S, Stanton C, Abou-Zahr CL, Campbell OMR. Measuring maternal mortality: An overview of opportunities and options for developing countries. *BMC Med* 2008; *6* : 12.

4. Graham W, Brass W, Snow RW. Estimating Maternal Mortality: The Sisterhood Method. *Stud Fam Plann* 1989; *20* : 125-33.

5. WHO (2007). Maternal Mortality in 2005: Estimates developed by WHO, UNICEF, UNFPA, and the World Bank. Available from: *http://www.unfpa.org/upload/lib_pub_file/717_filename_mm2005.pdf*, accessed on May 5, 2009.

6. House of Commons International Development committee (HCIDC) *Maternal health.* Fifth Report of Session 2007-08, vol. 1, London: HCIDC; 2008.

7. WHO/UNICEF. *The sisterhood method for estimating maternal mortality: guidance notes for potential users*. Geneva : WHO/UNICEF; 1997. p. 9.

8. Maskey M, Des Chene M. A method for detecting unreported neonatal tetanus cases in the developing countries (Abstract). *Am J Epidemiol* 2000; *15* : S69.

9. Maskey M. *Preventable risk factors of perinatal mortality in Nepal*, D.Sc. thesis, Boston University, Boston, USA; 2001.

10. Boerma, JT, Mati JKG. Identifying maternal mortality through networking: Results from coastal Kenya. *Stud Fam Plann* 1989; *20* : 246-53.

11. Fikree F, Worley H, Sines E. Delivering Safer Motherhood, Sharing the Evidence, IMPAACT Policy briefs, Population Reference Bureau, Washington, USA, 2007. Available from: *www.prb.org.*, accessed on June 8, 2009.

12. Shah R. *Utilization of skilled attendant at delivery by women in Divyanagar village development committee of Chitwan district*, MPHthesis, Tribhuvan University Institute of Medicine, Kathamandu, Nepal; 2005.

13. Plan Nepal. *Report on impact assessment of pregnant women group approach.* Kathmandu: Nepal, Plan Nepal; 2006.

14. Baral, KP. *Concept and approach of pregnant women's group: An approach to increase coverage of maternal health services in rural Nepal*, Kathmandu: Nepal. 2006.

15. *Statistical book of Bara district, Kathmandu Nepal*. Kathmandu, Nepal: Government of Nepal. 2005.

16. Stanton C, Hobcraft J, Hill K, Kodjogbé N, Mapeta WT, MuF. Every death counts: Measurement of maternal mortality via a census. *Bull World Health Organ* 2001; *79* : 657-64.

17. WHO. *Reduction of maternal mortality: a joint WHO/UNFPA/UNICEF/World Bank statement*, Geneva: World Health Organization; 1999.

18. MOHP/New Era/ USAID, *Nepal demographic and health survey 2006*, Kathamandu, Nepal; 2007.

19. Ellis M, Manandhar DS, Manandhar N, Wyatt J, Bolam AJ, Costello AM. Stillbirths and neonatal encephalopathy in Kathmandu, Nepal: an estimate of the contribution of birth asphyxia to perinatal mortality in a low-income urban population. *Paediatr Perinat Epidemiol* 2000; *14* : 39-52.

Pregnant Women's Groups and Their Impact on Newborn Mortality Rates in Bara District, Nepal

Background

Nepal's under-five, infant and neonatal mortality rates are 61, 48 and 33 per 1,000 live births, respectively[1]. Over 80% of women in Bara District in the central Terai region, deliver at home without a skilled birth attendant. In 2001, Plan Nepal began implementing the USAID-funded Child Survival Project in partnership with the Nepal Ministry of Health and Population (MoHP) and non-governmental organisations (NGOs) to reduce the maternal and under-five child mortality rates in all 98 villages int hat district. The impact study described here was conducted in June 2006.

The project had four components:

5. Promoting behaviour change communications: At meetings of over 430 pregnant women's groups (PWGs), mothers of children under the age of five learned to practice healthy behaviors and seek medical care from trained providers.
6. Increasing access to services: Target communities and families had greater access to health education, good-quality care and essential medicines.
7. Improving quality of care by service providers. The MoHP and female community health volunteers (FCHVs) practiced appropriate integrated management of sick children and delivered good-quality family planning and maternal and newborn preventive care.
8. Strengthening institutions.

Intervention

The objective of this study of the first component was to examine the relationship between membership in a PWG and mortality rates in the perinatal (from 28 weeks of gestation to 7 days), neonatal (0-28 days), and infant (0 days to one year) period. PWGs are facilitated by a cadre of respected and trained FCHVs who are officially recognised by the MoHP.

Interested pregnant women joined the PWG nearest to their home and met monthly to learn about maternal and newborn care and to recognise danger signs in neonates as well as during pregnancy and delivery and the post-partum period. Mothers who joined a PWG received iron/ folic acid tablets and two tetanus toxoid injections, and developed a delivery plan (outlining transportation, money, and three possible blood donors) that encouraged antenatal visits and delivery in a health clinic with a skilled birth attendant. Some PWGs established a transportation fund from which members could borrow in emergencies.

Methodology

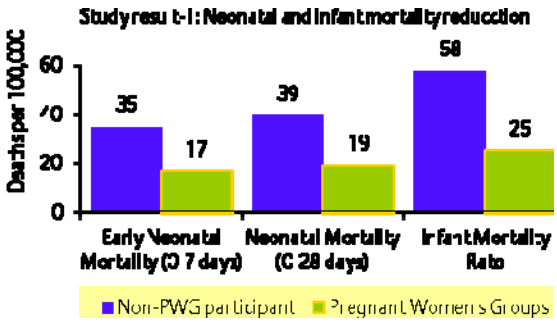
The design was a cross-sectional comparative study and the data were collected by the "motherhood method," a variant of the participatory community survey (Maskey and DesChene, 2005). The study population consisted of 110,000 women of reproductive age and 80,000 children under the age of five. Data was collected for two years, from July 2003 to July 2005. The 2001 Nepal Demographic and Health Survey (NDHS) report was used as a baseline for mortality data (see the table below).

National Mortality Rates (number of deaths per 1000 live births)		
Rate	2001 HDHS	2006 NDHS
Infant	61	48
Neonatal	39	33
Maternity (per 100,000 live births)	539	281

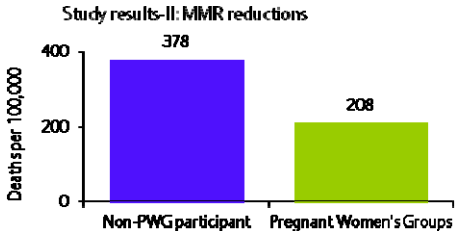
Results

In comparison with non-members, members of PWGs saw a 50–60%, statistically significant reduction in maternal, infant, neonatal, and early neonatal (0 to 7 days) mortality rates over the five-year period from 2001 to 2006. PWG members who are linked via a referral network to health facilities have better health outcomes than non-members (see the graphs and table below).

[1] Nepal Demographic and Health Survey 2006


Study result: Neonatal and infant mortality reduction
Deaths per 100,000
60
40
20
0
35
17
39
19
58
25
Early Neonatal Mortality (0-7 days)
Neonatal Mortality (0-28 days)
Infant Mortality Rate
Non-PWG participant
Pregnant Women's Groups

Mortality indices of PWG members and non-members in Bara District compared with national estimates (number of deaths per 1000 live births)				
Mortality rate	**PWG**	**Non-PWG**	**Total (95% Confidence Interval)**	**National average**
Maternal (per 100,000 live births)	9/4334=208	40/10,582=378	329 (243- 434)	281*
Infant	108/4334=25	605/10,582=57	48 (44 - 51)	48*
Neonatal	81/4334=19	412/10,582=39	33 (30 – 36)	33*
Early neonatal	72/4334=17	362/10,582=34	29 (26 - 32)	
Perinatal	113/4375=26	566/10,786=52	45 (42 - 48)	45*
Still birth	41/4375=9.4	204/10,786=19	16 (14 -18)	8.5**
**Nepal Demographic and Health Survey 2006; **Estimate of Kathmandu population*				



Conclusion

The simultaneous empowerment of PWG members and upgrading of health facilities through monthly data analysis and planning meetings at the local level was very successful in reducing infant and neonatal mortality rates. The success induced the government to design the Community-Based Newborn Care Programme for nationwide implementation and USAID to award Plan a follow-up project to expand the approach in the districts of Sunsari and Parsa in the eastern and central Terai regions respectively. Plan formed a total of 383 PWGs, each with about eight members, in those two districts (see Table 1).

Recommendations

- Disseminate key child survival messages directly to PWGs every month
- Teach PWG members behavioral mapping so that they can monitor their own utilisation of health services
- Replicate the PWG approach in similar areas with high rates of home deliveries

Lessons learned: Success factors

3) It is important to hold regular monthly review meetings at sub-district and district health facilities in order to keep staff motivated and to update health status records and;
4) Educating a narrow target groups (PWGs) and teaching them to use behavioural mapping to monitor themselves is effective.

Challenges

Replicating the PWG approach in widely dispersed communities with small populations will be difficult.

Outcomes

4) The positive results in Bara district convinced the MoHP to develop and launch the Community-Based Newborn Care Programme
5) The MoHP and Plan Nepal are currently working to reduce neonatal mortality in Parsa and Sunsari districts with the support from USAID and Plan USA through the Local Innovation for Better Outcomes of Neonates (LIBON) Project (2007 -2011).
6) Plan is currently working with Save the Children, Care Nepal, UNICEF, NFHP and other international non-governmental organisations to promote the community-level distribution of chlorhexidine to reduce neonatal sepsis.

Publications and acknowledgements

Versions of this article have been presented on the American Public Health Association (2011), Global Health Conference (2009). Nepal Public Health Association Journal (2010) and Perinatal Society of Nepal (2010) and published on the Indian Council of Medical Research (2011). In 2011 Plan International HQ listed the PWG approach the status of "success stories" and will be shared globally in February 2012. LIBON project site FCHV is selected as a "Health Hero" on web page http://healthheroes.eu/en/hero_chandrawati_ram.php

Table 1: PWG formation in Sunsari and Parsa districts

District	No. of PWGs	No. of members	Literacy		Ethnic group				Differently abled
			Yes	No	Dalit	*Janajati*	Muslim	Others	
Sunsari	260	2,055	942	1,113	488	615	0	952	0
Parsa	123	857	93	764	233	492	55	77	2
Total no.	**383**	**2,912**	**1,035**	**1,877**	**721**	**1,107**	**55**	**1,029**	**2**
Total %			36%	64%	25%	38%	2%	35%	0.01%

Note: Follow-up in Bara District has been done with 84% (362 of 430) PWGs and is continuing.

Findings of the final evaluation of Plan Nepal's LIBON Project in Bara, Parsa and Sunsari districts

Background

In 2007 Nepal's under-five, infant and neonatal mortality rates were 61, 48 and 33 per 1000 live births, respectively,[2] a considerable improvement over the comparable rates of 91, 64, and 39 found in the 2001 Nepal Demographic and Health Survey. The least decrease, just 15%, was in the neonatal rate, which currently accounts for two-thirds of the infant mortality rate.

The LIBON Project

To tackle the high neonatal rate, the Ministry of Health and Population (MoHP), in coordination with other collaborating organisations, has been implementing the Local Innovation for Better Outcomes for Neonates (LIBON) Project in Parsa and Sunsari districts since 30 September, 2007. This project is funded under a USAID Child Survival and Health Grant allocated to improve child and maternal health through the implementation the Community-Based Integrated Newborn Care Programme. It will draw to a close on 29 September, 2011.

Before LIBON, Plan had already implemented two other USAID-Child, Survival Projects: round CSXII (1997-2001), which covered 50 villages in Rautahat and Bara districts and round CSXVII (2001-2006).

Beneficiaries

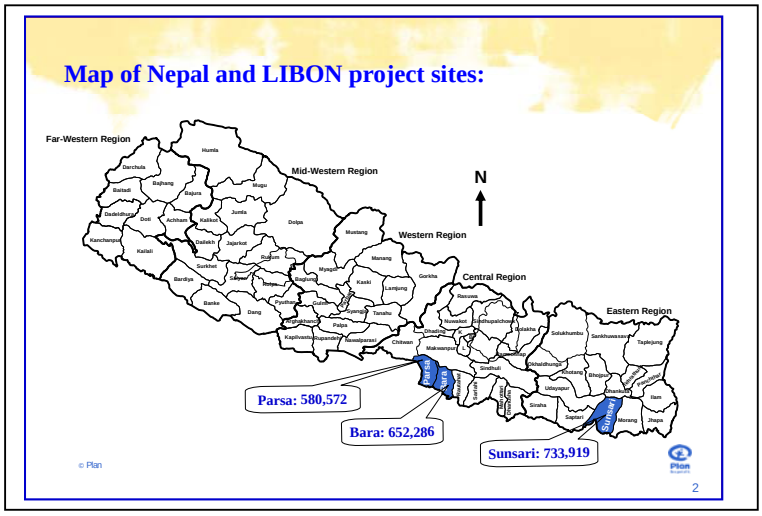
The project covers a total of population of 1.97 million, or 7.34% of the country's population. About 51% (1,003,056) are male and 49% (963,721) are female. There are 52,214 infants aged 0-11 months; 54,519 children aged 12–23 months; 161,609 children aged 24-59 months and 374,819 women of reproductive age. The LIBON project will target all these age groups, reaching a total beneficiary population of 643,161.

Goals and Results

The goal of the LIBON project is to assist the MoHP in reducing neonatal mortality rates and improving the health status of women of reproductive age in the two target districts.

This goal will be realised by achieving the following results:

Result 1: Increased access to neonatal health services in Sunsari and Parsa
Result 2: Increased demand for neonatal health services in Sunsari and Parsa
Result 3: Increased quality of neonatal health Services in Sunsari and Parsa
Result 4: Strengthened support for neonatal mortality reduction in Nepal



[2] ORC Macro. 2007. *Nepal Demographic and Health Survey 2006*. Calverton, MD: ORC Macro.

Strategy

The following strategies inform the project's design:

- Community-based service delivery
- Community mobilisation through PWGs
- Health systems strengthening
- Stakeholder sharing and collaboration
- Social inclusion

Methodology

In close collaboration with government health and line agencies, local partners and Plan Nepal, a final evaluation of the current health status of newborns, pregnant women, and mothers was carried out by an external consultant in May, June, and July 2011 in Sunsari, Bara and Parsa districts respectively. Using LQAS, the survey set out to fulfill three main objectives: 1) to obtain information about the level of knowledge of newborn health among pregnant women, mothers of newborns, and mothers of children under two years of age; 2) to identify existing household-level health care practices which affect newborn health; and 3) to assess coverage of health services affecting maternal and newborn health. Under the LIBON project, Plan Nepal provided technical support and transferred skills in LQAS to the health personnel of the district public health office (DPHO), to the *Ilaka*[3]-in-charge, and to its own staff and those of its partners.

The questionnaire was developed using the guidelines of the *Knowledge, Practice and Coverage (KPC) Survey 2000+ Field Guide* and in consultation with partners and stakeholders so that it would meet the specific objectives and context of the project. Different versions were developed for mothers of children aged 0-5 months and mothers of children aged 0-23 months to assess ante-natal visits, initiation of breastfeeding, and knowledge and practices related to newborn health such as recognition of newborn danger signs and use of chlorhexidine on the umbilicus. Other versions were developed for three other populations: mothers of children aged 0-11 months, mothers of children aged 12-23 months and women of reproductive age (15-49 years). Mothers of children 0-23 months were asked about feeding practices, immunisation coverage and practices related to childhood illnesses, including ARI, diarrhea and malaria. Women of reproductive age were asked about their knowledge of HIV/AIDS, child spacing and family planning.

The training covered LQAS methodology and its application. Since the majority of participants had taken basic LQAS and developed questionnaires for CSXII (1997-2001),

they were able to actively develop and pre-test the LIBON questionnaire, translate it from English to Nepali, sample respondents, and collect and analyse data.

[3] An *ilaka* is an administrative area smaller than a district and larger than a village development committee.

Sampling Frame:

To facilitate sampling for the survey, Sunsari District was divided into 15 supervision areas (SAs) (the 12 *Ilakas* of Sunsari DHO and the three district municipalities), Parsa into 13 SAs

(the 12 *Ilakas* of Parsa DPHO and the sole district municipality, and Bara into seven SAs based on CSXVII (2001-2006).

A sample size of 19 households per SA was selected as any smaller sample would have yielded unacceptably high α and β errors (greater than 10%) and any larger sample would have created more work but not necessarily reduced the margin of error. The samples form each SA in each district were then aggregated in order to obtain a large enough sample size to estimate the proportion of coverage in each population sub-group. Thus, Sunsari, with 19 households in each of 15 SAs, had a total sample size of 285; Parsa of 247 (19 x 13) and Bara of 133 (19 x 7).

Findings of LQAS survey of mothers with children aged 0-5 months

Antenatal care visits

In Sunsari District, the percentage of mothers who made four antenatal care visits and were checked by health workers up to the auxiliary nurse-midwife increased by 43.9%, from 29.1% to 74.0[4]%. In Parsa District, the corresponding increase was 37.6%, from 24.7% to 62.3%. The percent of mothers who were counseled on at least one aspect of antenatal cares during an antenatal care visit increased 22.1% and 29.2% in Sunsari and Parsa districts respectively (from 71.6% to 93.7% in the former and from 69.2% to 98.4% in the latter district).

Tetanus toxoid

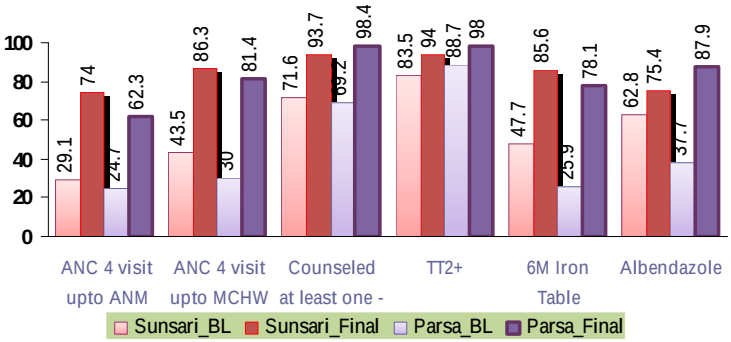
The percentages of mothers who had received a second dose of tetanus toxoid vaccine increased by 11.5% (from 83.5% to 94%) in Sunsari and by 9.3% (from 88.7% to 98.0 %.) in Parsa District.

Micronutrients

The percentage of mothers who had consumed six months of iron-folate tablets or capsules during pregnancy increased by around 38% (47.7% to 85.6%) in Sunsari and around 52% (25.9% to 78.1%) in Parsa..

De-worming

The percentages of mothers receiving a single 400-mg tablet of albendazole in the fourth month of their last pregnancy were increased by 12.6% (62.8% to 75.4%) in Sunsari and by around 50% (37.7% to 87.9%) in Parsa.



[4] The results of the 2011 survey are compared with the baseline findings of a survey conducted in 2008.

Delivery Care

- The percentage of mothers whose birth was attended by a skilled provider (a doctor, a nurse, a health assistant, an auxiliary health worker, or auxiliary nurse-midwife) increased by around 37% (from 45.3% to 82.5%) in Sunsari and around 22% (from 38.5% to 60.3%) in Parsa.
- The percentage of mothers who knew at least two danger signs during delivery increased by 66.4% (from 27.1% to 93.5%) in Sunsari and around 65% (from 17.2% to 82.1%) in Parsa.
- The percentage of newborns who, immediately after birth, were dried off and exposed to a source of heat (including the mother's own body heat in the case of kangaroo care) and not bathed for 24 hours increased by 51.6% (from 36.8% to 88.4%) in Sunsari and 52.2% (from 29.6% to 81.8%) in Parsa.

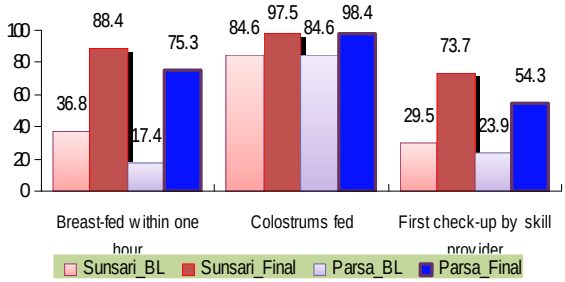
Post-natal care

- The percentage of mothers who know at least two danger signs regarding their own condition after delivery increased by around 66% (from 20.4% to 86.7%) in Sunsari and 69.3% (27.5% to 96.8%) in Parsa.
- The percentage of mothers who know at least two danger signs among newborns increased by 21.9% (from 75.7% to 97.6%) in Sunsari and by 31.6% (from 62.8% to 94.4%) in Parsa.
- The percentage of mothers who received vitamin A capsule single dose (400,000 international units) after delivery increased by around 26% (from 60.4% to 86.3%) in Sunsari and by 34% (from 47.8% to 81.8%) in Parsa.

Progress in Post-Natal Care				
	Sunsari		Parsa	
Indicator	Baseline	Final	Baseline	Final
Knowledge of at least 2 danger signs among post-delivery mothers	20.4%	86.7%	27.5%	96.8%
Knowledge of at least 2 danger signs among newborns	62.8%	94.4%	75.7%	97.6%
Consumption of post-natal vitamin A	60.4%	86.3%	47.8%	81.8%

Newborn care

- The percentage of children who were breastfed within one hour of birth increased



by 51.6% (from 36.8% to 88.4%) in Sunsari and by 57.9% (from 17.4% to 75.3%) in Parsa.

- The percentage of children who were fed colostrums increased by 12.9% (from 84.6% to 97.5%) in Sunsari and by 13.8% (from 84.6% to 98.4%) in Parsa.
- The percentage of mothers who, with their newborn received a check-up by a skilled provider within the first two days increased by around 44% (from 29.5% to 73.7%) in Sunsari and 24.4% (from 23.9% to 54.3%) in Parsa.

Findings of survey of maternal and newborn care among mothers with children aged 0-23 months

The table below compares the baseline data collected in January 2008 (Base) with that collected during the mid-term evaluation (MTE) of January 2010 and that collected in the final evaluation (FE) of May in Sunsari District and July 2011 in Parsa District. All data is given in percentages.

SN	Indicator (in percentage)	Sunsari District			Parsa District		
		Base (Jan 08)	MTE (Jan 10)	FE (Jun 11)	Base (Jan 08)	MTE (Jan 10)	FE (Jun 11)
1	Tetanus toxoid: Mothers with children aged 0-23 months who received two tetanus toxoid vaccinations before the birth of their youngest child	89.8	93.7	90.2	95.1	96.8	95.5
2	Skilled delivery assistance: Children aged 0-23 months whose births attended by skilled personnel	47.4	70.2	83.5	36.4	47	70.0
3	Post-natal visit to check on newborn: Children aged 0-23 months visited by a trained health worker within three days after birth	43.2	66.3	78.6	27.9	35.6	61.5
4	Exclusive breastfeeding: Children aged 0-5 months exclusively breastfed during the last 24 hours	67.7	90.6	74.7	80.7	84.5	89.2
5	Feeding of infants and young children: Children aged 6-23 months fed according to appropriate feeding practices	69.6	77.4	69.2	32.5	75.6	75.6
6	Vitamin A supplementation: Children aged 6-23 months who received a dose of Vitamin A in the last 6 months (card verified or mother's recall)	87.3	91.3	96.3	70.7	67.7	78.9
7	Measles vaccination: Children aged 12-23 months who received measles vaccine (card verified or mother's recall)	85.9	89.0	90.2	77.6	81.1	84.1
7a	Measles vaccination: Children aged 12-23 months who received measles vaccine (card verified)	21.7	40.7	41.5	10.3	19.8	17.5
8	Access to immunisation services: Children aged 12-23 months who received DTP1* (card verified or mother's recall)	94.6	91.2	95.1	87.9	89.6	95.2
8a	Access to immunisation Services: Children aged 12-23 months who received DTP1 (card verified)	31.5	44.0	47.6	18.7	23.6	22.2
9	Health systems performance regarding immunisation services: Children aged 12-23 months who received DTP3* (card verified or mother's recall)	88.0	86.8	92.7	80.4	79.2	84.1
9a	Health systems performance regarding immunisation services: Children aged 12-23 months who received DTP3 (card verified)	30.4	42.9	47.6	15.9	21.7	20.6
10	Treatment of fever in malarial zones: Children aged 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	44.4	40.7	69.4	45.3	56.3	79.3
11	Use of oral rehydration therapy: Children aged 0-23 months with diarrhea in the last two weeks who received oral rehydration therapy and/or recommended home fluids	39.3	63.6	87.5	29.4	53.5	68.0
12	Appropriate care seeking for pneumonia: Children aged 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	46.0	87.0	82.5	36.0	50	31.4
13	Clean drinking water: Households of children aged 0-23 months that treat water effectively	34.7	56.8	21.1	6.1	6.9	19.8
14	Appropriate hand-washing practices: Households of children aged 0-23 months with soap available at hand-washing sites	73.0	77.9	84.6	57.5	57.1	74.9
15	Use of mosquito netting: Children aged 0-23 months who had slept under an insecticide-treated bed net the previous night	0	0	0.0	0	0	0.0
16	Malnutrition: Children aged 0-23 months who are underweight**	13.0	6.3	8.4	10.5	9.5	4.9

*DTP1, DPT3. The first and third dosages respectively of the diphtheria, tetanus, and pertussis vaccine

**Two standard deviation below the median weight for age, according to the reference population of the World Health Organisation and the National Centre for Health Statistics

Progress in the CATCH (rapid core assessment tool for child health) indicators of Bara district

The table below compares the results of three LQAS studies conducted in Bara district, a baseline survey in June 2006, a mid-term evaluation in December 2009, and a final evaluation in June 2011.

SN	Indicator (in percentage)	Base Jun 06	MTE Dec 09	FE Jun 11
	Sentinel measures of children's health and wellbeing			
1	**Underweight children:** Children aged 0-23 months that are underweight	**29**	**13.2**	**6.0**
2	**Birth spacing:** Children aged 0-23 months that were born at least 24 months after the previous surviving child	**69.4**	**62.5**	**64.3**
3	**Delivery assistance:** Children aged 0-23 months whose births were attended by a skilled health worker up to the level of a maternal child health worker	**42.1**	**45.9**	**59.4**
4	**Maternal tetanus toxoid:** Mothers with children aged 0-23 months that received at least **two** tetanus toxoid injections before the birth of their youngest child.	**63.2**	**14.3**	**9.8**
5	**Exclusive breastfeeding:** Children aged 0-5 months that were exclusively breastfed during the last 24 hours	**100.0**	**82.9**	**70.4**
6	**Complementary feeding:** Children aged 6-9 months that received breast milk and complementary foods during the last 24 hours	**95.7**	**91.9**	**90.2**
7	**Full vaccination:** Children aged 12-23 months that are fully vaccinated (against five vaccine-preventable diseases) before their first birthday	**66.9**	**19.5**	**45.1**
8	**Measles:** Children age 12-23 months that received a measles vaccine	**72.2**	**21.1**	**45.1**
9	**Bed nets:** Children aged 0-23 months living in malarial areas that slept under an insecticide-treated net the night before the survey	**1.5**	**97.7**	**3.4**
10	**HIV/AIDS:** Mothers with children aged 0-23 months that cited at least **two** ways of reducing the risk of HIV infection	**51.1**	**29.3**	**48.9**
11	**Hand-washing:** Mothers with children aged 0-23 months that reported that they wash their hands with soap or ash before preparing food or feeding children and after defecating or attending to a child who has defecated	**63.2**	**33.1**	**47.4**
	Management and treatment of illness			
12	**Danger signs:** Mothers of children aged 0-23 months that knew at least **two** signs of childhood illness that indicate the need for treatment	**99.6**	**93.2**	**99.6**
13	**Sick child:** Sick children aged 0-23 months that received increased and continued feeding during an illness in the past two weeks	**94.5**	**75.3**	**98.5**
14	Sick Child: Sick children aged 0-23 months that received increased fluids during an illness in the past two weeks	92.7	44.2	93.8

**Two standard deviations below the median weight for age, according to the reference population of the World Health Organisation and the National Centre for Health Statistics

Child Survival and Health Grants Program Project Summary

Dec-23-2011

PLAN International
(Nepal)

General Project Information

Cooperative Agreement Number:	GHN-A-00-07-00006
PLAN Headquarters Technical Backstop:	Harpreet Anand
PLAN Headquarters Technical Backstop Backup:	
Field Program Manager:	Bhagawan Das Shrestha
Midterm Evaluator:	Rose Schneider
Final Evaluator:	Mahesh Kumar Maskey
Headquarter Financial Contact:	Harpreet Anand
Project Dates:	10/1/2007 - 9/30/2011 (FY2007)
Project Type:	Standard
USAID Mission Contact:	Naramaya Limbu
Project Web Site:	

Field Program Manager

Name:	Bhagawan Das Shrestha (LIBON Project Coordinator)
Address:	Plan Nepal Country Office Lalitpur Nepal
Phone:	+977 1 460 2046; +977-1-5535580 ext 107
Fax:	+977-1-5536431
E-mail:	bhagawan_das.shrestha@plan-international.org
Skype Name:	bhagawanshrestha

Alternate Field Contact

Name:	Sher Bahadur Rana (LIBON Project Coordinator)
Address:	 Lalitpur Nepal
Phone:	+977-1-5535580 ext 125
Fax:	+977-1-5536431
E-mail:	Sherbahadur.Rana@plan-international.org
Skype Name:	sher.rana

Grant Funding Information

USAID Funding: $1,494,337

PVO Match: $543,737

General Project Description

Plan USA, a 2007 Standard category grantee, is implementing the *Local Innovation for Better Outcomes for Neonates Project* (LIBON) in Sunsari, Parsa and Bara Districts, Nepal. The project goal is to sustainably reduce the burden of neonatal mortality through increased access to, demand for, and quality of neonatal health services and strengthened support for neonatal mortality reduction.

Plan will (1) contribute to the development and roll out of the government's Community-based Neonatal Care Package (CB-NCP); (2) facilitate community mobilization and information, education, communication (IEC)/behavior change communication (BCC) efforts; (3) build capacity at the central, district and village levels to make data-driven decisions; and (4) generate and disseminate neonatal health information to stimulate national level policy dialogue on scaling LIBON's innovative interventions.

Project Location

Latitude: 26.82
Longitude: 87.28
Project Location Types: (None Selected)
Levels of Intervention: (None Selected)
Province(s): --
District(s): Bara, Sunsari, and Parsa Districts
Sub-District(s): --

Operations Research Information

OR Project Title: Performance Coverage of Chlorhexidine (CHX) Study
Cost of OR Activities: $68,000
Research Partner(s): --
OR Project Description: Trials have shown great promise for chlorhexidine (CHX) to dramatically reduce neonatal sepsis (up to 24%), even in home deliveries. Clinical efficacy and consumer preference testing have been completed, and final formulation, branding and packaging preparations are due to finish in the year. A population-based trial of how CHX performs in the community (as opposed to a clinical setting) remains. If proven successful in the community (uptake and adherence), it is poised to be endorse as an evidence-based product for both institutional and home births in Nepal and potentially all low-resource settings.

Plan Nepal is conducting a two pronged study in Parsa District to determine chlorhexidine (CHX) uptake by the community at large and to assess the functionality of various delivery channels. Plan Nepal is working closely with USAID's Nepal Family Health Program (NFHP)-II in this endeavor, from design to execution to analysis.

Partners

The Institute of Medicine (IOM) of Tribhuvan University (Subgrantee)	$10,362
Government of Nepal, Ministry of Health and Population (CHD and FHD) (Collaborating Partner)	$0
Community Welfare Center (CWC) (Collaborating Partner)	$0
Integrated Mother and Child Health Organization (IMCHO) (Collaborating Partner)	$0
Resource Center for Sustainable Development (RCSD) (Collaborating Partner)	$0
Ramgun's Youth Club (RYC) (Subgrantee)	$250,693
District Public Health Office (DPHO) - Parsa (Subgrantee)	$67,669

Strategies

Social and Behavioral Change Strategies:	Community Mobilization Group interventions Interpersonal Communication Mass media and small media
Health Services Access Strategies:	Addressing social barriers (i.e. gender, socio-cultural, etc)
Health Systems Strengthening:	Quality Assurance Supportive Supervision
Strategies for Enabling Environment:	Create/Update national guidelines/protocols Stakeholder engagement and policy dialogue (local/state or national)
Tools/Methodologies:	Sustainability Framework (CSSA) LQAS

Capacity Building

Local Partners:	Local Non-Government Organization (NGO) Dist. Health System Health Facility Staff Other National Ministry Health CBOs

Interventions & Components

Immunizations	IMCI Integration	CHW Training HF Training
Nutrition	IMCI Integration	CHW Training HF Training
Vitamin A	IMCI Integration	CHW Training HF Training
Micronutrients		CHW Training HF Training
Pneumonia Case Management	IMCI Integration	CHW Training HF Training
Control of Diarrheal Diseases	IMCI Integration	CHW Training HF Training
Malaria	IMCI Integration	CHW Training HF Training
Maternal & Newborn Care (100%) - Emergency Obstetric Care - Neonatal Tetanus - Recognition of Danger signs - Newborn Care - Post partum Care - Child Spacing - Integation. with Iron & Folic Acid - Birth Plans	IMCI Integration	CHW Training HF Training
Healthy Timing/Spacing of Pregnancy	IMCI Integration	CHW Training HF Training
Breastfeeding	IMCI Integration	CHW Training HF Training
HIV/AIDS		CHW Training HF Training
Family Planning	IMCI Integration	CHW Training HF Training
Tuberculosis	IMCI Integration	CHW Training HF Training

Operational Plan Indicators

Number of People Trained in Maternal/Newborn Health			
Gender	**Year**	**Target**	**Actual**
Female	2010	1734	
Female	2010		2061
Male	2010		425
Male	2010	71	
Female	2011	40	
Female	2011		0
Male	2011		0
Male	2011	40	
Female	2012	0	
Male	2012	0	
Female	2013	0	
Male	2013	0	
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	
Male	2012	0	
Female	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	
Male	2012	0	
Female	2013	0	
Male	2013	0	

Locations & Sub-Areas

Sunsari District	733,919
Parsa District	580,572
Bara District	652,286
Total Population:	1,966,777

Target Beneficiaries

	Sunsari District	Parsa District	Bara District	Total
Children 0-59 months	94,908	81,847	91,587	268,342
Women 15-49 years	139,344	110,422	125,053	374,819
Beneficiaries Total	234,252	192,269	216,640	643,161

Rapid Catch Indicators: DIP Submission

Sample Type: LQAS

Maternal TT Vaccination

Description -- Percentage of mothers with children age 0-23 months who received at least two Tetanus toxoid vaccinations before the birth of their youngest child

Numerator: Enter the number of mothers with children age 0-23 months who received at least two tetanus toxoid vaccinations before the birth of their youngest child

Denominator: Enter the total number of mothers of children age 0-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Sunsari District	222	285	77.9%	4.8
Parsa District	231	247	93.5%	3.1
Bara District	0	0	0.0%	0.0

Skilled Birth Attendant

Description -- Percentage of children age 0-23 months whose births were attended by skilled personnel

Numerator: Enter the number of children age 0-23 months whose birth was attended by a doctor, nurse, midwife, auxiliary midwife, or other personnel with midwifery skills

Denominator: Enter the total number of children age 0-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Sunsari District	140	285	49.1%	5.8
Parsa District	92	247	37.2%	6.0
Bara District	0	0	0.0%	0.0

Post-Natal Visit to Check on Newborn Within the First 3 Days After Birth

Description -- Percentage of children age 0-23 months who received a post-natal visit from an appropriately trained health worker within three days after birth

Numerator: Enter the number of children age 0-23 months who received a post-natal visit within three days after birth by an appropriate health worker

Denominator: Enter the total number of children age 0-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Sunsari District	116	285	40.7%	5.7
Parsa District	64	247	25.9%	5.5
Bara District	0	0	0.0%	0.0

Exclusive Breastfeeding

Description -- Percentage of children age 0-5 months who were exclusively breastfed during the last 24 hours

Numerator: Enter the number of children age 0-5 months who drank breast milk in the previous 24 hours AND did not drink any other liquids in the previous 24 hours AND was not given any other foods or liquids in the previous 24 hours

Denominator: Enter the total number of children age 0-5 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Sunsari District	95	126	75.4%	7.5
Parsa District	75	88	85.2%	7.4
Bara District	48	48	100.0%	0.0

Infant and Young Child Feeding

Description -- Percentage of infants and young children age 6-23 months fed according to a minimum of appropriate feeding practices

Numerator: Enter the number infants and young children age 6-23 months fed according to a minimum of appropriate feeding practices

Denominator: Enter the total number of children age 6-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Sunsari District	110	159	69.2%	7.2
Parsa District	50	159	31.4%	7.2
Bara District	0	0	0.0%	0.0

Vitamin A Supplementation in the Last 6 Months

Description -- 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

Numerator: Enter the number of children age 6-23 months who received a dose of Vitamin A in the last 6 months (mother's recall or card verified)

Denominator: Enter the total number of children age 6-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Sunsari District	138	158	87.3%	5.2
Parsa District	111	157	70.7%	7.1
Bara District	132	133	99.2%	1.5

Measles Vaccination

Description -- Percentage of children age 12-23 months who received a measles vaccination

Numerator: Enter the number of children age 12-23 months who received a measles vaccination by the time of the interview as seen on the card or recalled by the mother
Denominator: Enter the total number of children age 12-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Sunsari District	66	93	71.0%	9.2
Parsa District	58	107	54.2%	9.4
Bara District	96	133	72.2%	7.6

Access to Immunization Services
Description -- 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
Numerator: Enter the number of children age 12-23 months who received a DTP1 at the time of the survey according to the vaccination card/child health booklet or mother's recall
Denominator: Enter the total number of children age 12-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Sunsari District	75	93	80.6%	8.0
Parsa District	87	107	81.3%	7.4
Bara District	95	133	71.4%	7.7

Health System Performance Regarding Immunization Services
Description -- 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
Numerator: Enter the number of children age 12-23 months who received DTP3 at the time of the survey according to the vaccination card/child health booklet or mother's recall
Denominator: Enter the total number of children age 12-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Sunsari District	70	93	75.3%	8.8
Parsa District	75	107	70.1%	8.7
Bara District	92	133	69.2%	7.8

Treatment of Fever in Malarious Zones
Description -- 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
Numerator: Enter the number of children age 0-23 months with a febrile episode in the last two weeks AND whose mother/caretaker sought treatment for the child within 24 hours AND who were treated with an appropriate anti-malarial drug
Denominator: Enter the total number of children age 0-23 months with a febrile episode in the last two weeks

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Sunsari District	4	75	5.3%	5.1
Parsa District	4	52	7.7%	7.2
Bara District	0	0	0.0%	0.0

ORT Use
Description -- 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
Numerator: Enter the number of children age 0-23 months with diarrhea in the last two weeks AND who received oral rehydration solution (ORS) and/or recommended home fluids
Denominator: Enter the total number of children age 0-23 months who had diarrhea in the last two weeks

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Sunsari District	21	58	36.2%	12.4
Parsa District	11	34	32.4%	15.7
Bara District	33	55	60.0%	12.9

Appropriate Care Seeking for Pneumonia
Description -- 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
Numerator: Enter the number 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
Denominator: Enter the total number of children with chest-related cough and fast and /or difficult breathing in the last two weeks

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Sunsari District	54	69	78.3%	9.7
Parsa District	33	88	37.5%	10.1
Bara District	24	30	80.0%	14.3

Point of Use (POU)
Description -- Percentage of households of children age 0-23 months that treat water effectively
Numerator: Enter the number of households of mothers of children 0-23 months that treat water effectively
Denominator: Enter the total number of households of children age 0-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Sunsari District	108	285	37.9%	5.6
Parsa District	17	247	6.9%	3.2
Bara District	0	0	0.0%	0.0

Appropriate Hand Washing Practices

Description -- Percentage of mothers of children age 0-23 months who live in households with soap at the place for hand washing

Numerator: Enter the number of mothers with children age 0-23 months who live in households with soap at the place for hand washing

Denominator: Enter the total number of mothers of children age 0-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Sunsari District	180	285	63.2%	5.6
Parsa District	144	247	58.3%	6.1
Bara District	104	133	78.2%	7.0

Child Sleeps Under an Insecticide-Treated Bednet

Description -- 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

Numerator: Enter the number of children age 0-23 months who slept under an insecticide-treated bednet the previous night

Denominator: Enter the total number of children age 0-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Sunsari District	0	285	0.0%	0.0
Parsa District	0	247	0.0%	0.0
Bara District	4	266	1.5%	1.5

Underweight

Description -- Percentage of children 0-23 months who are underweight (-2 SD for the median weight for age, according to the WHO/NCHS reference population)

Numerator: Enter the number of children 0-23 months with weight/age -2 SD for the median weight for age, according to the WHO/NCHS reference population

Denominator: Enter the total number of children age 0-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Sunsari District	32	285	11.2%	3.7
Parsa District	29	247	11.7%	4.0
Bara District	76	266	28.6%	5.4

Rapid Catch Indicators: Mid-term

Sample Type: LQAS

Maternal TT Vaccination

Description -- Percentage of mothers with children age 0-23 months who received at least two Tetanus toxoid vaccinations before the birth of their youngest child

Numerator: Enter the number of mothers with children age 0-23 months who received at least two tetanus toxoid vaccinations before the birth of their youngest child

Denominator: Enter the total number of mothers of children age 0-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Sunsari District	267	285	93.7%	2.8
Parsa District	239	247	96.8%	2.2
Bara District	19	133	14.3%	5.9

Skilled Birth Attendant

Description -- Percentage of children age 0-23 months whose births were attended by skilled personnel

Numerator: Enter the number of children age 0-23 months whose birth was attended by a doctor, nurse, midwife, auxiliary midwife, or other personnel with midwifery skills

Denominator: Enter the total number of children age 0-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Sunsari District	200	285	70.2%	5.3
Parsa District	116	247	47.0%	6.2
Bara District	61	133	45.9%	8.5

Post-Natal Visit to Check on Newborn Within the First 3 Days After Birth

Description -- Percentage of children age 0-23 months who received a post-natal visit from an appropriately trained health worker within three days after birth

Numerator: Enter the number of children age 0-23 months who received a post-natal visit within three days after birth by an appropriate health worker

Denominator: Enter the total number of children age 0-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Sunsari District	189	285	66.3%	5.5
Parsa District	88	247	35.6%	6.0
Bara District	0	0	0.0%	0.0

Exclusive Breastfeeding

Description -- Percentage of children age 0-5 months who were exclusively breastfed during the last 24 hours

Numerator: Enter the number of children age 0-5 months who drank breast milk in the previous 24 hours AND did not drink any other liquids in the previous 24 hours AND was not given any other foods or liquids in the previous 24 hours

Denominator: Enter the total number of children age 0-5 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Sunsari District	154	170	90.6%	4.4
Parsa District	109	129	84.5%	6.2
Bara District	63	76	82.9%	8.5

Infant and Young Child Feeding

Description -- Percentage of infants and young children age 6-23 months fed according to a minimum of appropriate feeding practices

Numerator: Enter the number infants and young children age 6-23 months fed according to a minimum of appropriate feeding practices

Denominator: Enter the total number of children age 6-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Sunsari District	89	115	77.4%	7.6
Parsa District	96	127	75.6%	7.5
Bara District	34	37	91.9%	8.8

Vitamin A Supplementation in the Last 6 Months

Description -- 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

Numerator: Enter the number of children age 6-23 months who received a dose of Vitamin A in the last 6 months (mother's recall or card verified)

Denominator: Enter the total number of children age 6-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Sunsari District	95	115	82.6%	6.9
Parsa District	86	127	67.7%	8.1
Bara District	121	133	91.0%	4.9

Measles Vaccination

Description -- Percentage of children age 12-23 months who received a measles vaccination

Numerator: Enter the number of children age 12-23 months who received a measles vaccination by the time of the interview as seen on the card or recalled by the mother
Denominator: Enter the total number of children age 12-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Sunsari District	81	91	89.0%	6.4
Parsa District	86	106	81.1%	7.4
Bara District	28	133	21.1%	6.9

Access to Immunization Services
Description -- 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
Numerator: Enter the number of children age 12-23 months who received a DTP1 at the time of the survey according to the vaccination card/child health booklet or mother's recall
Denominator: Enter the total number of children age 12-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Sunsari District	83	91	91.2%	5.8
Parsa District	95	106	89.6%	5.8
Bara District	30	133	22.6%	7.1

Health System Performance Regarding Immunization Services
Description -- 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
Numerator: Enter the number of children age 12-23 months who received DTP3 at the time of the survey according to the vaccination card/child health booklet or mother's recall
Denominator: Enter the total number of children age 12-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Sunsari District	79	91	86.8%	7.0
Parsa District	84	106	79.2%	7.7
Bara District	29	133	21.8%	7.0

Treatment of Fever in Malarious Zones
Description -- 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
Numerator: Enter the number of children age 0-23 months with a febrile episode in the last two weeks AND whose mother/caretaker sought treatment for the child within 24 hours AND who were treated with an appropriate anti-malarial drug
Denominator: Enter the total number of children age 0-23 months with a febrile episode in the last two weeks

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Sunsari District	22	54	40.7%	13.1
Parsa District	27	48	56.3%	14.0
Bara District	0	0	0.0%	0.0

ORT Use
Description -- 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
Numerator: Enter the number of children age 0-23 months with diarrhea in the last two weeks AND who received oral rehydration solution (ORS) and/or recommended home fluids
Denominator: Enter the total number of children age 0-23 months who had diarrhea in the last two weeks

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Sunsari District	21	33	63.6%	16.4
Parsa District	23	43	53.5%	14.9
Bara District	18	77	23.4%	9.5

Appropriate Care Seeking for Pneumonia
Description -- 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
Numerator: Enter the number 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
Denominator: Enter the total number of children with chest-related cough and fast and /or difficult breathing in the last two weeks

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Sunsari District	47	54	87.0%	9.0
Parsa District	40	80	50.0%	11.0
Bara District	60	99	60.6%	9.6

Point of Use (POU)
Description -- Percentage of households of children age 0-23 months that treat water effectively
Numerator: Enter the number of households of mothers of children 0-23 months that treat water effectively
Denominator: Enter the total number of households of children age 0-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Sunsari District	162	285	56.8%	5.8
Parsa District	17	247	6.9%	3.2
Bara District	0	0	0.0%	0.0

Appropriate Hand Washing Practices

Description -- Percentage of mothers of children age 0-23 months who live in households with soap at the place for hand washing

Numerator: Enter the number of mothers with children age 0-23 months who live in households with soap at the place for hand washing

Denominator: Enter the total number of mothers of children age 0-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Sunsari District	222	285	77.9%	4.8
Parsa District	141	247	57.1%	6.2
Bara District	41	133	30.8%	7.8

Child Sleeps Under an Insecticide-Treated Bednet

Description -- 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

Numerator: Enter the number of children age 0-23 months who slept under an insecticide-treated bednet the previous night

Denominator: Enter the total number of children age 0-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Sunsari District	0	285	0.0%	0.0
Parsa District	0	247	0.0%	0.0
Bara District	35	266	13.2%	4.1

Underweight

Description -- Percentage of children 0-23 months who are underweight (-2 SD for the median weight for age, according to the WHO/NCHS reference population)

Numerator: Enter the number of children 0-23 months with weight/age -2 SD for the median weight for age, according to the WHO/NCHS reference population

Denominator: Enter the total number of children age 0-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Sunsari District	18	285	6.3%	2.8
Parsa District	23	241	9.5%	3.7
Bara District	35	266	13.2%	4.1

Rapid Catch Indicators: Final Evaluation

Sample Type: LQAS

Maternal TT Vaccination

Description -- Percentage of mothers with children age 0-23 months who received at least two Tetanus toxoid vaccinations before the birth of their youngest child

Numerator: Enter the number of mothers with children age 0-23 months who received at least two tetanus toxoid vaccinations before the birth of their youngest child

Denominator: Enter the total number of mothers of children age 0-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Sunsari District	257	285	90.2%	3.5
Parsa District	236	247	95.5%	2.6
Bara District	13	133	9.8%	5.0

Skilled Birth Attendant

Description -- Percentage of children age 0-23 months whose births were attended by skilled personnel

Numerator: Enter the number of children age 0-23 months whose birth was attended by a doctor, nurse, midwife, auxiliary midwife, or other personnel with midwifery skills

Denominator: Enter the total number of children age 0-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Sunsari District	238	285	83.5%	4.3
Parsa District	173	247	70.0%	5.7
Bara District	79	133	59.4%	8.3

Post-Natal Visit to Check on Newborn Within the First 3 Days After Birth

Description -- Percentage of children age 0-23 months who received a post-natal visit from an appropriately trained health worker within three days after birth

Numerator: Enter the number of children age 0-23 months who received a post-natal visit within three days after birth by an appropriate health worker

Denominator: Enter the total number of children age 0-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Sunsari District	224	285	78.6%	4.8
Parsa District	152	247	61.5%	6.1
Bara District	63	133	47.4%	8.5

Exclusive Breastfeeding

Description -- Percentage of children age 0-5 months who were exclusively breastfed during the last 24 hours

Numerator: Enter the number of children age 0-5 months who drank breast milk in the previous 24 hours AND did not drink any other liquids in the previous 24 hours AND was not given any other foods or liquids in the previous 24 hours

Denominator: Enter the total number of children age 0-5 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Sunsari District	133	178	74.7%	6.4
Parsa District	140	247	56.7%	6.2
Bara District	38	54	70.4%	12.2

Infant and Young Child Feeding

Description -- Percentage of infants and young children age 6-23 months fed according to a minimum of appropriate feeding practices

Numerator: Enter the number infants and young children age 6-23 months fed according to a minimum of appropriate feeding practices

Denominator: Enter the total number of children age 6-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Sunsari District	74	107	69.2%	8.8
Parsa District	68	90	75.6%	8.9
Bara District	55	61	90.2%	7.5

Vitamin A Supplementation in the Last 6 Months

Description -- 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

Numerator: Enter the number of children age 6-23 months who received a dose of Vitamin A in the last 6 months (mother's recall or card verified)

Denominator: Enter the total number of children age 6-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Sunsari District	103	114	90.4%	5.4
Parsa District	71	90	78.9%	8.4
Bara District	131	133	98.5%	2.1

Measles Vaccination

Description -- Percentage of children age 12-23 months who received a measles vaccination

Numerator: Enter the number of children age 12-23 months who received a measles vaccination by the time of the interview as seen on the card or recalled by the mother
Denominator: Enter the total number of children age 12-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Sunsari District	74	82	90.2%	6.4
Parsa District	53	63	84.1%	9.0
Bara District	60	133	45.1%	8.5

Access to Immunization Services
Description -- 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
Numerator: Enter the number of children age 12-23 months who received a DTP1 at the time of the survey according to the vaccination card/child health booklet or mother's recall
Denominator: Enter the total number of children age 12-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Sunsari District	78	82	95.1%	4.7
Parsa District	60	63	95.2%	5.3
Bara District	60	133	45.1%	8.5

Health System Performance Regarding Immunization Services
Description -- 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
Numerator: Enter the number of children age 12-23 months who received DTP3 at the time of the survey according to the vaccination card/child health booklet or mother's recall
Denominator: Enter the total number of children age 12-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Sunsari District	76	82	92.7%	5.6
Parsa District	53	63	84.1%	9.0
Bara District	60	133	45.1%	8.5

Treatment of Fever in Malarious Zones
Description -- 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
Numerator: Enter the number of children age 0-23 months with a febrile episode in the last two weeks AND whose mother/caretaker sought treatment for the child within 24 hours AND who were treated with an appropriate anti-malarial drug
Denominator: Enter the total number of children age 0-23 months with a febrile episode in the last two weeks

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Sunsari District	34	49	69.4%	12.9
Parsa District	23	29	79.3%	14.7
Bara District			%	

ORT Use
Description -- 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
Numerator: Enter the number of children age 0-23 months with diarrhea in the last two weeks AND who received oral rehydration solution (ORS) and/or recommended home fluids
Denominator: Enter the total number of children age 0-23 months who had diarrhea in the last two weeks

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Sunsari District	28	32	87.5%	11.5
Parsa District	17	25	68.0%	18.3
Bara District	32	65	49.2%	12.2

Appropriate Care Seeking for Pneumonia
Description -- 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
Numerator: Enter the number 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
Denominator: Enter the total number of children with chest-related cough and fast and /or difficult breathing in the last two weeks

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Sunsari District	33	40	82.5%	11.8
Parsa District	11	35	31.4%	15.4
Bara District	32	72	44.4%	11.5

Point of Use (POU)
Description -- Percentage of households of children age 0-23 months that treat water effectively
Numerator: Enter the number of households of mothers of children 0-23 months that treat water effectively
Denominator: Enter the total number of households of children age 0-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Sunsari District	60	285	21.1%	4.7
Parsa District	49	247	19.8%	5.0
Bara District			%	

Appropriate Hand Washing Practices

Description -- Percentage of mothers of children age 0-23 months who live in households with soap at the place for hand washing

Numerator: Enter the number of mothers with children age 0-23 months who live in households with soap at the place for hand washing

Denominator: Enter the total number of mothers of children age 0-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Sunsari District	241	285	84.6%	4.2
Parsa District	185	247	74.9%	5.4
Bara District	113	133	85.0%	6.1

Child Sleeps Under an Insecticide-Treated Bednet

Description -- 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

Numerator: Enter the number of children age 0-23 months who slept under an insecticide-treated bednet the previous night

Denominator: Enter the total number of children age 0-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Sunsari District	0	285	0.0%	0.0
Parsa District	0	247	0.0%	0.0
Bara District	9	266	3.4%	2.2

Underweight

Description -- Percentage of children 0-23 months who are underweight (-2 SD for the median weight for age, according to the WHO/NCHS reference population)

Numerator: Enter the number of children 0-23 months with weight/age -2 SD for the median weight for age, according to the WHO/NCHS reference population

Denominator: Enter the total number of children age 0-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Sunsari District	24	285	8.4%	3.2
Parsa District	12	247	4.9%	2.7
Bara District	16	266	6.0%	2.9

Rapid Catch Indicator Comments

2) Percentage of mothers with children age 0-11 months who received at least two Tetanus toxoid vaccinations with card confirm before the birth of their youngest child in BARA district; Numerator is 19 and Denominator 133 and percentage is 14%. 3) Percentage of children age 0-11 months whose births were attended by skilled personnel in BARA district, Numerator is 61 and Denominator 133 and percentage is 46%. 4)Percentage of children age 0-23 months who received a post-natal visit from an appropriately trained health worker within 3 days after the birth of the youngest child has not collected information in BARA district. 6) Percent of infants and young children age 6-9 months fed according to a minimum of appropriate feeding practices in BARA district, Numerator is 34 and Denominator 37 and percentage is 92%. 11) 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 has not collected information in BARA district. 14) Percentage of households of children age 0-23 months that treat water effectively has not collected information in BARA district.

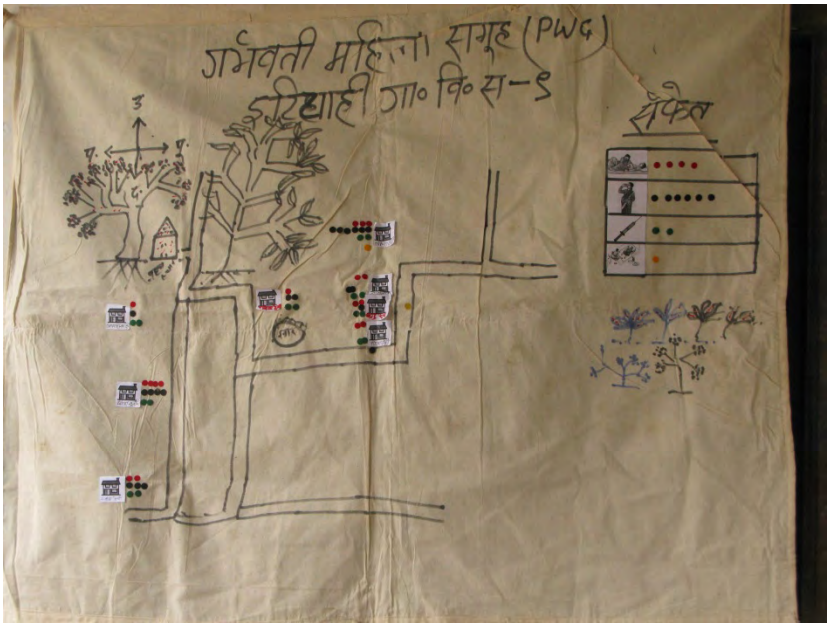
Annex 14: Nepal LIBON – Grantee Plans to Address Final Evaluation Findings

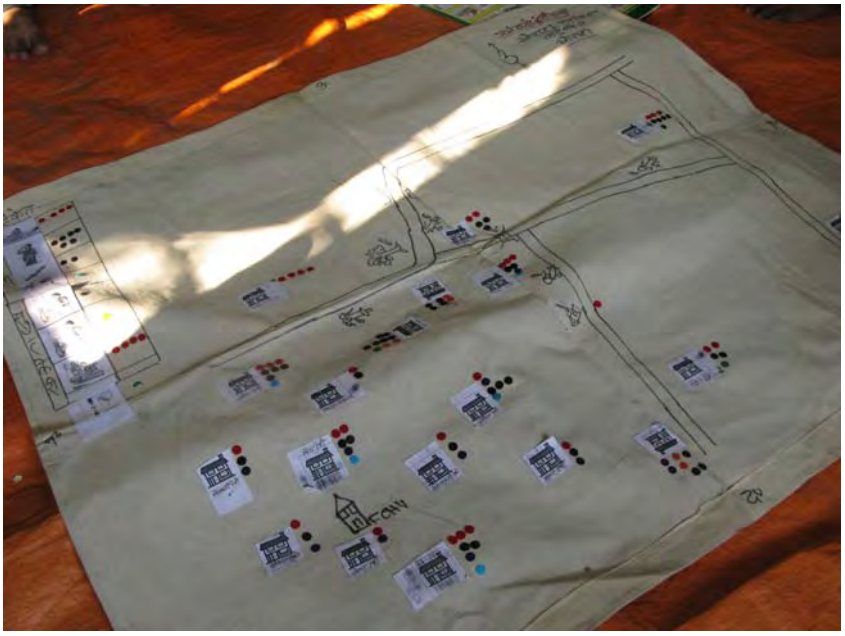
With the closing of the LIBON project, Plan Nepal does not have resources in the immediate future to continue programming; however, the country team is actively seeking further funding to scale up the best practices related to the LIBON project not only in Bara, Parsa and Susari but also in other Program Unit (PU) areas.

Annex 15: Nepal LIBON – Grantee Response to Final Evaluation Findings (optional)

Not Applicable (N/A)

Annex 16: Nepal LIBON Project – Social Mapping Mat





Annex 17: Nepal LIBON Project – "Mother's Card"

The "mother's card" (referred to in Nepal as "Jeewan Suraksha Action Card") has educated mothers about the Birth Preparedness Package (BPP) and danger signs. The card is used by the Government in all (75) districts of Nepal. The card is an A4 size pictorial card that is green in color on one side and red in color on the other side. On the green side are the illustrations of antenatal care, birth preparedness plan, post natal care and neonatal care; the red side has illustrations of danger signs during the pregnancy, at birth, after delivery and for neonates.

Annex 17 Nepal LIBON Project – "Mother's Card"

Annex 17 Nepal LIBON Project – "Mother's Card"

Community Based Newborn Care Program (CB-NCP) End Line Report

Sunsari & Parsa Districts

Local Innovation for Better Outcomes for Neonates Project (LIBON)

Plan Nepal Child Survival Project XXII

Funded by
United States Agency for International Development
Child Survival and Health Grants Program (CSHGP)
Grant No. GHN-A-00-07-00006-00
Bureau for Global Health
Office of Health, Infectious Disease, and Nutrition

Submitted by
Hari Bhakta Khoju
Rural Community Development Society

Submitted to
Plan Nepal

August, 2011

Acknowledgement

We acknowledge and express our gratitude to Plan-Nepal especially to Mr. Donal Keane, Country Director and Mr. Subhakar Baidya, Program Support Manager for offering us to prepare a report to Community Based-Newborn Care Program (CB-NCP) of Sunsari and Parsa Districts, Local Innovation for Better Outcomes for Neonates Project (LIBON), Plan Nepal Child Survival Project XXII.

Mr. Bhagawan Das Shrestha, Project Coordinator-LIBON and Mr. Sher Bahadur Rana, Health Coordinator, Plan Nepal deserves our heartfelt sincere thanks for their constant accomplishment and assistance in field work for data collection, data analysis and report preparation.

We would like to appreciate Mr. Dipak Dahal, Monitoring and Evaluation Officer for his endless commitment, enthusiasm and effort in convincing, building capacity and confidence of health supervisor and officials to conduct the survey for data collection without being bias to subjective judgment and data fabrication.

Mr. Parasuram Shrestha, Chief, Community Based-Integrated Management of Childhood Illness (CB-IMCI), Child Health Division, Ministry of Health and Population (MoHP), Mr. Indra Dev Yadav, District Public Health Office (DPHO) Parsa, Dr. Surendra Prasad Chaudhary, District Health Office (DHO) Bara and Dr. Indra Narayan Das, District Health Office Sunsari are also thankful to us, who provided information and inputs for report preparation.

We extend our heartfelt thanks to field based staff Mr. Deo Ratna Chaudhary, District LIBON Coordinator (DLC) Bara/Parsa, Mr. Diwakar Mishra, Assistant District LIBON Coordinator (ADLC) Bara, Mr. Krishna Bahadur Achhami, ADLC Parsa, Ms. Meena Kumari Singh, Admin and Finance Assistant and Ms. Srijana Rai, Office Assistant, Parsa for supporting the enumerators during data collection field work.

Further, we should appreciate and express heartfelt thanks to Ms. Kalawati Changbang, Health Program Coordinator-Sunsari Program Unit (PU), Mr. Hari Dev Shah, ADLC, Sunsari and Ms. Muiya Rai, Office Assistant, Sunsari for supporting and guiding enumerators during data collection field work.

We should not forget to appreciate and thank to Mr. Ram Khoju Shrestha and Mohan Prasad Adhikari, who dedicated to coding, entering and cleaning data during data processing work of this project.

At last but not least, we are thankful to the survey respondents for their valuable time and patience in cooperating and providing information.

Authors

Hari Bhakta Khoju
Rural Community Development Society

LIST OF ACRONYMS

AHW	Auxiliary Health Worker (HP, Sub-HP)
ANC	Antenatal Care
ANM	Auxiliary Mid-wives
BCC	Behavioral Change Communication
CB-NCP	Community Based – Neonatal Care Package
CDK	Clean Delivery Kit
CHDK	Clean Home Delivery Kit
CS	Child Survival
CSSA	Child Survival Sustainability Assessment
DDC	District Development Committee
DHO	District Health Office
DPHO	District Public Health Office
FCHV	Female Community Health Volunteers
GoN	Government of Nepal
HA	Health Assistants (HP, SHP)
HF	Health Facility
HH	Household
HP	Health Post
IEC	Information Education and Communication
IOM	Institute of Medicine
KPC	Knowledge, Practice and Coverage
LBW	Low Birth Weight
LIBON	Local Innovation for Better Outcomes for Neonates
LQAS	Lot Quality Assurance Sampling
MCHW	Maternal and Child Health Worker (SHP)
MINI	Morang Innovation for Neonatal Intervention
MoHP	Ministry of Health and Population, Government of Nepal
NGO	Non Governmental Organization
NNH	Neonatal Health
NNM	Neonatal Mortality
PHCC	Primary Health Care Center
PNC	Postnatal Care
PWG	Pregnant Women Group
RDW	Recently Delivered Women
RUCODES	Rural Community Development Society
SA	Supervision Area
SBA	Skilled Birth Attendant
SHP	Sub-health Post
SPSS	Statistical Package for the Social Sciences
TBA	Traditional Birth Attendants
TT	Tetanus Toxoid
VDC	Village Development Committee
VHW	Village Health Worker (SHP)

CONTENTS

TABLES

FIGURES

EXECUTIVE SUMMARY

Local Innovation for Better Outcomes for Neonates (LIBON) project aims to reduce neonatal mortality rate and maternal mortality ratio. It is believed that child and maternal mortality is caused due to lack of knowledge, information and skill to take care of pregnant mothers during their pregnancy, at birth, after delivery and the newborn. The objective of this study was to assess the factors associated with antenatal care, birth preparedness, delivery services, post-partum care and newborn care services. A total of 285 recently delivered women (RDW) of Sunsari and 247 RDW of Parsa, who were selected by lot quality assurance sampling were interviewed using structured questionnaire.

The types of antenatal and postnatal care counselling received during the last pregnancy have increased in both districts in the end line survey in July 2011 than in baseline in March 2010. Over all, more than 80% of the RDW reported that they had made some kind of preparations for their delivery in Sunsari and Parsa. The higher percentage of RDW reported making arrangement for money (Sunsari-100%, Parsa-99%) and arrangement of clean cloths (Sunsari-89%, Parsa-85%). There is remarkable increase in arrangement for health delivery kit (CHDK), clean instruments for cord cutting, Health Facility (HF)/Skill Birth Attendant (SBA) identification in end line survey in both districts. RDW experienced having no any danger signs during the delivery with decrease from 29.5% to 14.8% in Sunsari and from 24.3% to 18.2% in Parsa. Among referred RDWs, 75% of Sunsari and 60.73% of Parsa consulted hospital which has increased than baseline. Regarding the level of exposure of RDW to maternal and newborn health information, 82% RDW of Sunsari and 91% of Parsa mentioned that they had heard that a newborn should be breastfed within one hour after birth form FCHV.

In response to the place of keeping the newborn immediately after delivery, majority of newborn (71% in Sunsari and 79% in Parsa) were placed on the mothers' abdomen which is increased than baseline in both districts. Among RDWs with live birth, 95% of both districts reported that their baby cried or breathed immediately after birth. However, about 3% RDW of both the districts reported that their baby did not cry immediately after birth. Regarding taking help to cry or breathe the baby easily for newborn who did not cry, majority were rubbed or massaged which is increased from baseline (Sunsari- from 29.4% to 66.7%, Parsa- from 68.8% to 76.9%).

In the conclusion, all the indicators are increased from baseline survey in March 2010 to end line survey in August 2011 because of full implementation of community based newborn care programme in Sunsari and Parsa under the local innovation for better outcomes of neonates (LIBON) project.

Chapter 1: Introduction

Plan Nepal has been implementing Child Survival XX-III project called "Local Innovation for Better Outcomes for Neonates (LIBON)" in collaboration with the Ministry of Health and Population (MoHP) and Institute of Medicine (IOM), Tribhuvan University in Sunsari and Parsa districts to support to implement Community Based Newborn Care Program (CB-NCP) and supports Bara district to maintain the health service status of 2006 Final Evaluation Results. These districts are located in the Eastern and central parts in the Southern Terai belt, the lowland plain areas, along the border of India, starting from September 2007. It is a four year project to cover up-to 2011 September.

LIBON project is designed to address the complex issues to reduce neo-natal mortality rate which is caused due to lack of knowledge, information and skill to take care of pregnant mothers during their pregnancy, at birth and after delivery and newborn dangers sings.

To address these complex issues, LIBON project proposed following goals, results, strategies, interventions and activities which are in line with MoHP, Government of Nepal (GoN) policies and programs.

The main Goal of the project is "To Sustainably Reduce the Burden of Neonatal Mortality in Nepal"

The goal will be achieved through the implement of the following results:

Result 1: Increased Access to Neonatal Health (NNH) Services in Sunsari and Parsa
Result 2: Increased Demand for NNH Services in Sunsari and Parsa
Result 3: Increased Quality of NNH Services in Sunsari and Parsa
Result 4: Strengthened Support for Neonatal Mortality (NNM) Reduction in Nepal

Strategies:

- Community-based Service Delivery to increase ACCESS to meet Result 1
- Community Mobilization to increase DEMAND to meet Result 2
- Health Systems strengthening to increase QUALITY to meet Result 3
- Stakeholder sharing and Collaboration to increase SUPPORT to meet Result 4
- Social Inclusion to increase EQUITY to meet Result 1

The LIBON project will contribute:

- To the development and roll out of the MoHP's CB-NCP and its seven program components; facilitate and promote community mobilization and information, education, communication (IEC)/behaviour change communication (BCC) efforts including those that proved successful in Plan's previous child survival (CS) projects.
- To build capacity at the central, district and village levels to make data-driven decisions using information collected from knowledge, practice and coverage (KPC) questionnaires through the application of Lot Quality Assurance Sampling (LQAS) methods, and through application of the Child Survival Sustainability Assessment (CSSA), and
- To generate and disseminate NNH information to stimulate national level policy dialogue on nationwide implementation of LIBON's innovative interventions through its partnership with the MoHP and IOM.

Activities:

Reduce neonatal mortality through local organizations such as Pregnant Women's Groups (PWGs), a model transferred from Plan's previous child survival project, partner with Village Development Committees (VDCs) and District Development Committees (DDCs) to support appropriate health service delivery at each level, assist with training and organization at the local level, work with local non-governmental organizations (NGOs) such as the Community Welfare Center and the Integrated

Mother and Child Health Organization, staffs from both of these were involved in the implementation of previous CS projects.

All seven components of community-based neonatal care package along with implementing and integration of Bara CS-XVII Project and Morang Innovation for Neonatal Intervention (MINI) experiences are covered under this Project. Based on the selection criteria, the following seven components were identified for inclusion in the package:

1. Behaviour change communication
2. Promotion of institutional delivery and clean delivery practices in case of home deliveries
3. Postnatal care
4. Community case management of pneumonia/Possible Severe Bacterial Infection
5. Care of low birth weight (LBW) newborns (<2,500 grams)
6. Prevention and management of hypothermia
7. Recognition of asphyxia with initial stimulation and resuscitation of newborn baby

Chapter 2: Methodology

A Lot Quality Assurance Sampling (LQAS) technique was applied to conduct survey in Sunsari and Parsa districts on May and July 2011 respectively.

2.1. Concept and Use

LQAS was developed in the 1920s for quality control of industrial production goods. The basic principle is that a line manager/supervisor takes a small random sample of a recent batch, or lot, of goods from a production unit such as an assembly line. If the number of defective goods in a sample exceeds a pre-determined number, then the lot is rejected; otherwise it is accepted. The pre-determined (allowable) number is called the "decision rule." This allowable number is based on a production standard and the sample size. Recently, the industrial monitoring experience was transferred to monitor the quality of health indicators and to improve supervision of the field area.

2.2. Purpose of LQAS

The LQAS sampling method was used in the LIBON project to collect baseline data on project-relevant health indicators, to determine whether the supervision areas were above or below average coverage on specific indicators, to determine the indicators that were well performing and those that were not within a given supervision area, and to determine how supervision areas within the total project area compared with another area.

2.3. Sample Size

Sample sizes were calculated with the following formula:

> $n = z^2(pq)/d^2$; where n = sample size; z = statistical certainty chosen; p = estimated prevalence/coverage rate/level to be investigated; q = 1-p; and d = precision desired.

The value of p was defined by the coverage rate that requires the largest sample size (p= 0.5). The value of d was dependent on the precision, or margin of error, desired (in this case d=0.1). The statistical certainty was chosen to be 95% (z=1.96). Given the above values, the necessary sample size turns out to:

> n = (1.96x1.96) (0.5x0.5)/(0.1x0.1) = (3.84)(0.25)/0.01 = 96

As the value of "p" is not known, we took a conservative approach and set p=0.5.
The estimate of confidence limits for the survey results was calculated using the following formula:

> 95% confidence limit = p ± z (square root of $\{pq/n\}$); where p = proportion in population found from survey; z = statistical certainty chosen (for 95% certainty, z = 1.96); q = 1-p; and n = sample size.

2.4. Sampling Frame

For the purpose of the LQAS Survey, Parsa district was divided into 13 SAs (12 Ilakas of Parsa DHO and 1 district municipality - Birgunj). Likewise, Sunsari district was divided into 15 SAs (12 Ilakas of Sunsari DHO and 3 district municipalities namely Dharan, Itahari and Inaruwa).

A sample size of 19 households (HH) was selected per SA for this assessment. The reason for choosing 19 is that any sample that is less than 19 will have α and β errors greater than 10%, which is not desired. Similarly, increasing the sample size to greater than 19 creates more work and does not necessarily reduce the margin of error. In assessing coverage, we have aggregated all the samples taken from each SA in order to obtain a large enough sample size as required to estimate the proportion in each population subgroup.

In the case of Parsa, the total sample size was calculated as 247 mothers (19 HHs x 13 SAs that is MoHP's Ilaka). Similarly, in Sunsari, total sample size was 285 mothers (19 HHs x 15 SAs).

2.5. Threshold and Decision Rule

Initial thresholds/benchmarks for assessing the indicators were selected using the average proportion obtained by aggregating the data of all 13 SAs in Parsa and 15 SAs in Sunsari districts.

2.6. Survey Questionnaire

The survey questionnaire were used from Child Health Division, CB-NCP secretariat which was used by Save the Children, UNICEF, and CHD itself during the baseline data collection in 7 CB-NCP districts namely Dhankuta, Bardia, Chitwan, Dang, Kavre, Palpa and Morang. The questionnaire was already tested in different districts. The questionnaire is attached in the annex.

2.7. Team Composition and Field Plan

The district teams were requested to select the supervisors and enumerators ensuring that they would include an CB-IMCI focal person, a statistician, an EPI supervisor, a FP supervisor, and/or those in charge in Ilakas of concerned District (Public) Health Offices - D(P)HOs.

From the pool of representatives from D(P)HO, NGO, and Plan Nepal teams consisting of two persons (one from each group) were formed. The team is mixed with Government staff and NGOs/Plan staff to minimize the vested interests and subjective errors.

2.8. Training of Enumerators and Supervisors

The three-days training was conducted for D(P)HO, NGO/partner and Plan Staff of Sunsari and Parsa districts which included dummy practice of the questionnaire filling including real field practices in the ward which is not included in the real sample. There was sharing of the field practice and misunderstanding and make consensus in the plenary for common understanding among all the team members and supervisors.

2.9. Data Collection

A standard procedure was applied for data collection. First, a sampling frame was constructed for each field area consisting of 2-9 VDCs, their 9 wards with population sizes. Secondly, dividing the total population size of a field area by the LQAS sample size of 19 created a sampling fraction. Third, a random number between 1 and the sampling fraction was selected by standard random table. The ward having the corresponding person in the sampling frame's cumulative population column was selected as the first sample. Adding the sampling fraction to the selected sample identified the next ward. All remaining samples were selected by continuing the addition of the sampling fraction to the preceding sum.

Identifying locations for interview:
Step 1: List communities and their total population
Step 2: Calculate the cumulative population
Step 3: Calculate the sampling interval
Step 4: Choose a random number
Step 5: With an initial random number and the sampling interval, identify communities for the 19 sets of interviews

After the selection of community; interviewers visit that area and take the information from the key informants or self assessment in that location. If there are more than 30 households, they are subdivided into two or more (almost equal HHs) groups which is manageable to clearly identify the location. Then select one location of these sections randomly. If the selected area is still too large, subdivide it again into two or more equal section and select one section at random. It is continued until one small section with less than or equal to thirty households. Then, draw a map of the section

becomes with the help of key informant and number each household in the selected section on the map or door to door visit. Then use random number table and select the first household.

Household selection: assigning numbers

IF:	THEN:
A complete household list is available (from census, or map)	-) Assign a number to each house … work is done!
If the community size is about 30 households or less	-) Make a household list or map with the location of each household with the help of a key informant from the community -) And then, assign a number to each house … work is done!
If the community size is more than about 30 households	-) Subdivide the community into 2-5 sections with about the same # of households in each section -) Select one section at random -) Make a house list or map with the location of each household with the help of a key informant -) Then, assign a number to each house … work is done!

Household selection

- Once all households are numbered, pick a random number (using random tables) and select the first household in the selected community
- If more than one house is needed in the selected community, pick another random number to select the second household in the selected community

After the selection of household they visit that house and knock at the door of selected house and share the objective of survey to the family member(s) and ask whether they have a child age 0-11 months with mother or not. If there is a single child of 0-11 months then ask question and take information with mother after getting permission. If there are two or more children of 0-11 months then randomly select one child by using random table. If the house does not meet criteria then they move to next-nearest front door until they get a child aged 0-11 months with mother. If the respondent of the household is located far way for more than 30 minutes walking distance, then they visit the next-nearest front door.

Selecting a respondent

If the type of respondent you are looking for:	THEN:
Is at the household you selected	Interview that person IF she consents
Does not live at the household selected	They go to the next-nearest household from the front entrance and check the next-nearest household … continue this process until they find the respondent type you they looking for
Lives at that household, BUT is absent and far away (more than 30 minutes away)	They leave that house and select the next house.
If the type of respondent you are looking for:	THEN:
Lives at that household, is absent BUT is nearby (within 30 minutes)	They go find the respondent with the help of a guide from the community … IF they cannot find the person in the next 30 minutes, then GO to the next-nearest household from the front entrance of the household of the person they cannot find

After selecting the respondent, questionnaire consisting of one screening section and 8 sections (Annex 2) was administered in face to face interview with selected respondent. Questionnaires were completed during the interview. At every end of the day interviewers themselves checked the filled questionnaires for quality of data. The Director Family Health Dr. Naresh Pratap Rana, Prof. Chitra Kumar Gurung form IOM, Project Coordinator-LIBON project, Monitoring and Evaluating Officer and Health Coordinator, Plan Nepal also visited some of the study areas to supervise the fieldwork. The data were collected during June to July 2011.

2.10 Data cleaning and analysis

Filled-in questionnaires were brought to central office of Plan Nepal. Each filled questionnaire has been edited and coded for data entry. Data was entered and processed using Statistical Package for the Social Sciences (SPSS) software packages. Data entry was done directly from the completed questionnaires. The data was validated by a computer processing team consisting of a computer programmer and data entry personnel. The computer programmer constantly supervised and monitored the data entry activities. The data set was cleaned and prepared for output generation. Data has been analyzed using simple frequency tables and cross tabulations. Tables were designed and finalized in consultation with the Technical staff of LIBON project of Plan Nepal. Relationships between the selected variables have been established using Chi-square test. Data are presented in the form of tables and bar graphs.

Chapter 3: Characteristics of the Respondents

This chapter deals with the information regarding the socio-demographic and economic characteristics of the recently delivered women RDW.

Table 3.1: Percent distribution of RDW by level of education (result from qm105)

Level of education	District			
	Sunsari (n=285)		Parsa (n=247)	
	2010 March	2011 July	2010 March	2011 July
No schooling	42.1	46.2	67.2	66.4
Informal education	3.5	4.0	3.6	1.2
Primary	15.4	10.5	14.2	10.9
Class VI and above	38.6	39.4	15.4	21.5

Chapter 4: Antenatal Care and Birth Preparedness

This chapter deals with the utilization of antenatal services by RDW during their last pregnancy and the kind of preparations made for the delivery of their last child. Information related to the use of antenatal services including number and timing of Antenatal Care (ANC) visits, source of antenatal services and type of advice and services received from health service providers were collected in the survey. Information related to arrangement of money, transport, food and safe delivery items and skilled health providers for the delivery of their last child was also collected in the survey (Table # 4.1).

Table 4.1: Percent distribution of RDW by persons consulted for antenatal services during their last pregnancy (qm302)

Person consulted	Sunsari (n=276)	Sunsari (n=257)	Parsa (n=224)	Parsa (n=228)
	2010 March	2011 July	2010 March	2011 July
Doctor	34.0	33.1	41.1	50.9
Nurse	25.0	26.1	33.5	32.9
ANM	30.7	43.6	25.9	27.2
HA/AHW	19.2	14.0	13.4	19.7
MCHW	21.4	33.1	16.5	33.8
VHW	2.8	6.6	0.8	7.0
FCHV	19.0	26.1	11.7	26.3
TTBA	2.5	0.8	0.8	2.6
TBA	1.8	0.4	-	0.4
Ayurved	3.1		3.0	

The proportion of the RDW of both the districts received antenatal check up from skilled providers, health worker and FCHV has increased from baseline to end line.

Regarding the health institution for ANC services, the majority of the RDW in both the districts attended hospital and sub health posts. The proportion of the RDW receiving ANC services from SHP has increased than baseline may be due to birthing centre establishment and more demand of sevices. (Table 4.2).

Table 4.2: Percent distribution of RDW by source of antenatal services during their last pregnancy (qm305)

Source of antenatal services	Sunsari (n=276)	Sunsari (n=257)	Parsa (n=224)	Parsa (n=228)
	2010 March	2011 July	2010 March	2011 July
Hospital	34.9	33.9	39.2	49.6
PHCC	7.3	12.8	15.0	9.6
Health post	14.9	18.3	13.2	15.8
Sub-health post	24.7	43.2	16.3	43.4
PHC/ORC	12.7	23.7	4.4	11.0
Private clinic/nursing home	14.9	14.8	26.4	18.4
Pharmacy	0.4	0.4	-	4.4
Own home	3.3	1.6	2.7	1.8
TBA home	1.1	-	7.2	0.4
Others (family planning)	3.0	-	0.8	-

Table 4.3: Percent distribution of RDW by type of antenatal care received during their last pregnancy, among those who received ANC at least once (qm308)

Type of antenatal care received	2010 March Sunsari (n=276)	2011 July Sunsari (n=257)	2010 March Parsa (n=224)	2011 July Parsa (n=228)
Weight measurement	92.7	97.0	77.4	93.3
Blood pressure measurement	89.4	94.7	90.3	96.0
Urine sample examination	57.3	57.9	52.2	55.1
Blood sample examination	52.9	59.8	45.1	45.3

The type of antenatal care services received their last pregnancy has a small increase in both districts than in baseline. But weight measurement in Parsa is increased from 77.4% to 93.3%.

Table 4.4: Percent distribution of RDW by type of antenatal and postnatal care counselling received during their last pregnancy (qm312)

Types of counselling received	2010 March Sunsari (n=276)	2011 July Sunsari (n=257)	2010 March Parsa (n=224)	2011 July Parsa (n=228)
Tetanus toxoid vaccination	76.8	92.9	68.3	83.5
Danger signs during pregnancy	55.1	77.4	40.2	75.4
Using a skilled birth attendant/trained health worker	47.6	71.0	27.2	50.0
Breastfeeding immediately after birth	63.0	78.6	44.2	74.1
Financial preparation for your delivery	67.0	79.4	52.7	81.3
Wrapping the newborn	52.9	69.4	33.0	55.8
Preparation of CHDK	46.4	65.5	25.0	51.3
Essential newborn care	31.5	44.0	12.1	29.9
Family planning	28.3	44.4	18.8	30.4
Identifying emergency transport options	34.8	50.8	34.8	33.9
Arranging for blood in case of emergency	25.0	43.7	9.8	21.9

The types of antenatal and postnatal care counselling received during the last pregnancy have increased in the both districts in the end line survey.

4.1 Birth preparedness

The information about the preparations made by the RDW or their families for the delivery of their last child was collected. Overall, more than 80% of the RDW reported that they had made some kind

of preparations for their delivery and it was also higher in Sunsari than Parsa. The higher percentage of RDW reported making arrangement for money (Sunsari-100%, Parsa-99%), making provisions for food (Sunsari-75%, Parsa-86%) and arrangement of clean cloths (Sunsari-89%, Parsa-85%). There is remarkable increase in crucial preparations affecting the newborn such as arrangement for clean health delivery kit (CHDK), clean instruments for cord cutting, Health Facility (HF)/Skill Birth Attendant (SBA) identification in end line survey in both districts (Table 4.5).

Table 4.5: Percent distribution of RDW who reported making specific preparations for the delivery of their last child (qm402)

	2010 March	2011 July	2010 March	2011 July
Kind of preparations	**Sunsari (n=238)**	**Sunsari (n=271)**	**Parsa (n=168)**	**Parsa (n=198)**
HF/SBA identification	69.3	80.1	50.0	85.9
Transport arrangement	72.3	78.8	57.2	90.9
Money	94.1	100.0	93.4	99.0
Food	71.5	80.5	75.0	86.4
Clean delivery kit	55.9	64.8	36.9	70.7
Clean instrument for cord cutting	44.1	47.9	35.1	55.1
Clean cloths	76.1	89.8	64.0	85.4

Overall, 96% of the RDW reported that they had discussed about planning for delivery with at least one person (either a family member or outsider) during their last pregnancy. A majority of them discussed it with husbands followed by with mother in law. 67% RDW of both districts reported that they had discussed it with FCHVs. It indicates that family communication on planning for delivery was more prominent than communication with health workers. The end line values are increased than in baseline in both districts (Table 4.6).

Table 4.6: Percent distribution of RDW by type of person they discussed about plan for their recent delivery (qm404)

	2010 March	2011 July	2010 March	2011 July
Persons with whom they discussed	**Sunsari (n=230)**	**Sunsari (n=228)**	**Parsa (n=153)**	**Parsa (n=194)**
Husband	86.9	96.1	85.6	95.9
Mother in law	73.9	82.9	73.8	85.6
Friends/relatives	40.4	46.5	19.7	56.7
Mother	52.2	41.7	34.6	44.3
FCHV	54.8	66.7	35.3	67.5
Other health care worker	14.3	18.9	11.1	21.7
Other family members and relatives	0.9	6.1	2.0	2.1

RDW were also asked whether they had pre-identified the place for the delivery of their last child. Overall, 75% RDW of both districts reported that they had pre-identified the place for delivery. Among those who pre-identified the place for delivery, most of them pre-identified hospital to deliver their baby.

Table 4.7: Percent distribution of RDW by place where they had planned for the delivery of their last child (qm504)

Description	**2010 March**	**2011 July**	**2010 March**	**2011 July**
	Sunsari	**Sunsari**	**Parsa**	**Parsa**
Planning for place for delivery	**(n=285)**	**(n=281)**	**(n=247)**	**(n=241)**
Yes	68.1	75.1	53.0	75.7

No	31.9	24.9	47.0	21.9
Places pre-identified for delivery	**(n=195)**		**(n=131)**	
Hospital	71.1	68.3	58.8	66.3
PHCC	2.1	10.0	3.8	3.2
Health post	3.6	3.6	6.1	10.5
Sub-health post	5.7	8.6	1.5	4.7
Private clinic/nursing home	3.6	3.6	14.5	5.3
Own home	13.9	4.5	15.3	10.0

Chapter 5: Delivery Services

One of the objectives of the survey was to assess the perceptions and household behaviour regarding delivery at a health institution and in the presence of skilled birth attendants. Information on different aspects of delivery care such as knowledge about sources of delivery services, danger signs associated with delivery, utilization of delivery services and exposure to various behaviour change communication messages related to delivery were collected from RDW.

Table 5.1: Percent distribution of RDW by opinion regarding the persons to be present at birth to help deliver the baby safely (qm512)

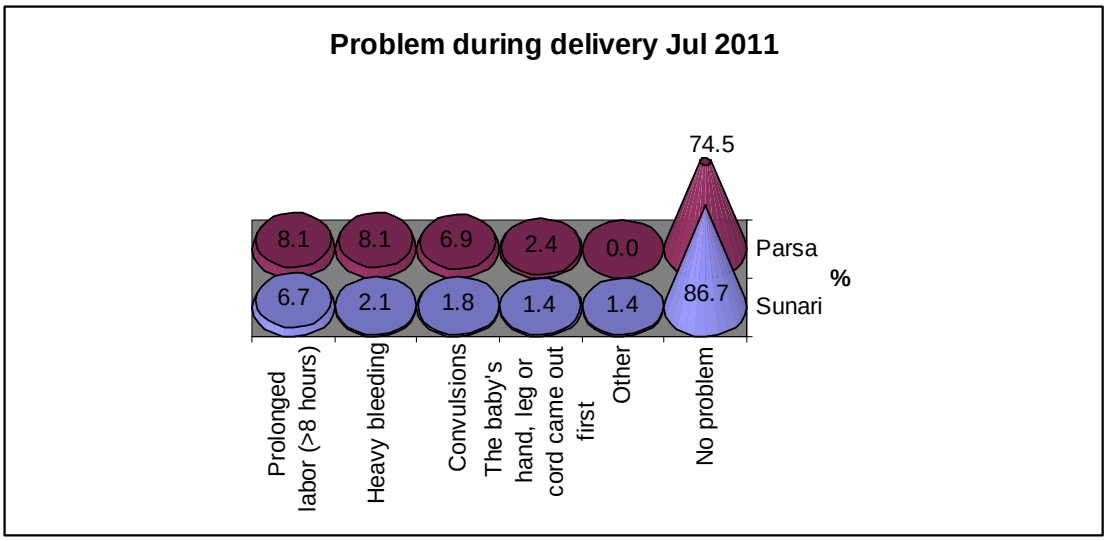
Persons to be present at birth (multiple response)	2010 March Sunsari (n=285)	2011 July Sunsari (n=285)	2010 March Parsa (n=247)	2011 July Parsa (n=247)
Doctor	57.1	47.5	46.9	35.2
Nurse	42.4	43.1	51.4	30.5
ANM	20.7	21.6	13.3	14.8
HA/AHW	3.5	3.5	7.2	11.4
MCHW	5.9	3.1	5.6	9.3
VHW	-	0.0	0.4	2.1
FCHV	32.2	25.1	20.2	33.1
TTBA	8.4	1.6	14.5	11.0
TBA	10.8	3.5	11.7	9.3
Relatives/friends	31.2	34.9	45.7	38.1
Family members	5.2		3.2	

5.1 Experiencing danger signs during delivery

RDWs were asked regarding danger signs during the delivery of their last child if they had experienced any. Among four pronounced major danger signs, 6.7% of Sunsari and 6.9% of Parsa reported having experienced prolonged labour. Similarly, 2.1% RDW of Sunsari and 8.1% of Parsa reported excessive bleeding, 1.8% of Sunsari and 8.1% of Parsa reported convulsions. Very few mothers reported mal presentation. RDW experienced having no any danger signs during the delivery decreased from 29.5% to 14.8% in Sunsari and from24.3% to 18.2% in Parsa.

Table 5.2: Percent distribution of RDW experiencing danger signs during the delivery of their last child (qm557)

	2010 March	2011 July	2010 March	2011 July
Type of danger signs experienced	**Sunsari (n=285)**		**Parsa (n=247)**	
	Total		**Total**	
Prolonged labour (>8 hours)	17.9	6.7	13.0	6.9
Excessive bleeding	7.7	2.1	9.3	8.1
Convulsions	6.7	1.8	5.2	8.1
The baby's hand, leg or cord came out first (mal presentation)	1.8	1.4	3.2	2.4
Others	7.3	1.4	4.0	1.6
No problems	70.5	84.2	75.7	81.8



RDW who reported having experienced danger signs during the delivery of their last child were then asked about the persons whom they consulted for the management of such problems. For this, consultation with doctors has decreased in both districts than in baseline whereas the consultation with FCHV has increased in case of complications during delivery.

Table 5.3: Percent distribution of RDW by persons consulted for the management of problems experienced during the delivery of last child (qm558)

Persons consulted	2010 March Sunsari (n=84)	2011 July Sunsari (n=45)	2010 March Parsa (n=60)	2011 July Parsa (n=)
Doctor	48.8	34.8	45.0	24.8
Nurse	25.0	18.2	23.4	17.1
ANM	6.0	9.1	5.0	8.6
HA/AHW	10.8	3.0	11.6	8.6
MCHW	-	1.5	-	4.8
VHW	1.2	0.0	-	1.0
FCHV	15.5	19.7	10.0	16.2
TTBA	3.6	0.0	1.7	5.7
TBA	3.6	1.5	3.3	3.8
Other HW	3.6	3.0	-	2.9
Traditional healers	-	3.0	-	1.0
Relatives/neighbour/friend	8.4	0.0	6.7	2.9
Pharmacist	2.4	3.0	-	1.9
Given medicine at home	1.2	0.0	-	1.0
Others	2.4	0.0	-	0.0

Among referred RDWs, 75% of Sunsari and 60.7.3% of Parsa consulted hospital has increased than baseline. The proportion of RDW consulting PHCC, health post and sub-health post has increased in both districts than in baseline except in health post in Sunsari (Table 5.4).

Table 5.4: Percent distribution of RDW by places they were referred for the complications appeared during last delivery

Places consulted	2010 March Sunsari (n=46)	2011 July Sunsari (n=32)	2010 March Parsa (n=30)	2011 July Parsa (n=28)
	Total		Total	

Hospital	67.4	75.0	43.3	60.7
PHCC	2.2	12.5	6.7	14.3
Health post	8.7	3.1	10.0	42.9
Sub-health post	8.6	31.3	3.3	25.0
Private clinic/nursing home	15.2	6.3	30.0	28.6
Own home	8.7	6.3	3.3	14.3
TBA home	-	-	3.3	7.1

5.2 Utilization of delivery services

RDW who had an institutional delivery for their last child were further asked about the persons who accompanied them to the health facility for delivery. In Sunsari, 70.8% and in Parsa 80.5% of RDW were accompanied by their husbands followed by Mother in law 54.2% in Sunsari and 69.2% in Parsa. Accompanied by FCHV is increased in both districts in the end line than in baseline.

Table 5.5: Percent distribution of RDW persons who accompanied them while going to the health facility for delivery

Persons (Multiple response)	2010 march	2011 August	2010 march	2011 August
	Sunsari (n=155)		Parsa (n=102)	
Husband	76.7	70.8	77.4	80.5
Other relatives	46.4	22.4	37.2	45.1
Mother in law	52.2	54.2	65.6	69.2
Father in law	24.5	20.3	28.4	27.1
Mother/father	29.6	20.8	23.5	26.3
FCHV	14.1	19.3	4.9	27.1
Others (friends/neighbours, sister)	4.5			3.9

5.3 Exposure to measures related to delivery services

Regarding the level of exposure of RDW to maternal and newborn health information, 82% RDW of Sunsari and 91% of Parsa mentioned that they had heard that a newborn should be breastfed within one hour after birth form FCHV.

Table 5.6: Percent distribution of RDW by source of information on maternal and newborn health services

Source of information	Sunsari (n=285)		Parsa (n=247)	
	2010 march	2011 August	2010 march	2011 August
FCHV	71.7	82	61.6	91
Other health personnel	32.8	42	36.6	48
Radio	63.7	40	32.2	27
Posters/pamphlets	12.8	13	4.5	09
TV	44.6	36	23.3	32
TBAs	4.4	04	8.9	13
BPP flip chart	12.8	15	5.4	31
Friends/relatives/neighbours	16.8	25	18.7	37
NGO workers	7.6	8	4.5	20
Street dramas	0.4	2	0.9	2
Others (teachers, books, mothers group)	4.8	5	6.2	2

A large proportion of the RDW in both the districts perceived FCHVs as trusted sources for getting information on maternal and newborn health services. Similarly, radio, television, health personal other than FCHVs were also reported as trusted sources for getting information on maternal and newborn health services.

Table 5.7: Percent distribution of RDW by perception on the trusted sources of information on maternal and newborn health services

	2010 march	2011 August	2010 march	2011 August
Opinion on the trusted sources of information (multiple response)	**Sunsari (n=285)**		**Parsa (n=247)**	
Other health personnel	35.1	50	39.0	49
FCHV	73.6	85	67.8	92
Radio	57.7	45	32.1	28
TV	43.3	12	24.1	28
Posters/pamphlets	10.1	5	8.0	11
TBA	6.3	5	10.3	15
NGO workers	7.7	12	3.4	22
BPP flip chart	15.9	18	3.4	29
Friends/relatives/neighbours	23.1	30	17.2	29
Street dramas	1.0	2	2.3	0
Others (newspaper, family members)	4.3	2	4.5	0
None	1.4	0	5.7	0

FCHVs, were commonly mentioned sources, who provided information about attendance of a trained health worker during delivery. Similarly, radio, television, health personnel other than FCHVs were also the sources for getting messages on attendance of a trained health worker during delivery.

Table 5.8: Percent distribution of RDW by sources from where they got messages on attendance of a trained health worker during delivery

	2010 march	2011 August	2010 march	2011 August
Source of information	**Sunsari (n=285)**	**N=165**	**Parsa (n=247)**	**N=140**
	Total		**Total**	
FCHV	68.9	72	59.3	84
Other health personnel	36.6	37	27.2	50
Radio	62.9	35	25.3	28
Posters/pamphlets	15.6	12	2.9	10
TV	47.3	33	17.5	23
TBAs	6.0	4	6.8	13
BPP flip chart	14.4	17	3.9	19
Friends/relatives/neighbours	25.3	26	21.3	28
NGO workers	8.4	14	2.0	28
Others (magazine, mothers group)	9.5	1	8.8	0
None/no where	1.1	0	9.8	0

Chapter 6: Postpartum Care

One of the objectives of the CB-NCP Program is to inform and encourage mothers in the program areas to utilize postnatal health services. The current status of use of postnatal health services among women who delivered babies 12 months prior to the survey. Information regarding the utilization of postnatal health services, such as source of postnatal services, timing of first and subsequent postnatal check ups, and type of services received from health facilities and providers were collected.

6.1 Early postnatal care visit

The information about the person who checked them post delivery was collected. It was found that 61.8% RDW were checked by skilled providers (doctor, nurse, ANM) in Sunsari and 51.9% in Parsa. FCHVs involvement in post delivery check up for both districts is increased and check up from TTBA/TBA decreased. This is a good trend.

Table 6.1: Percent distribution of RDW by persons who checked them before they were discharged or left their house

	2010 march	2011 August	2010 march	2011 August
Persons	**Sunsari (n=87)**	**Sunsari (157)**	**Parsa (n=55)**	**Parsa (110)**
Doctor	47.1	38.2	21.8	39.1
Nurse	8.0	11.5	9.1	7.3
ANM	13.8	12.1	7.3	12.7
HA/AHW/CMA	4.6	2.5	9.1	9.1
MCHW	6.9	.6	1.8	.9
VHW	1.1	5.7	1.8	6.4
FCHV	11.5	26.8	5.5	17.3
TTBA/TBA	5.7	.6	34.6	2.7
Relatives/friends/medical shop/medical shopkeeper	1.1	1.9	9.1	3.6

RDW reporting check up by a health care provider before they were discharged from the health facility or before the health provider left the house were also asked about the type of services they received. Majority of RDW in both the districts reported that their body was examined, check up for excessive bleeding, checked for breasts, checked for fever. Thus, it reveals that majority of RDW received the most essential check up services within few days following delivery in both districts.

Table 6.2: Percent distribution of RDW by type of services received from the health service providers

	2010 march	2011 August	2010 march	2011 August
Type of services	**Sunsari (n=87)**	**Sunsari (150)**	**Parsa (n=55)**	**Parsa (107)**
	Total		**Total**	
Examined body	86.2	98	83.7	100
Checked for excessive bleeding	75.9	82	52.8	82
Checked breasts	72.4	83	47.3	92
Checked for fever	68.9	81	56.3	70
Referred to a health center/hospital	22.1	25	12.7	18
Others (blood pressure check up, injection, check wound)	9.2	1	1.8	0

Chapter 7: Immediate Newborn Care and Newborn Care

The main objectives of the CB-NCP program are to increase awareness and bring about household behavior change towards healthy newborn practices, increase utilization of the available newborn services and strengthen the quality of the preventive, promotive and curative services from the

community to the health facility level. This chapter deals with the findings on immediate newborn care, exposure of respondents to messages related to immediate newborn care and newborn care practices during first month.

7.1 Immediate newborn care

Regarding immediate newborn care, information on materials used for cord cutting, drying, wrapping and bathing the newborn, initiation of breastfeeding and health check up and counselling following the birth was collected.

a) Drying, wrapping and bathing of newborn

In response to the place of keeping the newborn immediately after delivery, majority of newborn were placed on the mothers' abdomen which is increased than baseline in both districts.

Table 7.1: Percent distribution of RDW by placement of their newborn immediately after delivery

	2010 march	2011 August	2010 march	2011 August
Placement of baby immediately after birth	**Sunsari (n=285)**	**Sunsari (n=285)**	**Parsa (n=247)**	**Parsa (n=247)**
On a cot	8.8	6.8	30.4	10.7
On the floor	11.2	3.9	17.8	3.7
With someone else	10.9	11.1	8.1	3.7
On the mothers abdomen	64.6	71.3	33.2	79.4
Other (in cabin, plastic, ventilator)	1.8	3.2	4.5	.0
Do not know	2.8	3.6	6.1	2.5

b) Crying of baby after birth

Among RDW with live birth, 95% both districts reported that their baby cried or breathed immediately after birth. However, about 3% RDW of both the districts reported that their baby did not cry immediately after birth. Regarding to taking help to cry or breathe the baby easily for newborn who did not cry, majority were rubbed or massaged which is increased from baseline (Sunsari- from 29.4% to 66.7%, Parsa- from 68.8% to 76.9%). (Table: 7.2).

Table 7.2: Percent distribution of RDW whose baby cried or breathed easily immediately after birth and type of help provided for crying or easy breathing the baby

	2010 march	2011 August	2010 march	2011 August
Description	**Sunsari**	**Sunsari**	**Parsa**	**Parsa**
Whether baby cried or breathed easily	**n=285**	**N=285**	**n=247**	**n=247**
Yes	91.2	95.3	90.3	95.5
No	6.0	2.9	6.1	3.3
Do not know	2.8	1.8	3.6	1.2
Type of help provided for crying or breathing	**n=17**	**n=8**	**n=15**	**n=8**
Rubbed/massaged	29.4	66.7	68.8	76.9
Resuscitation using a bag and mask	11.8	-	12.5	23.1
Mouth-to-mouth resuscitation	5.9	-	-	-
Mouth cleared	-	-	6.7	23.1
Fed butter/ghee	17.6	-	12.5	
Others	11.8	-	13.3	15.4
Nothing	17.6	22.2	12.5	15.4
Do not know	17.6	11.1	-	7.7
Persons helped to cry or breathe qm519	**n=17**	**n=8**	**n=15**	**n=8**
Doctor	35.2	40.0	13.3	15.4
Nurse	41.1	20.0	33.3	38.5

Description	2010 march Sunsari	2011 August Sunsari	2010 march Parsa	2011 August Parsa
ANM	11.7	10.0	-	7.7
HA/AHW	5.8		6.6	15.4
Relatives/friends	5.8	20.0	20.0	
TBA	11.7	10.0	26.6	
MCHW	-		-	7.7
FCHV	5.8		-	7.7
TTBA	-		20.0	
Other (breathing itself)	23.5		-	7.7
Nobody	-		6.6	

d) Initiation of breastfeeding

It is recommended that a newborn should be breastfed immediately after birth. RDWs were asked about the timing of introducing breast milk to the newborn. About 78% of mothers of Sunsari and Parsa mentioned that a child should be breastfed immediately after birth. The proportion of mothers mentioning breastfeeding should be initiated after the placenta is expelled was significantly high in both districts (13.5%) though it is reduced from baseline value. Thus there is need of education about the appropriate timing of initiating breastfeeding.

Table 7.3: Percent distribution of RDW by knowledge about the timing of initiating the breast milk to the newborn

Knowledge about the timing of initiating breast milk	2010 march Sunsari (n=285)	2011 August Sunsari (n=285)	2010 march Parsa (n=247)	2011 August Parsa (n=247)
Immediately after birth	65.6	77.9	32.2	78.4
After the placenta is expelled	15.4	13.5	22.4	13.5
After bathing the newborn	1.1	.7	5.3	1.2
After 24 hours after birth	3.2	1.4	18.0	2.4
Others	8.4	1.8	6.1	.8
Do not know	6.3	4.6	15.9	3.7

e)Early PNC for newborn (within 24 hours or before discharge)

RDW, who reported that their baby was checked by a health care provider before they were discharged or before the provider left the house, were asked about the person checking their baby at that time. Among those newborns, 55.5% of Sunsari and 58.7% of Parsa were reported to have been checked by a skilled provider (doctor, nurse, ANM). The check up by FCHV to newborn is increased in the both districts in end line than baseline.

Table 7.4: Percent distribution of RDW by persons who checked their baby before the health professional, FCHV or TBA left their house or before they were discharged from the health facility following the birth of their last child

Persons checking baby's health (Multiple response)	2010 march Sunsari (n=174)	2011 August Sunsari (n=155)	2010 march Parsa (n=118)	2011 August Parsa (n=109)
Doctor	51.7	34.2	46.6	35.8
Nurse	28.2	7.1	35.6	11.0
ANM	11.5	14.2	9.3	11.9
HA/AHW	5.2	0	9.3	.9
MCHW	4.6	3.9	2.5	8.3
VHW	1.7	0	-	0
FCHV	13.2	35.5	5.9	20.2

Persons checking baby's health (Multiple response)	2010 march Sunsari (n=174)	2011 August Sunsari (n=155)	2010 march Parsa (n=118)	2011 August Parsa (n=109)
TTBA, TBA	6.9	.6	16.9	2.8
Relatives/friends	-	0	0.8	0
Other (jhole health worker)	0.6	.6	0.8	.0

7.2 Exposure to messages related to immediate newborn care

This section deals with the findings related to the type of health care provided to the newborn within one month following birth.

Among RDW whose newborn was checked within four weeks, majority (Sunsari-54.6%) were checked three times or more where as in Parsa only 20.4%. Skilled health care providers checking the newborn were doctors about 34% in both the districts. The involvement of FCHV was singnificantly increased in both districts than in baseline. (Table 7.5).

Table 7.5: Percent distribution of RDW by number of times and type of provider who checked their newborn within four weeks after birth, among RDW whose newborn was either still alive or survived at least one month after birth (Q 704 and 706)

Description	2010 march Sunsari (n=77)	2011 August Sunsari (n=152)	2010 march Parsa (n=50)	2011 August Parsa (n=107)
Number of times checking newborn				
1	40.3	19.1	52.0	53.1
2	33.8	26.3	26.0	26.5
3 or more	26.0	54.6	20.0	20.4
Persons checking newborn				
Doctor	46.8	34.2	18.0	35.8
Staff nurse	9.1	7.1	12.0	11.0
ANM	13.0	14.2	14.0	11.9
MCHW	5.2	3.9	2.0	8.3
HA	-	.0	4.0	.9
AHW/CMA	6.5	3.9	8.0	5.5
VHW	1.3	.0	2.0	0
FCHV	10.4	35.5	4.0	20.2
Trained TBA	5.2	.6	18.0	2.8
Untrained TBA	2.6	0	12.0	3.7
Relatives/friend	-	.6	4.0	0
Medical shopkeeper	-	0	2.0	0

Information about perception of the mothers regarding the size of their child at birth was also collected during the survey. Among RDW with live birth, 69.6% (baseline 60.4%) of Sunsari and 68.9 (baseline 57.9%) of Parsa reported that they perceived average weight or size of the baby.

Table 7.6: Percent distribution of RDW by opinion regarding the size of their child at birth (Q 716)

Perception on size of the newborn	2010 march Sunsari (n=285)	2011 August	2010 march Parsa (n=247)	2011 August
Very large	4.2	1.8	2.0	4.6
Larger than average	22.8	20.7	27.9	21.6
Average	60.4	69.6	57.9	68.9
Smaller than average	6.0	4.3	8.5	2.9
Very small	2.5	3.2	1.2	1.2
Do not know	4.2	.4	2.4	.8

a) Neonatal complications and treatment

RDW with live birth whose child was alive or survived at least one month were asked about any danger signs or symptoms experienced during the first month after delivery. Overall, 19.2% (baseline23.2%) RDW of Sunsari and 7.0% (baseline 10.9%) RDW of Parsa said that their newborn had experienced at least one of the danger signs or symptoms during their neonatal period (Figure 7.7). In both districts, the prevalence of danger sign is decreased in newborns. It is may be due to proper care of newborn by CBNCP program.

Fig 7.1

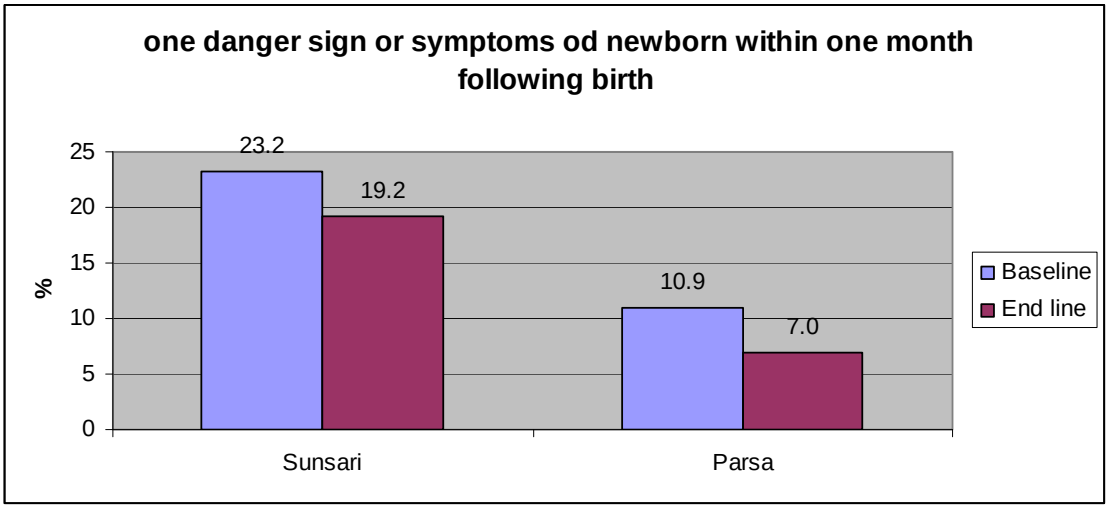


Figure 7.1: Percentage of RDW who reported that their infant had experienced at least one danger sign or symptoms within one month following birth, among RDW whose child was still alive or survived at least one month (n=285, 247)

The types of danger signs or symptoms experienced by their child within one month were also assessed in the survey. It was found that majority of newborn experienced fever, difficult or fast breathing, and unable to suck milk or feed.

Of the 59 RDW of Sunsari and 16 RDW of Parsa who reported that their newborn had experienced danger signs or symptoms within one month after birth, a great majority in both the districts said that their babies had one episode of illness upto to the age of one month. (Table: 7.7).

Table 7.7: Percent distribution of RDW by number of times their newborn got sick during neonatal period (Q 804)

Number of times of getting sick	2010 march Sunsari (n=66)	2011 August Sunsari (n=59)	2010 march Parsa (n=27)	2011 August Parsa (n=16)
1	71.2	67.8	70.4	75.0
2	18.2	11.9	18.5	6.3
3+	10.5	20.3	11.1	18.8
Average number of episodes	***1.48***	***1.92***	***1.44***	***1.69***

Annex-1a: Sample frame of Sunsari district

Ilaka#	Rec #	Ilaka/MP	LQA#	VDC/MP	Ward
1	1	Itahari	**1**	Aekamba	2
1	2	Itahari	**2**	Aekamba	5
1	3	Itahari	**3**	Aekamba	8
1	4	Itahari	**4**	Hanshposha	2
1	5	Itahari	**5**	Hanshposha	2
1	6	Itahari	**6**	Hanshposha	2
1	7	Itahari	**7**	Hanshposha	4
1	8	Itahari	**8**	Hanshposha	5
1	9	Itahari	**9**	Hanshposha	8
1	10	Itahari	**10**	Khanar	2
1	11	Itahari	**11**	Khanar	4
1	12	Itahari	**12**	Khanar	5
1	13	Itahari	**13**	Khanar	6
1	14	Itahari	**14**	Khanar	7
1	15	Itahari	**15**	Panchakanya	2
1	16	Itahari	**16**	Panchakanya	3
1	17	Itahari	**17**	Panchakanya	5
1	18	Itahari	**18**	Panchakanya	5
1	19	Itahari	**19**	Panchakanya	6
2	20	Chatara	**1**	Barahachhetra	1
2	21	Chatara	**2**	Barahachhetra	3
2	22	Chatara	**3**	Barahachhetra	4
2	23	Chatara	**4**	Barahachhetra	5
2	24	Chatara	**5**	Barahachhetra	6
2	25	Chatara	**6**	Bishnupaduka	4
2	26	Chatara	**7**	Bishnupaduka	6
2	27	Chatara	**8**	Bishnupaduka	8
2	28	Chatara	**9**	Mahendranagar	1
2	29	Chatara	**10**	Mahendranagar	2
2	30	Chatara	**11**	Mahendranagar	3
2	31	Chatara	**12**	Mahendranagar	4
2	32	Chatara	**13**	Mahendranagar	4
2	33	Chatara	**14**	Mahendranagar	4
2	34	Chatara	**15**	Mahendranagar	4
2	35	Chatara	**16**	Mahendranagar	7
2	36	Chatara	**17**	Mahendranagar	7
2	37	Chatara	**18**	Mahendranagar	9
2	38	Chatara	**19**	Mahendranagar	9
3	39	Madhuwan	**1**	Haripur	1
3	40	Madhuwan	**2**	Haripur	5
3	41	Madhuwan	**3**	Haripur	7
3	42	Madhuwan	**4**	Haripur	9
3	43	Madhuwan	**5**	Laukahi	3
3	44	Madhuwan	**6**	Laukahi	6
3	45	Madhuwan	**7**	Madhuwan	3
3	46	Madhuwan	**8**	Madhuwan	5
3	47	Madhuwan	**9**	Madhuwan	8
3	48	Madhuwan	**10**	PaschimKasuha	1
3	49	Madhuwan	**11**	PaschimKasuha	4
3	50	Madhuwan	**12**	PaschimKasuha	4
3	51	Madhuwan	**13**	PaschimKasuha	8
3	52	Madhuwan	**14**	PaschimKasuha	9
3	53	Madhuwan	**15**	Sripurjabdi	3
3	54	Madhuwan	**16**	Sripurjabdi	5
3	55	Madhuwan	**17**	Sripurjabdi	6
3	56	Madhuwan	**18**	Sripurjabdi	7
3	57	Madhuwan	**19**	Sripurjabdi	8
4	58	Harinagara	**1**	Basantapur	1
4	59	Harinagara	**2**	Basantapur	5
4	60	Harinagara	**3**	Basantapur	7

Ilaka#	Rec #	Ilaka/MP	LQA#	VDC/MP	Ward
4	61	Harinagara	**4**	Basantapur	8
4	62	Harinagara	**5**	Harinagara	1
4	63	Harinagara	**6**	Harinagara	3
4	64	Harinagara	**7**	Harinagara	4
4	65	Harinagara	**8**	Harinagara	6
4	66	Harinagara	**9**	Harinagara	8
4	67	Harinagara	**10**	Madhyeharsahi	1
4	68	Harinagara	**11**	Madhyeharsahi	3
4	69	Harinagara	**12**	Madhyeharsahi	5
4	70	Harinagara	**13**	Madhyeharsahi	7
4	71	Harinagara	**14**	RajganjSenuwari	1
4	72	Harinagara	**15**	RajganjSenuwari	3
4	73	Harinagara	**16**	RajganjSenuwari	4
4	74	Harinagara	**17**	RajganjSenuwari	5
4	75	Harinagara	**18**	RajganjSenuwari	7
4	76	Harinagara	**19**	RajganjSenuwari	9
5	77	Satterjhora	**1**	Aurabarni	1
5	78	Satterjhora	**2**	Aurabarni	3
5	79	Satterjhora	**3**	Aurabarni	6
5	80	Satterjhora	**4**	Aurabarni	9
5	81	Satterjhora	**5**	Bhaluwa	1
5	82	Satterjhora	**6**	Bhaluwa	5
5	83	Satterjhora	**7**	Bhaluwa	9
5	84	Satterjhora	**8**	Chhitaha	3
5	85	Satterjhora	**9**	Chhitaha	5
5	86	Satterjhora	**10**	Chhitaha	6
5	87	Satterjhora	**11**	Chhitaha	9
5	88	Satterjhora	**12**	Santerjhora	1
5	89	Satterjhora	**13**	Santerjhora	3
5	90	Satterjhora	**14**	Santerjhora	6
5	91	Satterjhora	**15**	Santerjhora	6
5	92	Satterjhora	**16**	Santerjhora	8
5	93	Satterjhora	**17**	Tanamuna	1
5	94	Satterjhora	**18**	Tanamuna	4
5	95	Satterjhora	**19**	Tanamuna	7
6	96	Inaruwa	**1**	Babiya	1
6	97	Inaruwa	**2**	Babiya	2
6	98	Inaruwa	**3**	Babiya	4
6	99	Inaruwa	**4**	Babiya	6
6	100	Inaruwa	**5**	Babiya	8
6	101	Inaruwa	**6**	Dumaraha	1
6	102	Inaruwa	**7**	Dumaraha	2
6	103	Inaruwa	**8**	Dumaraha	3
6	104	Inaruwa	**9**	Dumaraha	3
6	105	Inaruwa	**10**	Dumaraha	4
6	106	Inaruwa	**11**	Dumaraha	6
6	107	Inaruwa	**12**	Dumaraha	6
6	108	Inaruwa	**13**	Dumaraha	7
6	109	Inaruwa	**14**	Dumaraha	7
6	110	Inaruwa	**15**	Dumaraha	8
6	111	Inaruwa	**16**	Dumaraha	9
6	112	Inaruwa	**17**	Madhesa	3
6	113	Inaruwa	**18**	Madhesa	5
6	114	Inaruwa	**19**	Madhesa	7
7	115	Prakashpur	**1**	Bhokraha	1
7	116	Prakashpur	**2**	Bhokraha	1
7	117	Prakashpur	**3**	Bhokraha	2
7	118	Prakashpur	**4**	Bhokraha	3
7	119	Prakashpur	**5**	Bhokraha	3
7	120	Prakashpur	**6**	Bhokraha	4
7	121	Prakashpur	**7**	Bhokraha	5
7	122	Prakashpur	**8**	Bhokraha	6
7	123	Prakashpur	**9**	Bhokraha	7

Ilaka#	Rec #	Ilaka/MP	LQA#	VDC/MP	Ward
7	124	Prakashpur	**10**	Bhokraha	8
7	125	Prakashpur	**11**	Bhokraha	9
7	126	Prakashpur	**12**	Prakashpur	1
7	127	Prakashpur	**13**	Prakashpur	2
7	128	Prakashpur	**14**	Prakashpur	4
7	129	Prakashpur	**15**	Prakashpur	5
7	130	Prakashpur	**16**	Prakashpur	5
7	131	Prakashpur	**17**	Prakashpur	6
7	132	Prakashpur	**18**	Prakashpur	7
7	133	Prakashpur	**19**	Prakashpur	8
8	134	Bakalauri	**1**	Bakalauri	2
8	135	Bakalauri	**2**	Bakalauri	4
8	136	Bakalauri	**3**	Bakalauri	6
8	137	Bakalauri	**4**	Bakalauri	8
8	138	Bakalauri	**5**	BhadgauSinawari	2
8	139	Bakalauri	**6**	BhadgauSinawari	4
8	140	Bakalauri	**7**	BhadgauSinawari	5
8	141	Bakalauri	**8**	BhadgauSinawari	9
8	142	Bakalauri	**9**	Bharaul	2
8	143	Bakalauri	**10**	Bharaul	3
8	144	Bakalauri	**11**	Bharaul	4
8	145	Bakalauri	**12**	Bharaul	5
8	146	Bakalauri	**13**	Bharaul	7
8	147	Bakalauri	**14**	Pakali	2
8	148	Bakalauri	**15**	Pakali	4
8	149	Bakalauri	**16**	Pakali	9
8	150	Bakalauri	**17**	Singiya	2
8	151	Bakalauri	**18**	Singiya	5
8	152	Bakalauri	**19**	Singiya	8
9	153	Madhelee	**1**	Chandbela	4
9	154	Madhelee	**2**	Chandbela	7
9	155	Madhelee	**3**	Duhabi	1
9	156	Madhelee	**4**	Duhabi	3
9	157	Madhelee	**5**	Duhabi	4
9	158	Madhelee	**6**	Duhabi	5
9	159	Madhelee	**7**	Duhabi	5
9	160	Madhelee	**8**	Duhabi	6
9	161	Madhelee	**9**	Duhabi	8
9	162	Madhelee	**10**	Madhelee	1
9	163	Madhelee	**11**	Madhelee	4
9	164	Madhelee	**12**	Madhelee	7
9	165	Madhelee	**13**	Simariya	1
9	166	Madhelee	**14**	Simariya	6
9	167	Madhelee	**15**	Sonapur	1
9	168	Madhelee	**16**	Sonapur	2
9	169	Madhelee	**17**	Sonapur	3
9	170	Madhelee	**18**	Sonapur	7
9	171	Madhelee	**19**	Sonapur	9
10	172	Sitagunj	**1**	Amaduwa	1
10	173	Sitagunj	**2**	Amaduwa	3
10	174	Sitagunj	**3**	Amaduwa	5
10	175	Sitagunj	**4**	Amaduwa	6
10	176	Sitagunj	**5**	Amaduwa	9
10	177	Sitagunj	**6**	Amahibelaha	2
10	178	Sitagunj	**7**	Amahibelaha	6
10	179	Sitagunj	**8**	Amahibelaha	8
10	180	Sitagunj	**9**	Chimdi	1
10	181	Sitagunj	**10**	Chimdi	4
10	182	Sitagunj	**11**	Chimdi	6
10	183	Sitagunj	**12**	Purbakushaha	1
10	184	Sitagunj	**13**	Purbakushaha	3
10	185	Sitagunj	**14**	Purbakushaha	6
10	186	Sitagunj	**15**	Purbakushaha	8

Ilaka#	Rec #	Ilaka/MP	LQA#	VDC/MP	Ward
10	187	Sitagunj	**16**	RamganjBelgachhiya	1
10	188	Sitagunj	**17**	RamganjBelgachhiya	4
10	189	Sitagunj	**18**	RamganjBelgachhiya	7
10	190	Sitagunj	**19**	RamganjBelgachhiya	9
11	191	Dewanganj	**1**	Dewanganj	1
11	192	Dewanganj	**2**	Dewanganj	3
11	193	Dewanganj	**3**	Dewanganj	3
11	194	Dewanganj	**4**	Dewanganj	6
11	195	Dewanganj	**5**	Dewanganj	8
11	196	Dewanganj	**6**	Ghuskee	1
11	197	Dewanganj	**7**	Ghuskee	3
11	198	Dewanganj	**8**	Ghuskee	4
11	199	Dewanganj	**9**	Ghuskee	5
11	200	Dewanganj	**10**	Ghuskee	7
11	201	Dewanganj	**11**	Ghuskee	8
11	202	Dewanganj	**12**	Kaptanganj	1
11	203	Dewanganj	**13**	Kaptanganj	2
11	204	Dewanganj	**14**	Kaptanganj	3
11	205	Dewanganj	**15**	Kaptanganj	5
11	206	Dewanganj	**16**	Kaptanganj	7
11	207	Dewanganj	**17**	Kaptanganj	8
11	208	Dewanganj	**18**	Sahebganj	2
11	209	Dewanganj	**19**	Sahebganj	7
12	210	Bhutaha	**1**	Gautampur	4
12	211	Bhutaha	**2**	Gautampur	9
12	212	Bhutaha	**3**	Jalpapur	4
12	213	Bhutaha	**4**	Jalpapur	7
12	214	Bhutaha	**5**	Narshinhatappu	1
12	215	Bhutaha	**6**	Narshinhatappu	2
12	216	Bhutaha	**7**	Narshinhatappu	3
12	217	Bhutaha	**8**	Narshinhatappu	4
12	218	Bhutaha	**9**	Narshinhatappu	5
12	219	Bhutaha	**10**	Narshinhatappu	6
12	220	Bhutaha	**11**	Narshinhatappu	7
12	221	Bhutaha	**12**	Narshinhatappu	8
12	222	Bhutaha	**13**	Narshinhatappu	9
12	223	Bhutaha	**14**	RamnagarBhutaha	1
12	224	Bhutaha	**15**	RamnagarBhutaha	3
12	225	Bhutaha	**16**	RamnagarBhutaha	5
12	226	Bhutaha	**17**	RamnagarBhutaha	7
12	227	Bhutaha	**18**	RamnagarBhutaha	8
12	228	Bhutaha	**19**	RamnagarBhutaha	9
1a (13)	229	Itahari NP	**1**	Itahari N.P.	1
1a (13)	230	Itahari NP	**2**	Itahari N.P.	1
1a (13)	231	Itahari NP	**3**	Itahari N.P.	2
1a (13)	232	Itahari NP	**4**	Itahari N.P.	2
1a (13)	233	Itahari NP	**5**	Itahari N.P.	2
1a (13)	234	Itahari NP	**6**	Itahari N.P.	2
1a (13)	235	Itahari NP	**7**	Itahari N.P.	3
1a (13)	236	Itahari NP	**8**	Itahari N.P.	3
1a (13)	237	Itahari NP	**9**	Itahari N.P.	4
1a (13)	238	Itahari NP	**10**	Itahari N.P.	4
1a (13)	239	Itahari NP	**11**	Itahari N.P.	4
1a (13)	240	Itahari NP	**12**	Itahari N.P.	5
1a (13)	241	Itahari NP	**13**	Itahari N.P.	5
1a (13)	242	Itahari NP	**14**	Itahari N.P.	5
1a (13)	243	Itahari NP	**15**	Itahari N.P.	6
1a (13)	244	Itahari NP	**16**	Itahari N.P.	7
1a (13)	245	Itahari NP	**17**	Itahari N.P.	8
1a (13)	246	Itahari NP	**18**	Itahari N.P.	8
1a (13)	247	Itahari NP	**19**	Itahari N.P.	9
1b (14)	248	Dharan NP	**1**	Dharan NP	2
1b (14)	249	Dharan NP	**2**	Dharan NP	3

Ilaka#	Rec #	Ilaka/MP	LQA#	VDC/MP	Ward
1b (14)	250	Dharan NP	**3**	Dharan NP	6
1b (14)	251	Dharan NP	**4**	Dharan NP	7
1b (14)	252	Dharan NP	**5**	Dharan NP	8
1b (14)	253	Dharan NP	**6**	Dharan NP	8
1b (14)	254	Dharan NP	**7**	Dharan NP	9
1b (14)	255	Dharan NP	**8**	Dharan NP	10
1b (14)	256	Dharan NP	**9**	Dharan NP	11
1b (14)	257	Dharan NP	**10**	Dharan NP	12
1b (14)	258	Dharan NP	**11**	Dharan NP	13
1b (14)	259	Dharan NP	**12**	Dharan NP	14
1b (14)	260	Dharan NP	**13**	Dharan NP	15
1b (14)	261	Dharan NP	**14**	Dharan NP	15
1b (14)	262	Dharan NP	**15**	Dharan NP	15
1b (14)	263	Dharan NP	**s**	Dharan NP	16
1b (14)	264	Dharan NP	**17**	Dharan NP	17
1b (14)	265	Dharan NP	**18**	Dharan NP	18
1b (14)	266	Dharan NP	**19**	Dharan NP	19
6a (15)	267	Inaruwa NP	**1**	Inaruwa NP	1
6a (15)	268	Inaruwa NP	**2**	Inaruwa NP	1
6a (15)	269	Inaruwa NP	**3**	Inaruwa NP	2
6a (15)	270	Inaruwa NP	**4**	Inaruwa NP	3
6a (15)	271	Inaruwa NP	**5**	Inaruwa NP	3
6a (15)	272	Inaruwa NP	**6**	Inaruwa NP	3
6a (15)	273	Inaruwa NP	**7**	Inaruwa NP	4
6a (15)	274	Inaruwa NP	**8**	Inaruwa NP	5
6a (15)	275	Inaruwa NP	**9**	Inaruwa NP	5
6a (15)	276	Inaruwa NP	**10**	Inaruwa NP	6
6a (15)	277	Inaruwa NP	**11**	Inaruwa NP	6
6a (15)	278	Inaruwa NP	**12**	Inaruwa NP	6
6a (15)	279	Inaruwa NP	**13**	Inaruwa NP	7
6a (15)	280	Inaruwa NP	**14**	Inaruwa NP	7
6a (15)	281	Inaruwa NP	**15**	Inaruwa NP	7
6a (15)	282	Inaruwa NP	**16**	Inaruwa NP	8
6a (15)	283	Inaruwa NP	**17**	Inaruwa NP	9
6a (15)	284	Inaruwa NP	**18**	Inaruwa NP	9
6a (15)	285	Inaruwa NP	**19**	Inaruwa NP	10

Annex-1b: Sample frame of Parsa district

Ilaka Code	Record no.	Ilaka Name	LQAS #	VDC_Name	Ward
1	286	Thori	1	Nirmal Basti	1
1	287	Thori	2	Nirmal Basti	2
1	288	Thori	3	Nirmal Basti	3
1	289	Thori	4	Nirmal Basti	4
1	290	Thori	5	Nirmal Basti	4
1	291	Thori	6	Nirmal Basti	5
1	292	Thori	7	Nirmal Basti	6
1	293	Thori	8	Nirmal Basti	6
1	294	Thori	9	Nirmal Basti	6
1	295	Thori	10	Nirmal Basti	7
1	296	Thori	11	Nirmal Basti	8
1	297	Thori	12	Thori	1
1	298	Thori	13	Thori	1
1	299	Thori	14	Thori	3
1	300	Thori	15	Thori	5
1	301	Thori	16	Thori	6
1	302	Thori	17	Thori	7
1	303	Thori	18	Thori	8
1	304	Thori	19	Thori	9
2	305	Sedhwa	1	Bijbaniya	3
2	306	Sedhwa	2	Bijbaniya	7
2	307	Sedhwa	3	Jeetpur	2
2	308	Sedhwa	4	Jeetpur	6
2	309	Sedhwa	5	Jeetpur	9
2	310	Sedhwa	6	Mahadev patti	2
2	311	Sedhwa	7	Mahadevpatti	5
2	312	Sedhwa	8	Mahadevpatti	7
2	313	Sedhwa	9	Pidari Guthi	1
2	314	Sedhwa	10	Pidari Guthi	6
2	315	Sedhwa	11	Pidari Guthi	8
2	316	Sedhwa	12	Sankarsaraiya	3
2	317	Sedhwa	13	Sankarsaraiya	6
2	318	Sedhwa	14	Sedhwa	1
2	319	Sedhwa	15	Sedhwa	6
2	320	Sedhwa	16	Subarnapur	2
2	321	Sedhwa	17	Subarnapur	6
2	322	Sedhwa	18	Supauli	1
2	323	Sedhwa	19	Supauli	7
3	324	Nichuta	1	Auraha	5
3	325	Nichuta	2	Auraha	9
3	327	Nichuta	4	Gaadi	3
3	328	Nichuta	5	Gaadi	7
3	329	Nichuta	6	Kauwabankataiya	4
3	330	Nichuta	7	Lakhanpur	1
3	326	Nichuta	7	Dewarbana	3
3	331	Nichuta	8	Lakhanpur	7
3	332	Nichuta	9	Mahuwan	2
3	333	Nichuta	10	Mahuwan	8
3	334	Nichuta	11	Masihani	3
3	335	Nichuta	12	Masihani	8
3	336	Nichuta	13	Nichuta	4
3	337	Nichuta	14	Nichuta	8
3	339	Nichuta	16	Paterwa Sugauli	6

Ilaka Code	Record no.	Ilaka Name	LQAS #	VDC_Name	Ward
3	340	Nichuta	17	Sonbarsa	1
3	341	Nichuta	18	Sonbarsa	5
3	342	Nichuta	19	Sonbarsa	8
3	388	Nichuta	115	Paterwa Sugauli	3
4	343	Bagahi	1	Bagahi	2
4	344	Bagahi	2	Bagahi	6
4	345	Bagahi	3	Basdilwa	1
4	346	Bagahi	4	Basdilwa	5
4	347	Bagahi	5	Basdilwa	8
4	348	Bagahi	6	Belwa Parsauni	2
4	349	Bagahi	7	Belwa Parsauni	4
4	350	Bagahi	8	Belwa Parsauni	7
4	551	Bagahi	9	Belwa Parsauni	9
4	352	Bagahi	10	Birwaguthi	1
4	371	Bageshwori	10	Harpur	8
4	353	Bagahi	11	Birwaguthi	2
4	505	Bagahi	11	Maniyari	1
4	354	Bagahi	12	Biruwaguthi	3
4	355	Bagahi	13	Biruwaguthi	5
4	356	Bagahi	14	Biruwa Guthi	8
4	357	Bagahi	15	Chorni	3
4	398	Bagahi	16	Chorni	7
4	359	Bagahi	17	Chorni	8
4	360	Bagahi	18	Chorni	9
4	361	Bagahi	19	Lal Parsa	5
5	362	Bageshwori	1	Bagbana	4
5	363	Bageshwori	2	Bagbana	7
5	364	Bageshwori	3	Bagbana	9
5	365	Bageshwori	4	Bageshwori Tritona	2
5	366	Bageshwori	5	Bageshwori	6
5	367	Bageshwori	6	Bahuwari Pidari	1
5	368	Bageshwori	7	Bahuwari Pidari	5
5	369	Bageshwori	8	Bahuwari Pidari	9
5	370	Bageshwori	9	Harpur	4
5	372	Bageshwori	11	Madhuban Mathal	1
5	373	Bageshwori	12	Madhuban Mathal	4
5	374	Bageshwori	13	Madhuban Mathal	7
5	375	Bageshwori	14	Panchrukhi	2
5	376	Bageshwori	15	Panchrukhi	6
5	377	Bageshwori	16	Sakhwa Parsauni	1
5	378	Bageshwori	17	Sakhwa Parsauni	4
5	379	Bageshwori	18	Sakhuwa Parsauni	7
5	380	Bageshwori	19	Sakhuwa Parsauni	9
6	381	Bishrampur	1	Bahuawra Bhatta	1
6	382	Bishrampur	2	Bahuawra Bhatta	4
6	383	Bishrampur	3	Bahuawra Bhatta	7
6	384	Bishrampur	4	Bairiya Birta Da.Pu	3
6	385	Bishrampur	5	Bairiya Birta Da.Pu	6
6	386	Bishrampur	6	Bairiya Birta Da.Pu	9
6	387	Bishrampur	7	Bishrampur	4
6	388	Bishrampur	8	Bishrampur	6
6	389	Bishrampur	9	Gamhariya	1
6	390	Bishrampur	10	Gamhariya	6
6	391	Bishrampur	11	Nagardaha	3
6	392	Bishrampur	12	Nagardaha	9
6	393	Bishrampur	13	Ramnagari	7

Ilaka Code	Record no.	Ilaka Name	LQAS #	VDC_Name	Ward
6	394	Bishrampur	14	Udayapur Ghurmi	3
6	395	Bishrampur	15	Udaypur Ghurmi	6
6	396	Bishrampur	16	Udaypur Ghurmi	9
6	397	Bishrampur	17	Bahuratar	3
6	398	Bishrampur	18	Bhauratar	6
6	399	Bishrampur	19	Bhauratar	8
7	400	Bhikhampur	1	Bhikhampur	1
7	401	Bhikhampur	2	Bhikhampur	3
7	402	Bhikhampur	3	Bhikhampur	5
7	403	Bhikhampur	4	Bhikhampur	6
7	404	Bhikhampur	5	Bhikhampur	9
7	405	Bhikhampur	6	Ghoddaur Pipra	2
7	406	Bhikhampur	7	Ghoddaur Pipra	5
7	407	Bhikhampur	8	Ghoddaur Pipra	8
7	408	Bhikhampur	9	Ghoddaur Pipra	9
7	409	Bhikhampur	10	Jagarnathpur Sira	1
7	410	Bhikhampur	11	Jagarnathpur Sira	2
7	411	Bhikhampur	12	Jagarnathpur Sira	4
7	412	Bhikhampur	13	Jagarnathpur Sira	6
7	413	Bhikhampur	14	Jagarnathpur sira	7
7	414	Bhikhampur	15	Jagarnathpur sira	8
7	415	Bhikhampur	16	Janaki Tola	1
7	416	Bhikhampur	17	Janaki Tola	4
7	417	Bhikhampur	18	Janaki tola	6
7	418	Bhikhampur	19	Janaki tola	8
8	419	Langadi	1	Vishwa	3
8	420	Langadi	2	Vishwa	8
8	421	Langadi	3	Dhobini	3
8	422	Langadi	4	Dhobini	8
8	423	Langadi	5	Hariharpur	3
8	424	Langadi	6	Hariharpur	8
8	425	Langadi	7	Jaymangalapur	2
8	426	Langadi	8	Jaymangalapur	6
8	427	Langadi	9	Langadi	2
8	428	Langadi	10	Langadi	7
8	429	Langadi	11	Mirjapur	3
8	430	Langadi	12	Mirjapur	8
8	431	Langadi	13	Mudali	3
8	432	Langadi	14	Mudali	7
8	433	Langadi	15	Sambhauta	1
8	434	Langadi	16	Sambhauta	5
8	435	Langadi	17	Sambhauta	8
8	436	Langadi	18	Tulsibarba	3
8	437	Langadi	19	Tulsibarba	8
9	438	Pokhariya	1	Basantapur	2
9	439	Pokhariya	2	Basantapur	4
9	440	pokhariya	3	Basantapur	6
9	441	pokhariya	4	Basantapur	8
9	442	Pokhariya	5	Bairiya Birta Na. Ta.Ja	2
9	443	Pokhariya	6	Bairiya Birta Na. Ta.Ja	5
9	444	Pokhariya	7	Govindapur	1
9	445	Pokhariya	8	Govindapur	7
9	446	Pokhariya	9	Hariharpur Birta	3
9	447	Pokhariya	10	Pokhariya	1
9	448	Pokhariya	11	Pokhariya	3
9	449	Pokhariya	12	Pokhariya	5

Ilaka Code	Record no.	Ilaka Name	LQAS #	VDC_Name	Ward
9	450	Pokhariya	13	Pokhariya	7
9	451	Pokhariya	14	Sibarba	1
9	452	Pokhariya	15	Sibarba	4
9	453	Pokhariya	16	Sibarba	7
9	454	Pokhariya	17	Sibarba	9
9	455	Pokhariya	18	Srisiya Na Ta Ja	4
9	456	Pokhariya	19	Srisiya Na Ta Ja	9
10	457	Pakaha	1	Bhedihari	3
10	458	Pakaha	2	Bhedihari	6
10	459	Pakaha	3	Bedihari	9
10	461	Pakaha	5	Dhore	1
10	460	Pakaha	6	Biranchi Barba	4
10	462	Pakaha	6	Dhore	5
10	463	Pakaha	7	Dhore	9
10	464	Pakaha	8	Lahawar Thakri	6
10	664	Pakaha	8	Lahawar Thakri	6
10	465	Pakaha	9	Lahawar Thakri	9
10	465	Pakaha	9	Lahawar Thakri	9
10	466	Pakaha	10	Pakaha Mainpur	6
10	467	Pakaha	11	Prasauni Bhatta	1
10	468	Pakaha	12	Prasauni Bhatta	4
10	469	Pakaha	13	Prasauni Bhatta	7
10	470	Pakaha	14	Parsurampur	4
10	471	Pakaha	15	Sabaithwa	1
10	472	Pakaha	16	Sabaithwa	5
10	473	Pakaha	17	Sabaithwa	9
11	476	Srisiya	1	Alau	1
11	477	Srisiya	2	Alau	4
11	478	Srisiya	3	Alau	6
11	479	Srisiya	4	Alau	9
11	480	Srisiya	5	Amar Patti	5
11	481	Srisiya	6	Amar Patti	9
11	482	Srisiya	7	Bindabasini	6
11	483	Srisiya	8	Bindabasini	9
11	484	Srisiya	9	Harpatgunj	4
11	485	Srisiya	10	Harpatgunj	9
11	486	Srisiya	11	Jhauwa Guthi	4
11	487	Srisiya	12	Jhauwa Guthi	7
11	488	Srisiya	13	Ramgadwa	1
11	489	Srisiya	14	Ramgadwa	6
11	490	Srisiya	15	Srisiya Kahlwa Tola	2
11	491	Srisiya	16	Srisiya Kahlwa Tola	6
11	492	Srisiya	17	Srisiya Khalwa Tola	9
11	493	Srisiya	18	Sugauli Birta	4
11	494	Srisiya	19	Sugauli Birta	6
12	495	Birgunj	1	Bhawanipur	2
12	496	Birgunj	2	Bhawanipur	4
12	497	Birgunj	3	Bhawanipur	5
12	498	Birgunj	4	Bhawanipur	7
12	499	Birgunj	5	Bhawanipur	9
12	500	Birgunj	6	Lipnibirta	2
12	501	Birgunj	7	Lipnibirta	3
12	512	Birgunj	8	Prasauni Birta	6
12	502	Birgunj	8	Lipni Birta	5
12	513	Birgunj	9	Prasauni Birta	8
12	503	Birgunj	9	Lipni Birta	6

Ilaka Code	Record no.	Ilaka Name	LQAS #	VDC_Name	Ward
12	504	Birgunj	10	Lipni Birta	8
12	506	Birgunj	12	Maniyari	3
12	507	Birgunj	13	Maniyari	5
12	508	Birgunj	14	Maniyari	7
12	509	Birgunj	15	Maniyari	8
12	510	Birgunj	16	Prasauni Birta	1
12	511	Birgunj	17	Prasauni Birta	3
13	514	Birgunj NP	1	Birgunj U.M.N.P	1
13	515	Birgunj NP	2	Birgunj U.M.N.P	2
13	516	Birgunj NP	3	Birgunj UMNP	3
13	517	Birgunj NP	4	Birgunj U.M.N.P	4
13	518	Birgunj NP	5	Birgunj U.M.N.P	6
13	519	Birgunj NP	6	Birgunj UMNP	9
13	520	Birgunj NP	7	Birgunj UMNP	10
13	521	Birgunj NP	8	Birgunj UMNP	11
13	522	Birgunj NP	9	Birgunj UMNP	13
13	523	Birgunj NP	10	Birgunj UMNP	13
13	524	Birgunj NP	11	Birgunj UMNP	14
13	525	Birgunj NP	12	Birgunj UMNP	14
13	526	Birgunj NP	13	Birgunj UMNP	15
13	527	Birgunj NP	14	Birgunj UMNP	16
13	528	Birgunj NP	15	Birgunj UMNP	16
13	529	Birgunj NP	16	Birgunj UMNP	17
13	530	Birgunj NP	17	Birgunj UMNP	18
13	531	Birgunj NP	18	Birgunj UMNP	19
13	532	Birgunj NP	19	Birgunj UMNP	19

Annex-2: Survey instrument – questionnaire is an attached file.

COMMUNITY-BASED NEWBORN CARE PACKAGE (CB-NCP)
SURVEY QUESTIONNAIRE: MAY-JUL 2011
(MOHP/PLAN NEPAL)
SCREENING QUESTIONNAIRE – 1

Instructions to interviewer: Complete this Household Listing Form by interviewing the household head. If the household head is not present or otherwise unable to provide the required information, interview a senior member of the household and note their name in the table below.

Form No.				

1) Name of District _____	
2) Name and code of VDC _____	
3) Ward Number ……	
4) Village name ……	
5) Cluster Number. ……	
6) Household Number ……	
7) Name of the household head _____	
8) Name of respondent:_____	
9) Relationship of respondent to household head (if respondent is not household head) _____	

INTERVIEWER VISITS				
	1	**2**	**3**	
DATE [DD/MM/YY]	/ /	/ /	/ /	
INTERVIEWER'S NAME:				
RESULT				
NEXT VISIT : DATE [DD/MM/YY] TIME	/ /	/ /		

***RESULT CODES:**
1 = Interview completed
2 = Respondent refused to be interviewed
3 = Time and date set for later
4 = Respondent not at home
5 = Other, specify:_____

Language Of Questionnaire _____
Language of Interview _____
Native Language of Respondent _____
Translator Used (Yes=1; No=2) …….

Language Codes: Nepali=1, Bhojpuri=2, Maithili=3, Tharu=4, Other=5

Q. #	Question	Codes	Go to Q
1.	How many women (all women) of age 15-49 years live in your household?	☐☐ None…….97	If none then end the interview
2.	Please give me the name(s) of the women who usually live in your household?	Name_____ Marital status:_____ Name_____ Marital status:_____ Name_____ Marital status:_____	

Supervisor	Field Editor	Office Editor	Keyed By
Name _____	Name _____		
Date _____	Date _____		

COMMUNITY-BASED NEWBORN CARE PACKAGE (CB-NCP)
SURVEY QUESTIONNAIRE: MAY-JUL 2011
(MOHP/PLAN NEPAL)
SCREENING QUESTIONNAIRE – 2

Form No.				

1) Name of District _____	
2) Name and code of VDC _____	
3) Ward Number ……	
4) Village name ……	
5) Cluster Number. ……	
6) Household Number ……	
7) Name of the household head _____	
8) Name of respondent	

INTERVIEWER VISITS				
	1	**2**	**3**	
DATE [DD/MM/YY]	/ /	/ /	/ /	
INTERVIEWER'S NAME:				
RESULT				
NEXT VISIT : DATE [DD/MM/YY] TIME	/ /	/ /		
***RESULT CODES:** 1 = Interview completed 2 = Respondent refused to be interviewed 3 = Time and date set for later 4 = Respondent not at home 5 = Other, specify:: _____				

INTRODUCTION AND CONSENT

Namaste! My name is _____. I am from Plan Nepal, which is conducting a study for the Ministry of Health and Population/Government of Nepal. The MOHP has been helping pregnant women, mothers, and newborns in this district with the objectives of improving child health status. We are here to find out about the health of mothers and newborns to help you and your community to keep mothers and children healthy. We would very much appreciate your participation in this survey. This information will help the MOHP to improve its program in the districts. The survey usually takes around one hour. I assure you that your name will not be shared with anyone else and your answers to my questions will be combined with answers from many other people so that no one will know that the answers you give me today belong to you. Your privacy is protected, and I assure that your answers will be kept confidential.

Your participation in this survey is voluntary and you can choose not to answer any individual question or all of the questions. However, we hope that you will participate in this survey since your views are important.

May I proceed with the questions?

RESPONDENT AGREES TO BE INTERVIEWED…… 1

RESPONDENT DOES NOT AGREE TO BE INTERVIEWED…… 2 → END INTERVIEW & THANK RESPONDENT

101	Now, I would like to ask you about all the pregnancies that you have had in the last 3 years. By this I mean all the children born to you in last 3 years whether they were born alive or dead, whether they are still living or not, whether they live with you or someone else, and all the pregnancies in the last 3 years that did not result in a live birth. I understand that it is not easy to talk about children who have died, or pregnancies that ended before the full term, but it is important you tell us about all of them, so that the government can develop programs to improve children's health.		
102	First I would like to ask about all the births you have had in the last 3 years. Have you given birth in the last 3 years?	Yes……..1 No……...2	→107
103	Do you have any sons or daughter to whom you have given birth in the last 3 years who are now living with you?	Yes…….1 No……..2	→105
104	How many sons live with you? And how many daughters live with you? If NONE, RECORD '00'	Sons at Home……..…..1 __|__ Daughters at Home…….....2 __|__	
105	Do you have any sons or daughters to whom you have given birth in the last 3 years who are alive but do not live with you?	Yes…….1 No……..2	→107
106	How many sons are alive but do not live with you? And how many daughters are alive but do not live with you? If NONE, RECORD '00'	Sons Elsewhere……..1 __|__ Daughters Elsewhere……...2 __|__	
107	Have you given birth to a boy or girl in the last 3 years who was born alive but later died? If NO PROBE: Any baby who cried or showed any sign of live but did not survive?	Yes…….1 No……..2	→109
108	How many boys have died? And how many girls have died? If NONE, RECORD '00'	Boys Dead……...…1 __|__ Girls Dead……..2 __|__	
109	Women sometimes have pregnancies that do not result in a live born child. That is, a pregnancy can end in a miscarriage, or the child can be born dead. Have you ever had a pregnancy in last 3 years that did not end in a live birth including induced abortion?	Yes…….1 No……..2	→111
110	How many pregnancies in the last 3 years did not end in a live birth?	Pregnancy Losses……..__|__	
111	Sum Answers to 104, 106, 108 And 110 and Enter total. If None, record '00'	Total …….__|__	
112	Check 111: Just to make sure that I have this right: you have had in TOTAL____ pregnancies during last 3 years. Is that correct? Yes ☐ ……113 No ☐ Probe and Correct 102-111 As necessary.		
113	Check 111: One Or More pregnancies in last 3 years …… ☐ 114 No Pregnancies…… END the interview		

Now I would like to record all of your pregnancies in the last three years, whether born alive, born dead, or lost before full term, starting with the last one you had. RECORD ALL THE PREGNANCIES IN 111. RECORD TWINS AND TRIPLETS ON SEPARATE LINES. (If there are more than 5 pregnancies, use an additional questionnaire starting with the second row;)

114	115	116	117	118	119	120	121	122	123
	Think back to your last pregnancy. Was that a single or multiple pregnancy?	Was the baby born alive, born dead, or lost before birth?	Did that baby cry, move, or breath when it was born?	What was the name of the child?	Was [NAME] a boy or a girl?	In what month and year was [NAME] born?	Is [NAME] still alive?	If Born Alive and Still Living	
								How old was [NAME] at his/her last birthday? Record age in completed months (<1 yr.) or years.	Is [NAME] living with you?
01	Single……1 Multiple……...2 Do not know……8	Born alive…...1→118 Born dead…..2 Lost before full term……..3→126	Yes……1 No…….2 →126	_____ Name	Boy……1 Girl……2	Month ☐☐ Year ☐☐☐☐	Yes……1 No…….2 →124	Month ☐☐ Age in Years ☐☐	Yes…….1 No……..2 (Next pregnancy)
02	Single……1 Multiple……...2 Do not know……8	Born alive…...1→118 Born dead…..2 Lost before full term……..3→126	Yes……1 No……..2 →126	_____ Name	Boy……1 Girl……2	Month ☐☐ Year ☐☐☐☐	Yes……1 No…….2 →124	Age in Years ☐☐	Yes…….1 No……..2 (Next pregnancy)
03	Single……1 Multiple……...2 Do not know……8	Born alive…...1→118 Born dead…..2 Lost before full term……..3→126	Yes……1 No……..2 →126	_____ Name	Boy……1 Girl……2	Month ☐☐ Year ☐☐☐☐	Yes……1 No…….2 →124	Age in Years ☐☐	Yes…….1 No……..2 (Next pregnancy)
04	Single……1 Multiple……...2 Do not know……8	Born alive…...1→118 Born dead…..2 Lost before full term……..3→126	Yes……1 No……..2 →126	_____ Name	Boy……1 Girl……2	Month ☐☐ Year ☐☐☐☐	Yes……1 No…….2 →124	Age in Years ☐☐	Yes…….1 No……..2 (Next pregnancy)
05	Single……1 Multiple……...2 Do not know……8	Born alive…...1→118 Born dead…..2 Lost before full term……..3→126	Yes……1 No……..2 →126	_____ Name	Boy……1 Girl……2	Month ☐☐ Years ☐☐☐☐	Yes……1 No…….2 →124	Age in Years ☐☐	Yes…….1 No……..2 (Next pregnancy)

124	125	126	127
If born alive but now dead		If born dead or lost before birth	
How old was [NAME] when he/she died? If '1 YRS' PROBE: How many months old was [NAME]? RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OR YEARS	In what month and year did [NAME] die?	In what month and year did the pregnancy end?	How many months did this pregnancy last? RECORD IN COMPLETED MONTHS.
Days……1 ⬜⬜ Months....2 ⬜⬜ Years…..3 ⬜⬜	Month ⬜⬜ Year ⬜⬜⬜⬜ (Next Pregnancy)	Month ⬜⬜ Year ⬜⬜⬜⬜	#Months ⬜⬜ (Next pregnancy)
Days……1 ⬜⬜ Months....2 ⬜⬜ Years…..3 ⬜⬜	Month ⬜⬜ Year ⬜⬜⬜⬜ (Next Pregnancy)	Month ⬜⬜ Year ⬜⬜⬜⬜	#Months ⬜⬜ (Next pregnancy)
Days……1 ⬜⬜ Months....2 ⬜⬜ Years…..3 ⬜⬜	Month ⬜⬜ Year ⬜⬜⬜⬜ (Next Pregnancy)	Month ⬜⬜ Year ⬜⬜⬜⬜	#Months ⬜⬜ (Next pregnancy)
Days……1 ⬜⬜ Months....2 ⬜⬜ Years…..3 ⬜⬜	Month ⬜⬜ Year ⬜⬜⬜⬜ (Next Pregnancy)	Month ⬜⬜ Year ⬜⬜⬜⬜	#Months ⬜⬜ (Next pregnancy)
Days……1 ⬜⬜ Months....2 ⬜⬜ Years…..3 ⬜⬜	Month ⬜⬜ Year ⬜⬜⬜⬜ (Next Pregnancy)	Month ⬜⬜ Year ⬜⬜⬜⬜	#Months ⬜⬜ (Next pregnancy)

128	Compare 111 with the number of pregnancies with the history above and mark: Number are same ……..……..1 Numbers are different (Probe and reconcile)…….2	☐ ☐
	Check: for each pregnancy: year is recorded in 120, 125 and 126 ▪ For each birth since November, 2007: month and years are recorded ▪ For each living child: current age is recorded in 122 ▪ For each dead child: age at death is recorded in 124 ▪ For age at death at 12 months or 1 year: probe to determine the exact month of death ▪ For age at death <1 month, probe to determine the exact day of death	☐ ☐ ☐ ☐ ☐
129	Check 126 and 127 and enter the number of still births in November 2007 or later and The pregnancy that lasted for 7 months or more. If None, record '0'	☐
130	Check 124 and 125 and enter the "number of deaths" at 0-30 days in November, 2007 or later, If none, record '0'	☐
131	Check 129 and 130, if one or more read the following statement: "We would like to get more information on the circumstances around the deaths of the young children so that the government can provide services to help reduce the deaths. We would like to come back and talk with you about your child's death. Is this okay?"	Yes…1 No….2
132	Check 120 and enter the number of births in November, 2007 or later, if none, record '0'	

The eligible women for the main questionnaire are all women who have given birth(s) from November 2007. The child born to these women can be:

- Born alive but dead (124-125)
- Born alive and still living (122-123)
- Still born (born dead or lost before birth, pregnancy lasted for 7 months or more) (126-127)

Confidential, information to be used for research purposes only

COMMUNITY-BASED NEWBORN CARE PACKAGE (CB-NCP)
SURVEY QUESTIONNAIRE: MAY – JUL 2011
(MOHP/PLAN NEPAL)
MAIN QUESTIONNAIRE FOR RECENTLY DELIVERRED WOMEN

Form No.					

Respondent: Recently Delivered Women (RDW): RDW are defined as women who have delivered within 12 months prior to the survey date (since Jan/Feb 2009) (regardless of whether the infant is currently alive or dead), including stillbirths.

1) Name of District _____	
2) Name and code of VDC _____	
3) Ward Number ……	
4) Village name ……	
5) Cluster Number. ……	
6) Household Number ……	
7) Name of the household head _____	
8) Name of respondent	

INTERVIEWER VISITS				
	1	**2**	**3**	
DATE [DD/MM/YY]	/ /	/ /	/ /	
INTERVIEWER'S NAME:				
RESULT				
NEXT VISIT : DATE [DD/MM/YY] TIME	/ /	/ /		
***RESULT CODES:** 1 = Interview completed 2 = Respondent refused to be interviewed 3 = Time and date set for later 4 = Respondent not at home 5 = Other, specify:: _____				

INTRODUCTION AND CONSENT

Namaste! My name is _____. I am from Plan Nepal, which is conducting a study for the Ministry of Health and Population/Government of Nepal. The MOHP has been helping pregnant women, mothers, and newborns in this district with the objectives of improving child health status. We are here to find out about the health of mothers and newborns to help you and your community to keep mothers and children healthy. We would very much appreciate your participation in this survey. This information will help the MOHP to improve its program in the districts. The survey usually takes around one hour. I assure you that your name will not be shared with anyone else and your answers to my questions will be combined with answers from many other people so that no one will know that the answers you give me today belong to you. Your privacy is protected, and I assure that your answers will be kept confidential.

Your participation in this survey is voluntary and you can choose not to answer any individual question or all of the questions. However, we hope that you will participate in this survey since your views are important.

May I proceed with the questions?

RESPONDENT AGREES TO BE INTERVIEWED…… 1

RESPONDENT DOES NOT AGREE TO BE INTERVIEWED…… 2 → END INTERVIEW & THANK RESPONDENT

Check **Q114, Q118, Q121, Q122, Q124, Q127**: enter in the table the line number, name and the survival status of each birth from November 2007 or later, ask questions about the last birth.

QA	Line number from 114	Last birth
QB	From 118 and 121	Name _____ Living……1 Dead……..2
QC	From 122	Age of [NAME] ☐☐ months
QD	From 124	Age of [NAME] when he/she died ☐☐ months
QE	From 127 (pregnancy loss after 7 months or more)	Stillbirth ☐

SECTION 1: RESPONDENT'S BACKGROUND

Interviewer: "Now I would like to ask some questions about you and your household."

Q. #	Question	Codes	Go to Q
101	In what month and year were you born?	Month [__ _ | __ _] Year [_ __ | _ __] Don't know month …… 98 Don't know year ……..98	
102	How old are you?	Age in completed years . [___ | ___] Don't know 98	
103	Have you ever attended school?	Yes .....1 No.....2	→106
104	What is the highest class you completed?	Grade…… ☐☐	
105	**(Interviewer: Check Q. 104)**	Grade 5 or below .....1 Grade 6 and above 2	→107
106	Now, I would like you to read out loud as much of this sentence as you can. *"Gharelu Upachar"* **(Show card to the respondents)**	Cannot read at all.....1 Able to read only parts of sentence .....2 Able to read whole sentence.....3	→108
107	Do you read from a newspaper or magazine almost every day, at least once a week, less than once a week or not at all?	Almost every day.....1 At least once a week .....2 Less than once a week .....3 Not at all..... ……. 4	
108	Do you watch television almost every day, at least once a week, less than once a week, or not at all?	Almost every day.....1 At least once a week .....2 Less than once a week .....3 Not at all.....4	
109	Do you listen to the radio almost every day, at least once a week, less than once a week, or not at all?	Almost every day.....1 At least once a week .....2 Less than once a week .....3 Not at all.....4	

<table>
<tr><th>Q. #</th><th colspan="2">Question</th><th>Codes</th><th colspan="2"></th><th>Go to Q</th></tr>
<tr><td rowspan="13">110</td><td colspan="2">From where do you get information on maternal and newborn health services?
Circle all responses which the mother mentions unprompted. Then ask, “Is there any other else.” Then, read each question and circle “2” for “yes” or “3” for “no.”</td><td>Unprompted</td><td colspan="2">Prompted
Yes | No</td><td rowspan="13"></td></tr>
<tr><td>1</td><td>FCHV</td><td>1</td><td>2</td><td>3</td></tr>
<tr><td>2</td><td>TBAs</td><td>1</td><td>2</td><td>3</td></tr>
<tr><td>3</td><td>NGO workers</td><td>1</td><td>2</td><td>3</td></tr>
<tr><td>4</td><td>Other health personnel</td><td>1</td><td>2</td><td>3</td></tr>
<tr><td>5</td><td>TV</td><td>1</td><td>2</td><td>3</td></tr>
<tr><td>6</td><td>Radio</td><td>1</td><td>2</td><td>3</td></tr>
<tr><td>7</td><td>Posters/pamphlets</td><td>1</td><td>2</td><td>3</td></tr>
<tr><td>8</td><td>BPP flip chart</td><td>1</td><td>2</td><td>3</td></tr>
<tr><td>9</td><td>Street dramas</td><td>1</td><td>2</td><td>3</td></tr>
<tr><td>10</td><td>Newspaper/Magazine</td><td>1</td><td>2</td><td>3</td></tr>
<tr><td>11</td><td>Other (specify):_________________</td><td>1</td><td></td><td></td></tr>
<tr><td>97</td><td>Nowhere</td><td>7</td><td></td><td></td></tr>
<tr><td>111</td><td colspan="2">Which are the trusted sources of information?
(MULTIPLE RESPONSE)</td><td colspan="3">FCHV............ 1
TBAs............ 2
NGO workers............ 3
Other health personnel............ 4
TV............ 5
Radio............ 6
Posters/pamphlets............ 7
BPP flip chart............ 8
Street dramas............ 9
Newspaper/Magazine............ 10
Other, specify:............ 11
None............ 97</td><td></td></tr>
<tr><td>112</td><td colspan="2">To which radio station do you mostly listen?
(MULTIPLE RESPONSE)</td><td colspan="3">Radio Nepal…………1
FM station …………2

Name the station_______________________
None…………97
Don't know…………98</td><td>

→114</td></tr>
<tr><td>113</td><td colspan="2">At what time do you listen to the radio?</td><td colspan="3">6-9:59 am…………1
10 am-1:59 pm…………2
2-3:59 pm …………3
4-7:59 pm…………4
8pm-5:59 am…………5
Don't know…………8</td><td></td></tr>
<tr><td>114</td><td colspan="2">Which TV stations do you watch the most?</td><td colspan="3">NTV…………1
Kantipur…………2
Nepal 1…………3
Channel Nepal…………4
Sagarmatha…………5
Avenues…………6
Image…………7
None…………97
Don’t know………… 98</td><td></td></tr>
<tr><td>115</td><td colspan="2">What is your caste or ethnicity?
(Write caste in space provided. Do not fill in the box.)</td><td colspan="3">_______________________
Caste/Ethnicity
|__|__|</td><td></td></tr>
</table>

Q. #	Question	Codes	Go to Q
116	What is your religion?	Hindu……..1 Buddhist…….2 Muslim ……..3 Kirat……..….4 Christian…….5 Other, specify:_____ 6	

Section 2: Respondent's Background (Socio-economic status)

Interviewer: "Now I would like to ask some questions about your household."

Q. #	Question	Codes	Go to Q
201	Does your household have the following items? **(READ ALL)**		
		Yes / No	
	1 Electricity	1 / 2	
	2 Bicycle	1 / 2	
	3 Telephone	1 / 2	
	4 Television	1 / 2	
	5 Radio	1 / 2	
202	What is the main source of drinking water for members of your household?	**Piped water** • Piped into house/yard/plot …….. 1 • Public / neighbor's tap …… 2 **Dug well** • Well in house/yard/plot ……..…. 3 • Public/neighbor's well …… 4 **Tube well/borehole** • Tube well in yard/plot ……. 5 • Public/neighbor's tube well ……... 6 **Surface water** • Spring/kuwa ……... 7 • River/stream/pond/lake …….. 8 • Stone tap/dhara …….. 9 Other, specify: _____ 10	
203	What type of toilet facilities does your house have?	Flush toilet …… 1 Traditional pit toilet ……. 2 Ventilated improved pit latrine …… 3 No facility / bush / field …… 4 Other, specify: ……..…… 5	
204	Main material of the floor **Record observation**	Earth/mud/dung …… 1 Wood planks …… 2 Linoleum / carpet ……. 3 Ceramic tiles, marble chips …….. 4 Cement ……. 5 Other, specify: _____ 6	
205	Main material of the roof **Record observation**	Thatch …… 1 Metal …….. 2 Tiles/Khapada …… 3 Cement ……... 4 No roof ……... 5 Other, specify: _____ 6	
206	Main material of the walls **a) Record observation**	Bamboo with mud …….. 1 Bamboo with cement……..….2 Adobe …… 3 Unfinished wood …… 4 Cement ……... 5 Bricks ……. 6 Cement blocks …… 7 Wood planks ……..... 8 No walls ……... 9	

Q. #	Question	Codes	Go to Q
		Other, specify: _____ 10	

Section 3: Antenatal Care

Now I would like to ask you some questions about services you may have received during your last pregnancy

Q. #	Question	Codes	Go to Q.
301	Did you see anyone for antenatal care during your last pregnancy?	Yes ..... 1 No 2	→Section 4
302	Whom did you see? *Circle all responses which the mother mentions unprompted. Then ask,* "Is there anyone else." *Then, read each question and circle "2" for "yes" or "3" for "no."*		

	Unprompted	Prompted	
	Yes	Yes	No
SKILL PERSONNEL			
1 Doctor	1	2	3
2 Nurse	1	2	3
3 ANM	1	2	3
TRAINED PERSONNEL			
4 HA/AHW	1	2	3
5 MCHW	1	2	3
6 VHW	1	2	3
OTHER PERSONNEL	1	2	3
7 FCHV	1	2	3
8 TTBA	1	2	3
9 TBA	1	2	3
10 Other (specify): _____	1		

303	Did you discuss your pregnancy with an FCHV?	Yes……..1 No ……..2	→305
304	Did your FCHV give you specific information about where to go for ANC check up?	Yes……..1 No ……..2	
305	Where did you receive antenatal care during your last pregnancy? *Circle all responses which the mother mentions unprompted. Then ask,* "Is there anywhere else." *Then, read each question and circle "2" for "Yes" or "3" for "No."* If unable to determine if a hospital, PHCC or health center or clinic is private or public, write the name of the place(s) below. (Name of places)		

	Unprompted	Prompted	
	Yes	Yes	No
PUBLIC SECTOR			
1 Hospital	1	2	3
2 PHCC	1	2	3
3 Health post	1	2	3
4 Sub-health post	1	2	3
5 PHC/ORC	1	2	3
PRIVATE SECTOR			
6 Pvt. Clinic/Nursing Home	1	2	3
7 Pharmacy	1	2	3
HOME			
8 Own home	1	2	3
9 TBA home	1	2	3
10 Other (specify): _____	1		

Q. #	Question	Codes			Go to Q.
	98 Don't know/don't remember	8			
306	How many months pregnant were you when you first received antenatal care for this pregnancy?	Months…… ☐☐ Don't know……98			
307	How many times did you receive antenatal care during your last pregnancy?	Number of times…… ☐☐ Don't know..... 98			
308	As part of your antenatal care during this pregnancy, were any of the following done at least once? **(READ ALL)**	Yes	No	Don't Know	
	1 Were you weighed?	1	2	8	
	2 Was your blood pressure measured?	1	2	8	
	3 Did you give a urine sample?	1	2	8	
	4 Did you give a blood sample?	1	2	8	
309	During any of your antenatal care visit(s), were you advised to use a skilled birth attendant during delivery?	Yes……...1 No……..…..2 Don't know……..……8			
310	During (any of) your antenatal care visit(s), were you told about the signs of pregnancy complications?	Yes……...1 No……..…..2 Don't know……..……8			
311	Were you told where to go if you had any of these complications?	Yes……...1 No……..…..2 Don't know……..……8			
312	During any of your antenatal care visits with health workers during this pregnancy, were you counseled on: **(READ ALL RESPONSES)**				
		Yes	No	Don't know	
	1 Financial preparation for your delivery?	1	2	8	
	2 Breastfeeding immediately after birth?	1	2	8	
	3 Danger signs during pregnancy?	1	2	8	
	4 Tetanus toxoid vaccination?	1	2	8	
	5 Wrapping the newborn?	1	2	8	
	6 Using a skilled birth attendant/trained Health Worker?	1	2	8	
	7 CDK	1	2	8	
	8 Family planning?	1	2	8	
	9 Identifying emergency transport options?	1	2	8	
	10 Arranging for blood in case of emergency?	1	2	8	
	11 Essential Newborn care?	1	2	8	
313	During this pregnancy, were you given an injection in the arm to prevent you and the baby from getting tetanus?	Yes……...1 No……2 Don't know……..8			 →Sec 4 →Sec 4
314	During this pregnancy, how many times did you get this tetanus injection? *If more than "7," write "7."*	#Times…… ☐ Don't Know……8			

Section 4: Birth Preparedness

"Now I would like to ask you some questions about how you prepared for delivery for your last pregnancy."

Q. #	Question	Codes	Go to Q.
401	During your last pregnancy, did you make any preparations for delivery?	Yes ……1 No ……..2	→ 403

Q. #	Question	Codes			Go to Q.
402	If yes, what kind of preparation did you make? *Circle all responses which the mother mentions unprompted. Then ask,* "Is there anything else." *Then, read each question and circle "2" for "yes" or "3" for "no."* What things did you arrange?	Unprompted	Prompted		
		Yes	Yes	No	
	1 HF/SBA identification	1	2	3	
	2 Transport	1	2	3	
	3 Money	1	2	3	
	4 Food	1	2	3	
	5 Clean Delivery kit	1	2	3	
	6 Clean instrument for cord cutting	1	2	3	
	7 Clean cloths	1	2	3	
	8 Other, specify:_____	1			
403	Did you discuss planning for your delivery with anybody while you were pregnant?	Yes ..... 1 No 2			→Section 5
404	With whom did you plan for your delivery? *Circle all responses which the mother mentions unprompted. Then ask,* "Is there anyone else." *Then, read each question and circle "2" for "yes" or "3" for "no."*				
		Unprompted	Prompted		
		Yes	Yes	No	
	1 Husband	1	2	3	
	2 Mother in law	1	2	3	
	3 Mother	1	2	3	
	4 Friends/relative	1	2	3	
	5 FCHV	1	2	3	
	6 Any other health care worker, specify:	1	2	3	
	7 Other, specify:_____	1			
	97 No one	7			
	98 Don't know	8			

Section 5: Delivery Care and Immediate Newborn Care

Q. #	Question	Codes			Go to Q.
501	Who assisted with your most recent delivery? *Circle all responses which the mother mentions unprompted. Then ask,* "Is there anyone else." *Then, read each question and circle "2" for "yes" or "3" for "no."*				
		Unprompted	Prompted		
		Yes	Yes	No	
	SKILL PERSONNEL				
	1 Doctor	1	2	3	
	2 Nurse	1	2	3	
	3 ANM	1	2	3	
	TRAINED PERSONNEL				
	4 HA/AHW	1	2	3	
	5 MCHW	1	2	3	
	6 VHW	1	2	3	
	OTHER PERSONNEL				
	7 FCHV	1	2	3	
	8 TTBA	1	2	3	
	9 TBA	1	2	3	
	10 Relative/friends	1	2	3	
	11 Other (specify): _____	1			
	97 Nobody	7			
502	Did your FCHV give you specific information about where to go for delivery?	Yes……..1 No……2			
503	Did your FCHV give you specific information to call her at the time of delivery?	Yes…….....1 No……..……2			
504	Did you plan the place for delivery during your pregnancy?	Yes……1 No…….2			→ 506
505	Where had you planned to deliver? If source is hospital, health center, or clinic, write the name of the place. Probe to identify the type of source and circle the appropriate code to the right. **2. *Name of place:*** _____	**Public Sector** Hospital....1 PHCC....2 Health post....3 Sub-health post....4 **Private Sector** Pvt. Clinic/nursing Home....5 **Home** Your home....6 TBA home....7 Other (specify)_____....8			
506	Where did you give birth during your most recent delivery? If source is hospital, health center, or clinic, write the name of the place. Probe to identify the type of place and circle the appropriate code to the right. ***3. Name of place:*** _____	**Public Sector** Hospital....1 PHCC....2 Health post....3 Sub-health post....4 **Private Sector** Pvt. Clinic/nursing Home....5 **Home** Your home....6 TBA home....7 FCHV home……..8 Other (specify)_____....9			→ 509 → 509 → 509

Q. #	Question	Codes	Go to Q.
507	Who accompanied you to the health facility? (*Probe:* "Did FCHV accompany you to the health facility?") *(Circle all responses.)*	Self……………………………………..1 Mother-in-law......……………..……….....2 Father-in-law.....………………………....3 Husband....………………………….…....4 Mother/father ……………………..…..5 Other relative ………………………….. 6 FCHV……………………………………7 Other, specify:______________________8 Don't know.....................…......………98	
508	How long after [NAME] was delivered did you stay there? IF LESS THAN ONE DAY, RECORD IN HOURS.	HOURS……………………………….. 1 ☐ ☐ DAYS………………………………. 2 ☐ ☐ DON'T KNOW…………………………………..98	→511 →511 →511
509	Why didn't you deliver in a health facility? (Probe: "Any other reason?") (Circle all responses)	Cost too much …………………………… 1 Facility not open ……………………….… 2 Too far / no transportation ………………. 3 Don't trust facility / poor quality service… 4 No female provider at facility …………… 5 Husband / family did not allow ………….. 6 Not necessary ……………………………. 7 Not customary ……………………………. 8 Other, specify: _____________________ 9	
510	Did your FCHV give you specific information about which health worker to contact to attend a home birth if you chose to deliver at home?	Yes……………………………...……….1 No ………………………………………2	
511	Please tell me the name and type of health facility in your community where you can go to deliver your child as well as its location. ***4. Name:____________*** ***Location:___________________*** Confirmed by supervisor:__________	**Public Sector** Hospital..1 PHCC...2 Health post..3 Sub-health post...4 **Private Sector** Pvt. Clinic/nursing Home..............................5 **Home** Your home..6 TBA home...7 FCHV home………………………………8 Other (specify)_____________ ....9 Do not know...98	
512	Who should be present at birth to help deliver the baby safely? (**MULTIPLE RESPONSE)**	**Skill Personnel** Doctor...1 Nurse...2 ANM..3 **Trained Personnel** HA/AHW...4 MCHW..5 VHW...6 **Other Personnel** FCHV..7 TTBA..8 TBA..9 Relatives/friends..10 Other (specify)_______________ ....11 Nobody...97	

Q. #	Question	Codes	Go to Q.
	Checkbox 5.1 Interviewer: Check questions **QB** and **QE**. Which of the following conditions is true: Baby still alive……1 Baby born alive, then died ……2 **Baby stillborn……3**		→Sec. 6
513	Was the baby wiped (dried) before the placenta was delivered?	Yes……1 No……2 Don't know . . . ……8	
514	Where was the baby placed immediately after delivery?	On the floor ……..... 1 On a cot……..……2 On the mother's abdomen ……..……3 With someone else ……..... ……..4 Other, specify: _____5 Don't know ……..…….... ……98	
515	Was the baby wrapped with cloth before the placenta was delivered?	Yes……..……1 No……2 Don't know . . . ……..8	→517 →517
516	What was the condition of the cloth, which was used for wrapping the baby? (Probe: "*Anything else*?") (Circle all responses)	Clean cloth. …… 1 Dry cloth. ……... 2 New cloth……. ……..…… 3 Used cloth……. ……. 4 Wet cloth……..5 Other, specify: _____6 Don't know …… 8	
517	Did your baby cry/breathe easily immediately after birth?	Yes……..……1 No……2 Don't know . . . ……..……8	→520 →520
518	What was done to help the baby cry or breathe at the time of birth?	Rubbed/massaged…….....1 Dried. ……..……2 Mouth cleared ……....3 Fed Butter/Ghee. . . . ……4 Mouth-to-mouth resuscitation……..…..5 Resuscitation using a bag and mask…..…6 Other, specify: _____7 Nothing…….....…..97 Don't know. . ……. …… 98	
519	Who took these measures to help the baby cry or breathe?	**Skill Personnel** Doctor ..... 1 Nurse ..... 2 ANM ..... 3 **Trained Personnel** HA/AHW ..... 4 MCHW ..... 5 VHW ..... 6 **Other Personnel** FCHV ..... 7 TTBA ..... 8 TBA ..... 9 Relatives/friends ..... 10 Other (specify)_____ ..... 11 Nobody 97	
520	Was the baby put to the breast before the placenta was delivered?	Yes……1 No……...2 Don't know . . . ……8	
521	Was a Clean Home Delivery Kit used during delivery? (Show example of a CHDK)	Yes……..……1 No……..……..2 Don't know……..…..8	→ 526

Q. #	Question	Codes	Go to Q.
522	What was used to cut the cord?	New blade.....1 Blade that was used for other purposes.....2 Sickle ….....3 Scissor ….....4 Other, Specify: _____5 Don't Know/Can't Remember….....98	
523	Was the instrument used to cut cord boiled prior to use?	Yes ….....1 No ….....2 Don't Know/Can't Remember….....…8	
524	What was used to tie the cord? Probe: "Were the ties boiled?"	New ties ……. 1 Boiled string or thread …….... 2 Unboiled used string or thread …….. 3 Other, specify: _____4 Don't know ……..……8	
525	On what surface was the cord cut on?	Plastic disc..……...……1 Metal coin.. ……..…...2 Wood……..…….…….....3 Other, specify: _____4 Nothing……7 Don't know …….....8	
526	Was anything applied to the cord immediately after cutting?	Yes ….....….....1 No ….....2 Don't Know/Can't Remember.....…8	 →528 →528
527	What was applied to the cord just after cutting the cord?	Butter……..……..…1 Ash……..……2 Ointment…….……3 Animal dung……..….....4 Oil…….……..……5 Other, specify: _____6 Don't know…….……...98	
528	**Check Q N. 506,** **(**Place of delivery)	**Public Sector:** Hospital.....1 PHCC.....2 Health post.....3 Sub-health post.....4 **Private sector** Pvt. Clinic/n. Home.....5 **Home** Your home ……..…..… 6 TBA home …….. 7 FCHV home……8 Other, specify: _____ 9	→530
529	FOR BIRTHS IN WOMAN'S OWN/OTHER'S HOME: Before the Health Professional, FCHV or traditional birth attendant left your house, after [NAME] was born, did he/she check on your health?	YES…… 1 NO……..... ….2 NONE OF THEM WERE PRESENT..…..3	→531 →534 →534
530	FOR ALL OTHER BIRTH LOCATIONS (PUBLIC & PRIVATE SECTOR) : Before you were discharged after [NAME] was born, did any health care provider check on your health?	YES…… 1 NO……..... ….2	 →535

Q. #	Question	Codes	Go to Q.
531	Who checked on your health at that time? *Circle all responses which the mother mentions unprompted. Then ask,* "Is there anyone else." PROBE FOR MOST QUALIFIED PERSON.	**Skill Personnel** Doctor ..... 1 Nurse ..... 2 ANM ..... 3 **Trained Personnel** HA/AHW ..... 4 MCHW ..... 5 VHW ..... 6 **Other Personnel** FCHV ..... 7 TTBA ..... 8 TBA ..... 9 Relatives/friends ..... 10 Other (specify)_____ 11	
532	How long after delivery did the first check take place? IF LESS THAN ONE DAY, RECORD HOURS.	HOURS…….. 1 ☐☐ DAYS……. 2 ☐☐ DON'T KNOW……998	
533	What did the health provider do to check on your health? *Circle all responses which the mother mentions unprompted. Then ask,* "Is there anything else." *Then, read each question and circle "2" for "yes" or "3" for "no."*		

	Unprompted	Prompted	
	Yes	Yes	No
1 Did she examine your body?	1	2	3
2 Did she check your breasts?	1	2	3
3 Did she check for heavy bleeding?	1	2	3
4 Did she check for fever?	1	2	3
5 Did she refer you to a health center/hospital?	1	2	3
6 Other (specify)_____	1		
97 Nothing	7		

534	**FOR BIRTHS IN WOMAN'S OWN/OTHER'S HOME:** Before the Health Professional, FCHV or traditional birth attendant left your house, after [NAME] was born, did he/she check on your baby's health?	YES…… 1 NO…….... ….2 NONE OF THEM WERE PRESENT..…..3	→536 →543 →543
535	**FOR ALL OTHER BIRTH LOCATIONS (PUBLIC & PRIVATE SECTOR) :** Before you were discharged after [NAME] was born, did any health care provider check on your baby's health?	YES…… 1 NO…….... ….2	→543
536	Who checked on your baby's health at that time? *Circle all responses which the mother mentions unprompted. Then ask,* "Is there anyone else." PROBE FOR MOST QUALIFIED PERSON.	**Skill Personnel** Doctor ..... 1 Nurse ..... 2 ANM ..... 3 **Trained Personnel** HA/AHW ..... 4 MCHW ..... 5 VHW ..... 6 **Other Personnel** FCHV ..... 7 TTBA ..... 8 TBA ..... 9 Relatives/friends ..... 10 Other (specify)_____ 11	

Q. #	Question	Codes	Go to Q.
537	How long after delivery did the first check take place? IF LESS THAN ONE DAY, RECORD HOURS.	HOURS…….. 1 ☐☐ DAYS……. 2 ☐☐ DON'T KNOW……998	

538 What did the health provider do to check on your baby's health?

Circle all responses which the mother mentions unprompted. Then ask, "Is there anything else."
Then, read each question and circle "2" for "yes" or "3" for "no."

	Unprompted	Prompted	
	Yes	Yes	No
1 Did she generally examine the baby's body?	1	2	3
2 Did she weigh the baby?	1	2	3
3 Did she check the umbilical cord?	1	2	3
4 Did she observe breastfeeding?	1	2	3
5 Did she refer you to a health center/hospital?	1	2	3
6 Other (specify)_____	1		
97 Nothing	7		
98 I wasn't there/Don't know	8		

539 **CHECK 506;** Before you were discharged (or before the Health care provider or traditional birth attendant or FCHV left your home), what health topics did the health provider discuss with you regarding your health or your baby's health?

Circle all responses which the mother mentions unprompted. Then ask, "Is there anything else."
Then, read each question and circle "2" for "yes" or "3" for "no."

	Unprompted	Prompted	
	Yes	Yes	No
a Breast feeding	1	2	3
b Nutritious food for mother	1	2	3
c Umbilical cord care	1	2	3
d Immunization	1	2	3
e Skin-to-skin/kangaroo method	1	2	3
f Keep baby warm (except STS or KMC)	1	2	3
g Danger signs/symptoms for newborn	1	2	3
h Danger signs/symptoms for mother	1	2	3
i Birth control/family planning	1	2	3
j Other (specify)_____	1		

540 *ASK THE FOLLOWING QUESTION ONLY IF THE MOTHER ANSWERS 'YES' TO 539a .*

What advice did the health provider give you on breastfeeding?

DO NOT READ THE RESPONSES. CIRCLE ALL MENTIONED.

Breastfeed immediately/as soon as possible…..1
Give colostrum……..……2
Don't give formula ……3
Breastfeed exclusively……..….4
More frequent breastfeeding leads to more milk produced by mother…….……..….5
Other ways to increase milk production…….6
How to breastfeed……..…….…...…7
Mother should plan breastfeeding together with family……..……8
Benefits of breast milk for newborn, "is good, the best"…….……..……...…...9
Give food/drink besides breast milk…….10
Breast/nipple care/cleaning……...11
Mother should eat nutritious food…….12
Mother should eat vegetables……13
Other, specify: _____14
Not Applicable ……..……97

Q. #	Question	Codes	Go to Q.
541	*Ask the following question only if the mother answers "yes" to 539c.* What advice did the health provider give you on how to treat the umbilical cord? DO NOT READ THE RESPONSES. CIRCLE ALL MENTIONED.	Do not put anything on the cord……..1 Clean with alcohol……...2 Provided with microform/betadine…….3 Clean with soap and water……..…4 Do not cover the cord……5 Other, specify: _____6 Not Applicable …….……97	
542	*ASK THE FOLLOWING QUESTION ONLY IF THE MOTHER ANSWERS 'YES' TO 539f.* What advice did the health provider give you on how to keep the newborn warm? *DO NOT READ THE RESPONSES. CIRCLE ALL MENTIONED.*	Cover with blanket……..…...…1 Put on mother's breast/abdomen…….....2 Skin-to-skin contact/kangaroo……3 Apply warm water compress……..4 Cover head with hat/cap…….5 Put on gloves..…… ……6 Put on socks.……..7 Delay bathing…….…..….8 Other, specify: _____9 Not Applicable …….……97	
543	When was [NAME] bathed for the first time after delivery? IF LESS THAN ONE DAY, PROBE TO RECORD THE NUMBER OF HOURS OF LIFE WHEN BATHED.	HOURS…….. 1 ☐☐ DAYS…….. 2 ☐☐ DON'T KNOW……998	
544	Did you ever breastfeed [NAME]?	Yes……..…….1 No……..……..2 Baby died early……3	→ 551 → 551
545	How long after birth did you first put [NAME] to the breast?	During the first hour after delivery.…….1 More than 1 hour. ..……..…2 Don't know……..…8	
546	Did you give [NAME] the first liquid (*begauti*) that came from your breasts?	Yes……..1 No……2	
547	Are you still breastfeeding [NAME]?	Yes……..1 No……...2	→ 550

Q. #	Question	Codes			Go to Q.
548	Interviewer: "Now I would like to ask you about liquids your baby [NAME] drank yesterday during the day or at night. Did [NAME] drink:" (**READ ALL**)				
		Unprompted	Prompted		
		Yes	Yes	No	
	1 Plain water?	1	2	3	
	2 Honey?	1	2	3	
	3 Non-breast (animal) milk?	1	2	3	
	4 Infant formula?	1	2	3	
	5 Expressed breastmilk?	1	2	3	
	6 Fruit juice?	1	2	3	
	7 Daal?	1	2	3	
	8 Yogurt or mohi?	1	2	3	
	9 Tea?	1	2	3	
	10 Ghee?	1	2	3	
	11 Did you feed your baby any liquids using a bottle?	1	2	3	
	12 Did you give any other liquids (specify) __?	1	2	3	
549	Interviewer: "Now I would like to ask you about the food [NAME] ate yesterday during the day or at night, either separately or combined with other foods. Did [NAME] eat:" (**READ ALL**)				
	13 Jaulo?	1	2	3	
	14 Lito?	1	2	3	
	15 Biscuits?	1	2	3	
	16 Noodles?	1	2	3	
	17 Fruits?	1	2	3	
	18 Vegetables?	1	2	3	
	19 Bread?	1	2	3	
	20 Bhaat?	1	2	3	
	21 Meat, fish or eggs?	1	2	3	
	22 Did you give any other solids (specify) __?	1	2	3	
550	At how many completed months of age did you first start giving food or drink other than breast milk to your baby?	# months: ____ ____ Baby exclusively breastfed until now .. 95 Don't know …….. 98			
551	Please tell me when should a newborn child be breast fed for the first time after birth?	Immediately after the birth…….....1 After the placenta is out.....……...2 After bathing the new born……...3 After 24 hours after birth.....……4 Other (specify) _____5 Don't know……..…….8			
552	In the last three months, have you heard, seen, or read the message: "A newborn should be breast fed within one hour after birth."	Yes……1 No……..2			→554
553	Please tell me where you saw or heard the message or who told you about it? "A newborn should be breastfed within one hour after birth." *Circle all responses which the mother Mentions unprompted. Then ask,* "Is there anything else." Then, read each question and circle "2" for "yes" or "3" for "no."				
		Unprompted	Prompted		
		Yes	Yes	No	
	1 FCHV	1	2	3	
	2 TBAs	1	2	3	
	3 NGO workers	1	2	3	
	4 Other health personnel	1	2	3	
	5 Friends	1	2	3	
	6 TV	1	2	3	
	7 Radio	1	2	3	
	8 Posters/pamphlets	1	2	3	
	9 BPP flip chart	1	2	3	
	10 Street dramas	1	2	3	
	11 Any other (specify) _____	1			
	97 Nobody	7			

Q. #	Question	Codes	Go to Q.
554	Please tell me when should a newborn child be bathed after the birth?	Immediately after the birth.…….…....1 Within 24 hours after birth.…….....2 After 24 hours after birth...…….....3 Should not be bathed....…….....4 Other, specify: _____5 Don't know……..……..8	
555	In the last three months, have you seen, heard, or read the message "A newborn should have their first bath delayed until at least 24 hours after birth."	Yes……1 No……..2	→557

556 Please tell me where you saw or heard the message or who told you about it?

"A newborn should have their first bath delayed until at least 24 hours after birth."
Circle all responses which the mother mentions unprompted. Then ask, "Is there anything else."
Then, read each question and circle "2" for "yes" or "3" for "no."

	Unprompted	Prompted	
	Yes	Yes	No
1 **FCHV**	1	2	3
2 TBAs	1	2	3
3 NGO workers	1	2	3
4 Other health personnel	1	2	3
5 Friends	1	2	3
6 TV	1	2	3
7 Radio	1	2	3
8 Posters/pamphlets	1	2	3
9 BPP flip chart	1	2	3
10 Street dramas	1	2	3
11 Other, specify: _____	1		
97 Nobody	7		

Danger signs

557 During your delivery, did you experience any danger signs?
Circle all responses which the mother mentions unprompted. Then ask, "Is there anything else."
Then, read each question and circle "2" for "yes" or "3" for "no."

	Unprompted	Prompted	
	Yes	Yes	No
1 Heavy bleeding?	1	2	3
2 Convulsions?	1	2	3
3 Prolonged labor (>8 hours)?	1	2	3
4 The baby's hand, leg or cord came out first ?	1	2	3
5 Other, specify:	1		
6 No problems	7		→ 561

558 What did you do or whom did you consult for the problems that you stated above?
Circle all responses which the mother mentions unprompted. Then ask, "Is there anything else."
Then, read each question and circle "2" for "yes" or "3" for "no."

	Unprompted	Prompted	
	Yes	Yes	No
SKILL PERSONNEL			
1 Doctor	1	2	3
2 Nurse	1	2	3
3 ANM	1	2	3
CONSULTED TRAINED PERSONNEL			
4 HA/AHW	1	2	3
5 MCHW	1	2	3
6 VHW	1	2	3
OTHER PERSONNEL			
7 FCHV	1	2	3
8 TTBA	1	2	3
9 TBA	1	2	3

Q. #	Question	Codes			Go to Q.
	10 Other HW	1	2	3	
	11 Dhami Jhakri (traditional healers)	1	2	3	
	12 Consulted relative/neighbor/friend	1	2	3	
	13 Bought medicine from pharmacy	1	2	3	
	14 Given medicine at home	1	2	3	
	15 Other (specify): _____	1			
	97 Nothing	7			
559	Were you referred for any of these problems?	Yes……1 No……..2			→561
560	Where did you go? *Circle all responses which the mother mentions unprompted. Then ask,* "Is there anywhere else." Then, read each question and circle "2" for "yes" or "3" for "no."				
		Unprompted	Prompted		
		Yes	Yes	No	
	PUBLIC SECTOR				
	1 Hospital	1	2	3	
	2 PHCC	1	2	3	
	3 Health post	1	2	3	
	4 Sub-health post	1	2	3	
	PRIVATE SECTOR				
	5 Pvt. Clinic/Nursing Home	1	2	3	
	HOME				
	6 Your home	1	2	3	
	7 TBA home	1	2	3	
	8 FCHV home	1	2	3	
	9 Other (specify): _____	1			
561	In the past three months, have you seen, heard, or read anything about attendance of a trained health worker during delivery on the radio or television or in the newspaper or anywhere else?	Yes……..……..……..1 No……...……..2			
562	In the past three months, have you seen, heard, or read anything about attendance of a FCHV during delivery on the radio or television or in the newspaper or anywhere else?	Yes……..……..……..1 No……..2			
	Checkbox 5.2 **Interviewer: Check questions 561 and Q562 and circle below:** Answered "yes" in Q561 or Q562 or both .....1 Answered "no" in both Q561 and Q562 2				→ Sec 6
563	Please tell me where you saw or heard a message on attendance of a trained health worker during delivery or who told you about it. *Circle all responses which the mother mentions unprompted. Then ask,* "Is there anywhere else." *Then, read each question and circle "2" for "yes" or "3" for "no."*				
		Unprompted	Prompted		
		Yes	Yes	No	
	1 FCHV	1	2	3	
	2 TBAs	1	2	3	
	3 NGO workers	1	2	3	
	4 Other health personnel	1	2	3	
	5 Friends	1	2	3	
	6 TV	1	2	3	
	7 Radio	1	2	3	
	8 Posters/pamphlets	1	2	3	
	9 BPP flip chart	1	2	3	
	10 Street dramas	1	2	3	
	11 Other, specify: _____	1			
	97 Nobody	7			

Section 6: Post-natal Care for the Mother

Q. #	Question	Codes	Go to Q.
601	**Check Q N. 506, (**Place of delivery)	Public Sector: Hospital.....1 PHCC.....2 Health post.....3 Sub-health post.....4 Private sector Pvt. Clinic/n. Home.....5 Your home …… 6 TBA home ……..... 7 FCHV home…….8 Other, specify: _____ 9	→603
602	**FOR BIRTHS IN OWN/OTHER HOME, ASK:** After [NAME] was born and the health care provider, FCHVor traditional birth attendant left your home, did any health care provider or a traditional birth attendant check on your health? Note: For women with a stillbirth, ask: "After you lost your baby, and the health care provider, FCHV or traditional birth attendant left your home, , did any health care provider or a traditional birth attendant check on your health?	Yes……. 1 No…… 2	→604 →611
603	**FOR BIRTHS IN HEALTH FACILITY, ASK:** After you were discharged, did any health care provider or a traditional birth attendant check on your health?	Yes……. 1 No.…… 2	→611
604	In the first month, after [NAME] was born, how many times did a health care provider or traditional birth attendant check on your health?	# TIMES MOTHER 1 ☐☐	
605	How long after delivery did the first check take place? IF LESS THAN ONE DAY, RECORD HOURS.	HOURS 1 ☐☐ DAYS 2 ☐☐ Don't know…….998	
606	Who checked on your health at that time? PROBE FOR MOST QUALIFIED PERSON.	**Skilled Personnel** Doctor…….……...1 Staff Nurse . . . ……..…...2 ANM…….……..……..... 3 **Trained Personnel** MCHW……...……..…4 HA ……..…..5 AHW / CMA ……..….. …...……6 VHW.....…….…….……7 FCHV……8 O**ther Personnel** Trained TBA…….……..…...9 Untrained TBA……..…..…10 Relative/Friend …….…….…11 Other, specify: _____12	

Q. #	Question	Codes			Go to Q.
607	What things did she or he do to check on your health? *Circle all responses which the mother mentions unprompted. Then ask,* "Is there anything else." *Then, read each question and circle "2" for "yes" or "3" for "no."*				
		Unprompted	Prompted		
		Yes	Yes	No	
	1 Did she examine your body?	1	2	3	
	2 Did she check your breasts?	1	2	3	
	3 Did she check for heavy bleeding?	1	2	3	
	4 Did she check for fever?	1	2	3	
	5 Did she refer you to a health center/hospital?	1	2	3	
	6 Other (specify)_____	1			
	97 Nothing	7			
	Check box 6.1 Interviewer: Check questions Q604 and circle below: More than one postnatal check for mother .....1 Only one visit.....2				→ 611
608	How long after delivery did the second check of your health take place? IF LESS THAN ONE DAY, RECORD HOURS. IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS 1 ☐☐ DAYS 2 ☐☐ WEEKS 3 ☐☐ Don't know……..…….998			
609	Who checked on your health at that time? PROBE FOR MOST QUALIFIED PERSON.	**Skilled Personnel** Doctor…….……...1 Staff Nurse . . . …….…...…...2 ANM…..……...……..... 3 **Trained Personnel** MCHW……...……...…4 HA ……..…..5 AHW/CMA ……..….. ……..……6 VHW.....…….…….……7 FCHV…….8 O**ther Personnel** Trained TBA…….……...…...9 Untrained TBA……..……10 Relative/Friend …….…….11 Other, specify: _____12 Nobody …… 97			
610	Where did this second check take place? PROBE TO IDENTIFY THE TYPE OF PLACE AND CIRCLE THE APPROPRIATE CODE. IF UNABLE TO DETERMINE IF A HOSPITAL, HEALTH CENTER, OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**Public Sector:** Hospital.....1 PHCC.....2 Health post.....3 Sub-health post.....4 **Private sector** Pvt. Clinic/n. Home.....5 **Home** Your home ……..… 6 Other/TBA home ……..… 7 FCHV home……..…..8 Other, specify: _____ 9			
611	**Check Box 6.2** **Interviewer: Check questions B and E (page 2), and circle below:** Baby still alive or baby born alive then died .....1 Baby stillborn.....2				→ End interview

Section 7: Post-natal Care for the Newborn

Q. #	Question	Codes	Go to Q.
701	**Check Q N. 506, (**Place of delivery)	Public Sector: Hospital..1 PHCC...2 Health post...3 Sub-health post ....4 Private sector Pvt. Clinic/n. Home ....5 **Your home ………………...….……..… 6** TBAhome …………………......…....... 7 FCHV home……………………….…..…..8 Other, specify: ___________________ 9	(1–4) →703
702	**FOR BIRTHS IN OWN/OTHER HOME, ASK:** After [NAME] was born and the health care provider or traditional birth attendant left your home, did any health care provider or a traditional birth attendant check on his/her health?	Yes………………………………………. 1 No………..…………………………… 2	→704 →711
703	**FOR BIRTHS IN A HEALTH FACILITY, ASK:** After you were discharged, did any health care provider or a traditional birth attendant check on [NAME'S] health?	Yes………………………………………. 1 No………..…………………………… 2	 →711
704	In the first month, after [NAME] was born, how many times did a health care provider or traditional birth attendant check on his/her health?	# TIMES BABY 1 ☐ ☐	
705	How long after delivery did the first check take place? IF LESS THAN ONE DAY, RECORD HOURS. IF LESS THAN ONE WEEK, RECORD DAYS	HOURS 1 ☐ ☐ DAYS 2 ☐ ☐ WEEKS 3 ☐ ☐ Don't know…………………………….998	
706	Who checked on his/her health at that time? PROBE FOR MOST QUALIFIED PERSON.	**Skilled Personnel** Doctor…………………….……………...1 Staff Nurse . . . ………………….....…...2 ANM….…………..…………….............. 3 **Trained Personnel** MCHW……………………......……..…4 HA ………………………………...…..5 AHW / CMA ……………….….. …………6 VHW........………………….…………….…7 FCHV…………………………………….8 **Other Personnel** Trained TBA……………….……..…...9 Untrained TBA………………..…..…10 Relative/Friend ……………….…….….11 Other, specify: ___________________12	

Q. #	Question	Codes			Go to Q.
707	What things did she or he do to check on your baby's health? *Circle all responses which the mother mentions unprompted. Then ask,* "Is there anything else." *Then, read each question and circle "2" for "yes" or "3" for "no."*				
		Unprompted	Prompted		
		Yes	Yes	No	
	1 Did she generally examine the baby's body?	1	2	3	
	2 Did she weigh the baby?	1	2	3	
	3 Did she check the umbilical cord?	1	2	3	
	4 Did she observe breastfeeding?	1	2	3	
	5 Did she refer you to a health center/hospital?	1	2	3	
	6 Did she take temperature using thermometer?	1	2	3	
	7 Did she take temperature without thermometer?	1	2	3	
	8 Other, specify______________________	1			
	97 Nothing	7			
	98 I wasn't there/Don't know	8			
	<u>Check box 7.1</u> **<u>Interviewer</u>: Check question 704 and circle below:** More than one postnatal check for baby ....1 Only one visit....................2				 → 711
708	How long after delivery did the second check of your baby's health take place? IF LESS THAN ONE DAY, RECORD HOURS. IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS 1 ☐ ☐ DAYS 2 ☐ ☐ WEEKS 3 ☐ ☐ Don't know…………………………….998			
709	Who checked on his/her health at that time? PROBE FOR MOST QUALIFIED PERSON.	**Skilled Personnel** Doctor……………………..1 Staff Nurse . . . ……………………2 ANM……………………… 3 **Trained Personnel** MCHW………………………4 HA …………………………5 AHW / CMA …………………6 VHW........……………………7 FCHV…………………………8 **Other Personnel** Trained TBA…………………9 Untrained TBA………………10 Relative/Friend ………………11 Other, specify: ____________________12			
710	Where did this second check take place? PROBE TO IDENTIFY THE TYPE OF PLACE AND CIRCLE THE APPROPRIATE CODE. IF UNABLE TO DETERMINE IF A HOSPITAL, HEALTH CENTER, OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE.	**Public Sector:** Hospital ....1 PHCC ....2 Health post ....3 Sub-health post ....4 **Private sector** Pvt. Clinic/n. Home ....5 **Home**			

Q. #	Question	Codes	Go to Q.
	______________________ (NAME OF PLACE)	Your home ……………………..……..… 6 Other/TBA home ……………..…........... 7 FCHV home………………………….……..8 Other, specify: ____________________ 9	
711	Was [NAME] weighed any time after birth?	Yes……………………………………..1 No………………………………………2 Don't know……………………….…….8	 → 716 → 716
712	When was your baby [NAME] weighed the **first time** after birth?	Within 24 hours ……………………… 1 1-2 days……..…………………………2 3 days…………………………………..3 After 3 days ……………………………4 Don't know……………………………..8	
713	Where was the baby weighed?	**Public Sector:** Hospital..1 PHCC...2 Health post..3 Sub-health post ....4 **Private sector** Pvt. Clinic/n. Home ....5 **Home** Your home ……………………………..… 6 Other/TBA home ………………………… 7 Other, specify: ______________________ 8	
714	Who weighed the baby?	**Skilled Personnel** Doctor…………………..………….……...1 Staff Nurse . . . ……………..………..……....2 ANM……………….……………............. 3 **Trained Personnel** MCHW……………….….……...……..…4 HA ……………………….……….……..…..5 AHW / CMA …………....….. ……..……6 VHW........………………..……………..……7 FCHV……………………..………………8 **Other Personnel** Trained TBA……………………..…..……..9 Untrained TBA……………………...……10 Relative/Friend ……………..…………..…..11 Other, specify:______________________12	
715	How much did [NAME] weigh? RECORD WEIGHT IN KILOGRAMS FROM HEALTH CARD, IF AVAILABLE.	KG FROM CARD ☐ . ☐ ☐ ………………..………1 KG FROM RECALL ☐ . ☐ ☐ ……………...…2 DON'T KNOW………………………..99.98	
716	When [NAME] was born, was he/she very large, larger than average, average, smaller than average, or very small?	Very large…………………………………1 Larger than average………………………2 Average……………………………..….....3 Smaller than average……………….…....4 Very small………..……………............. 5 Don't know…………………………… 8	(1–3) → Sec. 8
717	Because your baby was small, did you receive extra visits from a health provider?	Yes……………………………………. 1 No…………………………………… 2 Don't know………………….…………8	
718	What advice did FCHV give when your baby [NAME] was small? **Probe:** What else advice?	Frequent breast feeding...............................1 Keep baby warm....................................... 2 Newborn danger signs................................ 3 Repeatedly weigh baby…......................... 4 Repeated visit 5	

Q. #	Question	Codes	Go to Q.
		Other, specify:_____ _____6 FCHV not visited……96 No advice.....…97 Don't know.....98	→722
719	Following your last delivery, did the FCHV talk about "keeping the baby in skin-to- skin contact with the mother?"	Yes……..1 No……...2	
720	Because your baby was small, was [NAME] referred to a health facility?	Yes……. 1 No…… 2	→722
721	Did you take the baby to health facility?	Yes……..…….1 No...……..……..2	
722	Because your baby was small, did you give extra care to your baby?	Yes……. 1 No…… 2	→724
723	What extra care did you give to your baby? CIRCLE ALL MENTIONED.	More frequent breastfeeding…… 1 Skin-to-skin care…….. 2 Fed by cup or spoon……3 Other, Specify: _____4	
724	Was the baby placed in SKIN-to-SKIN contact in the first 24 hours after delivery?	Not at all ……..1 A little (up to 2 hours total)……..2 Moderate amount (between 2 to 5 hours total)……3 A lot (more than 5 but less than 12 hours)……..…..4 Most of the time (day & night, more than 12 hours)…….……..5	→726
725	How soon after delivery was the baby placed SKIN-to-SKIN for the first time?.	Before the cord tied……..……1 After the cord tied, before the placenta delivered……..…2 After the placenta delivered, within the first hour after birth……..…….3 After one hour after delivery……4 DK ……..…8	
726	For how many days did your baby get skin to skin contact?	Number of days: ☐☐ Not at all…… 96	→Sec. 8
727	Did your baby get skin-to-skin contact for 24 hours a day?	Yes……1 No…….2	→729
728	How many days did your baby get skin to skin contact for 24 hours?	Number of days: ☐☐	
729	Who else did skin-to-skin contact for your baby? (Multiple Responses.)	Husband……1 Mother-in-law……2 Other family member…….3 Other, specify: _____ 4 No one……7	

Section 8: Sick Newborn Care

Q. #	Question	Codes	Go to Q.
801	What are the danger signs/symptoms after giving birth indicating the need to seek health care for a baby less than a month? *When she has finished answering, ask* "Is there anything else?" *CIRCLE ALL RESPONSES MENTIONED.* .	Fever……1 Unable to suckle/feed……2 Difficult/fast breathing……3 Diarrhea……4 Convulsions……5 Persistent vomiting……6 Yellow palms/soles/eyes/jaundice……7 Lethargy……8 Unconsciousness……9 Red/discharging eyes……10 Skin pustules……11 Skin around cord red……12 Pus from cord……13 Failure to pass urine……14 Shivering/cold baby/low temperature……15 Bluish palms and soles……16 Very small baby/below normal weight……17 Baby doesn't cry at birth……18 Baby cries stridently……19 Other, specify: _____20 Do not know……98	
802	Did [Name] experience any danger sign/symptoms during the first month following delivery?	Yes……1 No……2 Don't know……8	→End the interview → End the interview
803	What were the danger signs/symptoms that [NAME] experienced? *Circle all responses which the mother mentions unprompted. Then ask,* "Is there anything else." THEN, READ EACH QUESTION AND CIRCLE "2" FOR "YES" OR "3" FOR "NO."		

		Unprompted	Prompted		Most serious episode (Q806)
		Yes	Yes	No	
1	Fever	1	2	3	4
2	Unable to suckle/feed	1	2	3	4
3	Difficult/fast breathing	1	2	3	4
4	Diarrhea	1	2	3	4
5	Convulsions	1	2	3	4
6	Persistent vomiting	1	2	3	4
7	Yellow palms/soles/eyes/jaundice	1	2	3	4
8	Lethargy	1	2	3	4
9	Unconsciousness	1	2	3	4
10	Red/discharging eyes	1	2	3	4
11	Skin pustules	1	2	3	4
12	Skin around cord red	1	2	3	4
13	Pus from cord	1	2	3	4
14	Failure to pass urine	1	2	3	4
15	Shivering/cold baby/low temperature	1	2	3	4
16	Bluish palms and soles	1	2	3	4
17	Very small baby/below normal weight	1	2	3	4
18	Baby doesn't cry at birth	1	2	3	4
19	Baby cries stridently	1	2	3	4
20	Other (specify):_____	1			4

Q. #	Question	Codes	Go to Q.
804	How many episodes of illness did [NAME/BABY] have up to the age of 1 month?	Number [___|___]	
805	How many times did you seek medical help up to the age of 1 month?	Number of times …..……[|] Never ever examined ……97	
806	**CHECK BOX: 8.1** **IF MORE THAN ONE EPISODE OF ILLNESS, IDENTIFY WHAT MOTHER FELT WAS MOST SERIOUS EPISODE. CHECK THE APPROPRIATE BOX IN THE LAST COLUMN IN THE TABLE FOR Q 803**		
807	MOST SERIOUS ILLNESS How old was [NAME] when the problem started? If less than 1 day, record hours. If less than 1 week, record days. Otherwise record weeks.	HOURS 1□□ DAYS 2□□ WEEKS 3□□ DON'T KNOW…….998	
808	How was [NAME] treated for this illness at home? *Circle all responses which the mother mentions unprompted. Then ask,* "Is there anything else." *Then, read each question and circle "2" for "yes" or "3" for "no."*		

	Unprompted Yes	Prompted Yes	Prompted No
1 By giving drugs	1	2	3
2 By giving herbs	1	2	3
3 By bringing health provider to home	1	2	3
4 By taking advice of the health provider	1	2	3
5 Other (specify)	1		
97 No treatment	7		

809	How long after illness started was care initialised at home?	Hours [___|___] Days [___|___] No care given at home…….……96 Don't know..... 98	
810	Did you seek advice or treatment for the illness outside the home?	Yes ..... 1 No ..... 2 Don't Know 8	→823 →823
811	How much time after illness started was [NAME] brought outside the home for care?	Hours [___|___] Days [___|___] Don't know 998	
812	Whom did you go to for the **first time** for the problem?	**Skilled Personnel** Doctor……..…….……...1 Staff Nurse . . . ……..…….…….....2 ANM….…….……..... 3 **Trained Personnel** HA/AHW……..…….…..…..…4 MCHW ……..…….…..…..5 VHW.....……..……6 **Other Personnel** FCHV…….…….……7 TTBA……..…..…….…...8 TBA……..……..…9 Relative/Friend ……..…….…..…..10 Other, specify:_____11	

Q. #	Question	Codes	Go to Q.
813	From where did you seek care for the first time?	**Public Sector** Hospital.....1 PHCC.....2 Health post.....3 Sub-health post.....4 **Private sector** Pvt. Clinic/N. Home.....5 **Home** TBA home ……..… 6 FCHV home……7 Other, specify: _____ 8	
814	How did you take [NAME] to the hospital/clinic/care provider? **(Multiple Response)**	Taxi…….1 Bus…….2 Bicycle……3 Motor Cycle……4 Horse/Donkey……5 Horse/Donkey Cart/Bullock cart…….6 On foot……..……7 Other (specify) _____….……8	
815	Was it difficult to find the transport?	Yes……1 No……..2 Don't Know……...8	
816	How much time did it take to go there?	Minutes [_____]_____] Hours [_____]_____] Don't Know…….998	
817	On your way to the health facility (other), what did you do to care for your baby? *Circle all responses which the mother mentions unprompted. Then ask,* "Is there anything else." *Then, read each question and circle "2" for "yes" or "3" for "no."*		

	Unprompted	Prompted	
	Yes	Yes	No
1 Skin-to-skin	1	2	3
2 Kept baby bundled	1	2	3
3 Breastfed	1	2	3
4 Other (specify)_____	1	2	3
7 Nothing	7		
8 Don't Know	8		

	<u>Check Box 8.2 Interviewer</u>: Check question 812 and circle below: Examined by an FCHV .....1 Not examined by an FCHV 2		→ 819
818	If examined by an FCHV, did she give a referral form to call the VHW/MCHW? (**Note:** show referral/call form)	Yes ……1 No ……..……2	
819	At that time, was a pediatric tablet of Cotrimoxazole given?	Yes ……1 No ……..……2	→824
820	How many days did you give Cotrim?	#Days ……... ☐☐	
821	What was the condition of your baby [NAME] at last dose of Cotrim?	Improved..... 1 Worse ……2 Same ……3 Dead……4 Don't' know……8	
822	Did you pay for Cotrim?	Yes……1 No……2	→824 →824

Q. #	Question	Codes	Go to Q.
823	**Why didn't you seek care for your neonate outside your home?** If the respondent says, respected 'FAMILY MEMBERS DID NOT ALLOW', probe to identify who that family member is: husband? Mother? Mother-in-law? Father? Father-in-law? Grand mother/grand father? Specify		

		Unprompted	Prompted	
		Yes	Yes	No
	1 Expecting self resolution of the illness	1	2	3
	2 Health facility too far/no transportation	1	2	3
	3 Cost of treatment service high	1	2	3
	4 Don't trust facility/poor quality of care	1	2	3
	5 Respected family members did not allow	1	2	3
	6 The traditional birth attendant didn't allow	1	2	3
	7 Not customary to seek care outside home after childbirth	1	2	3
	8 Other (specify): _____	1		
	97 No reason given	7		

824	Now I would like to know how frequently your baby was breastfed during the illness. Was he/she breastfed less than usual, about the same or more than usual frequency?	Less than usual……..... 1 Same as usual…….....2 More than usual……..…3 Nothing to drink ……...…4 Don't know . .…….....….....8

Thank you for your time and cooperation in answering my questions. The information that you have provided will help us to improve the health of women and children throughout Nepal.