Final Evaluation of Municipal Health Partnership Programme (MHPP)

in Bogra, Dinajpur, Gaibandha, Joypurhat, Kurigram, Nilphameri, Rangpur Municipalities of Rajshahi Division, Bangladesh

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ACRONYMS

ANC	Antenatal Care
AIDS	Acquired Immuno-deficiency Syndrome
ARI	Acute Respiratory Infection
BDHS	Bangladesh Demographic and Health Survey
CBA	Community Birth Assistant
CEmOC	Comprehensive Emergency Obstetric Care
CHV	Community Health Volunteer
C-IMCI	Community-Integrated Management of Childhood Illness
CSSA	Child Survival Sustainability Assessment
EoP	End of Project
EPP	Extremely Poor People
FP	Family Planning
FWVs	Family Welfare Visitors
HICAP	Health Institution Capacity Assessment Process
HMIS	Health Management Information System
IFA	Iron Folic Acid
IMCC	Inter-Ministerial Coordination Committee
KPC	Knowledge, Practice and Coverage Survey
LAMB	Lutheran Aid to Medicine in Bangladesh
LOE	Level of Effort
MCH	Maternal and Child Health
MCWC	Maternal and Child Welfare Center
MESPCC	Municipal Essential Services Package Coordination Committee
MHD	Municipality Health Department
MHPP	Municipal Health Partnership Program
MOH&FW	Ministry of Health and Family Welfare
MOLGR&C&C	Ministry of Local Government and Rural Development Cooperatives
MNCH	Maternal, Newborn and Child Health
NGO	Non-Government Organization
PHC	Primary Health Care
PPC	Postpartum Care
RMP	Rural Medical Practitioners
TT	Tetanus Toxoid
UNICEF	United Nations International Children's Fund
USAID	United States Agency for International Development
WHC	Ward Health Committee

A. Executive Summary

The goal of United States Agency for International Development (USAID) Child Survival Health Grants Program is to contribute to sustained improvements in child health by supporting the work of private voluntary organizations and their partners. The Municipal Health Partnership Program (MHPP) (Oct 2005-Sept 2009) scaled-up the precedessor child survival program. MHPP expanded into seven municipalities and adapted the model where Concern facilitated building the capacities of the municipal (political) leadership and health department as well as raising awareness and mobilizing available resources at the community level. Working in close partnership with seven municipalities, the goal of MHPP is to reduce maternal and child morbidity and mortality. Concern Worldwide Bangladesh engaged a team to conduct MHPP's final evaluation from April 24-May 10, 2009. The Team was led Susan Rae Ross, an international health expert and a national consultant, Dr. Akhter Hamid.

1. Results

Result #1: Sustaining improvements in MCH planning and coordination systems. Although the MOLGRD&C's urban health policy calls for the creation of municipal and community level committees few exist. MHPP supported the development of seven municipal coordinating bodies and 73 ward health committees (WHC). Capacity assessments of these bodies demonstrate significant gains in their ability to manage and coordinate health activities. The Team was very impressed by the level of enthusiasm and commitment to health exhibited by the elected officials. One indication of their commitment is the increase ($188,000 from 07-08) in the health budget. All the stakeholders said they would continue to support health efforts.

Result #2: Improve Preventive and Care-Seeking Practices for Sick children. Table 1 provides a summary of the project's knowledge, practice and coverage surveys which clearly demonstrates that MHPP overall was quite successful. In terms of child health there has been improvements in care seeking practices for pneumonia, complementary feeding and Vitamin A supplementation. Based on the Lives Saved calculator, the result of MHPP activities contributed to 1,077 children's lives being saved.

Table 1: Summary of MHPP Health Outcome Results, 2005 vs 2009

Indicator	Baseline (2005)	Final (2009)	EoP Target
Knowledge of 4 dangers signs of sick child	15%	60%	35%
ARI – seek treatment	45%	58%	60%
Use of ORT	71%	73%	80%
More food/liquids during diarrhea	38%	27%	50%
Mothers hand washing at 5 critical times	16%	17%	30%
Complementary feeding (6-11 months)	57%	92%	45%
Vitamin A (12-23 months)	59%	92%	85%
Iron supplementation (90 days)	42%	52%	60%
Pregnant women ate more food than usual during pregnancy	32%	43%	45%
Birth preparation	16%	16%	30%
Delivery with Skilled Birth Attendant (SBA) (1)	49%	58%	60%
Delivery with Community Birth Attendant (CBA) (2)	18%	28%	20%
Vitamin A postpartum	25%	49%	50%
Breastfeeding initiation (within 1st hour)	42%	42%	60%
Newborn immediately wrapped with clean cloth	17%	16%	30%

Skilled Birth Attendant: Doctors, Nurse, FWV. CBAs: Trained Traditional Birth Attendants

Result #3: Improve Maternal and Newborn Care Practices
More women at least three antenatal care visits, from 58% to 73%. There was an increase with women delivering with skilled birth attendants and trained CBAs. Post-partum and newborn care both increased and there was significant increase in women receiving post-partum Vitamin A.

2. Cross-Cutting Results

Equity/Reaching the Poor: The WHCs visited had identified extremely poor people (EPP) and had developed mechanisms to support them to access services. The data shows that while the entire population benefited, the poor benefited the most. A composite of MNCH indicators shows the greatest improvements occurred among poorest (Q1), from 28% to 41%, a 13% increase. This was followed by an 11% improvement for people in (Q2). A smaller gain was seen for Q4 and no change among the richest residents. **Overall, the equity *gap* dropped from 29.9% to 16%.**

Sustainability of the Urban Health Model: One of the WHC members had this response when asked about sustainability.

"We can continue to have meetings; Concern never gave us money, they gave us ideas. However, who will keep pushing us and giving us ideas?"

The Team thinks that the municipal leadership needs to identify an entity (e.g., MHD staff and/or NGOs) that can continue to play this important catalytic role, played by Concern under MHPP. The Team also believes that developing a cross-learning mechanism among the municipalities will help to energize their efforts.

A major concern expressed by all stakeholders is the upcoming elections. Even though many of the municipalities and WHC are functioning fairly well, they do not have a plan to orient the candidates and/or new political leadership to support health or new WHC members.

Scaling–up of Urban Health Model: MHPP has clearly demonstrated its effectiveness with evidence to support its results. The Team believes that in order to both sustain the model and enhance the likelihood of its replication, Concern Bangladesh needs to maintain a learning relationship with these municipalities.

Concern is finalizing an *Operations Manual for Strengthening Urban Health Systems* that will provide step-by-step instructions and we believe will facilitate the transfer "technology" of the model. However, if the model is to be adopted by the MOLGRD&C or donors it needs to be "packaged" in a way that is easy for donors to "buy".

3. Recommendations

Recommendations are divided into three categories in Table 2. First, The Team provides guidance to the local stakeholders that reinforces their current capacities and identifies areas that should be strengthened. Second, specific recommendations are provided for the Concern Bangladesh/MHPP Team to focus on for successfully ending the project. Third, the Team provides ideas regarding dissemination and scale-up of the model that may contribute to further urban programming.

Table 2: Summary of Key Recommendations

Local Stakeholders	Concern Bangladesh MHPP Team	Concern Bangladesh Future
Municipal leadership should continue sustain/increase the health budget.	Assist municipalities to identify ways to further develop their leadership in health.	Maintain a learning relationship with the (nine) municipalities.
Municipal Coordinating committee should identify/cultivate a relationship with a NGOs private sector health providers	Assist the municipalities to develop a mechanism to promote cross municipal learning after MHPP	
Municipalities/WHC should continue sharing innovations in terms of: 1) fundraising; 2) management of WHC emergency funds; and 3) sharing local solutions to recognizing the efforts of CBAs and CHVs	Assist the MHD to develop a system to train new CHVs	Ensure that model is well documented, packaged, and marketed to facilitate transfer. In addition, this should be actively shared with key urban health decision-makers
	Assist the MHD to develop a strategy to create the linkage with MCWC staff and CBAs	
	Identify income generating activities for the CBAs/CHVs	
	Assist WHCs to complete final capacity assessments	
	Reinforce maternal and newborn danger signs for CBA/ CHV trainers, CBAs and CHVs.	
	Assist WHCs, particularly the Vice-Chairs, to develop a strategy of how to orient newly elected officials after the upcoming election.	

4. Conclusion

In summary, MHPP met or exceeded the majority of its targets, even though there was at least one year of political turmoil that limited implementation. The evidence clearly proves MHPP's hypothesis that "enhancing coordination mechanisms, building municipal capacity and creating community demand can result in the adoption of healthy practices and improvements in health outcomes".

MHPP turned the MOLGRD&C policy into actual functional structures at the municipal and community levels, which facilitated and supported improved health outcomes.

Municipal officials and WHCs have showed significant gains in capacity which can benefit other government and development programs and is key for their sustainability. The Team found that the model is effective in both large and small municipalities, but the time required may vary due to differences in initial capacity levels. The municipal officials, WHC members, and CHVs and CBAs stated that they are committed to continue these efforts after the departure of MHPP.

MHPP had a particular focus on improving conditions for EPP. Data clearly indicates that the model has been successful in ensuring that messages and services reach the poor, with an overall reduction in equity gap from 29.9% to 16%.

The Team believes that Concern Bangladesh should maintain a learning relationship with these municipalities to both act as their advocate with other development partners and to inform Concern Bangladesh's future urban programming.

B. Evaluation Overview

The goal of United States Agency for International Development (USAID) Child Survival and Health Grants Program is to contribute to sustained improvements in child health outcomes by supporting the work of private voluntary organizations and their partners. Concern Worldwide Bangladesh engaged a review team to conduct the final evaluation of the five-year (Oct-Sept 2009) Municipal Health Partnership Program (MHPP) in seven municipalities in Rajshahi Division from April 24-May 10, 2009.

MHPP has three overall objectives, to: 1) sustain improvements in the quality of municipal maternal and child health (MCH) systems; 2) improve preventive and care-seeking practices for sick children; and 3) improve maternal and newborn care practices. Concern Worldwide Bangladesh does not directly provide these services. Rather, as a program facilitator, they devote their time to building the capacities of the municipal political leadership and health department as well as raising awareness and mobilizing available resources at the community or ward level.

1. Terms of Reference

Working in close partnership with seven municipalities, Bogra, Dinajpur, Gaibandha, Joypurhat, Kurigram, Nilphamari and Rangpur, the goal of MHPP is to reduce maternal and child morbidity and mortality. According to the Terms of Reference **(Annex 9)**, the evaluation was designed to be a participatory exercise to assess the process, performance and technical effectiveness of the program as well as develop overarching lessons learned and provide recommendations to phase out the project.

2. Evaluation Team **(Annex 8)**

The evaluation team was led by an international health expert, Susan Rae Ross, and a national consultant Dr. Akhter Hamid. Twelve stakeholders from the municipalities were selected to participate on the evaluation team to promote learning among the municipalities. The Team consisted of

- Three Councillors: Afroza Bulbul (Nilphamari); Nilufa Johur (Joypurhat); Abdur Rahim (Bogra).
- Three Ward Health Committee (WHCs) members: Alam Mia(Gaibandha); Amirul Islam (Rangpur); Ms. Shamsed Begum (Kurigram)
- Two representatives from the Municipal Health Department (MHD): Mafruja Begum (Dinajpur); Tazul Islam (Nilphamari)
- Two Community Health Volunteers (CHVs): S.I. Shahid (Kurigram); Sumon Chandra (Gaibandha)
- Two Community Birth Assistants (CBAs): Ms. Rehana Akhter (Bogra); Ms. Rahela (Joypurhat)

Concern Bangladesh staff also participated in the evaluation including: Dr. Amirul Islam, MHPP Program Manager, Dr. Shamim Jahan, Health Expert, Izaz Raul, Urban Program, Head as well as the technical backstop, Michelle Kouletio, Health Advisor from Concern Worldwide, US in New York.

3. Methodology **(Annex 9)**

The final evaluation involved a number of different components including: 1) reviewing documents; 2) soliciting feedback from national and local stakeholders prior to field visits, 3) conducting field visits to all project municipalities, and 4) sharing findings, recommendation and lessons learned with national and local stakeholders.

The Team Leader contacted the USAID Child Survival Team to solicit their input prior to her arrival in Bangladesh. Second, the consultants reviewed MHPP documents and key documents about the status of urban health in Bangladesh (**Annex 2-** List of References). MHPP conducted the following studies:

1. Knowledge, Practice and Coverage (KPC) surveys in 2005, 2007 and 2009
2. Health Institution Capacity Assessment Process (HICAP) in 2006 and 2008
3. Ward Health Committee (WHC) Capacity Assessments in 2007 and 2008
4. Maternal, newborn, child health (MNCH) review of Maternal and Child Welfare Centers (MCWC) and District hospitals in 2005
5. Preliminary cost study data October 2004 – September 2008

There was an extensive process to solicit feedback from stakeholders in Bangladesh prior to the field visits. On April 26^{th,} the Team Leader and Concern staff met with USAID Bangladesh to discuss the methodology. On April 27, 2009, there was a meeting with 23 national stakeholders in Dhaka to share the methodology and solicit input. On April 28, 2009, the same process was conducted with 54 municipal stakeholders in Rangpur.

The Team was divided into two, one led by Ms. Susan Rae Ross (Bogra, Rangpur, Kurigram) and the other by Dr. Akhter Hamid (Dinajpur, Joypurhat, Gaibandha). Key informant interviews, as outlined in Table 3, were the primary source of data collection to substantiate project results, identify lessons learned and make recommendations for the remainder of the project period. (**Annex 10-** List of Questions and Summary of Field Visits). The Team reviewed and analyzed the findings and agreed on lessons learned and recommendations.

On May 6, 2009, a post-evaluation meeting was held with 51 municipal officials in Rangpur where the findings and recommendations were shared and discussed. A similar meeting was held with 38 national level stakeholders in Dhaka on May 10, 2009. The Team leader, accompanied by the Concern Worldwide US's Health Advisor, Michelle Kouletio, to present project findings, lessons learned and recommendations to USAID/Washington on May 28,2009.

Table 3: Types of Informants Interviewed by Municipality

	Bogra	Dinajpur	Gaibandha	Joypurhat	Kurigram	Nilphamari	Rangpur
Mayors with Cabinet Members					■	■	■
Learning Participants	■		■	■			
Municipal Health Dept Staff	■						
MESPCC w/MHD		■	■				
Typical WHC members	■	■	■			■	
WHC Reps Summit				■	■		■
MCWC Staff		■			■		■
CBAs					■		■
CHVs	■		■	■		■	
Imams				■	■		
RMPs/Homeopaths		■				■	
Families supported in health crisis in past 6 months	■	■	■	■	■	■	■

(MESPCC) Municipal Essential Services Package Coordinating Committee; (WHC) Ward Health Committee; (MCWC) Maternal and Child Welfare Centers; (CBA) Community Birth Attendant; (CHV) Community Health Volunteer; (RMP) Rural Health Practitioner

C. Project Background

1. Urban Health Structures

Bangladesh has a population of about 146 million. Urbanization is rapidly increasing at an estimated 4.6% per annum. Urban centers are expected to represent 33% of the population (over 50 million) by 2010. While many of the urban statistics indicate better access to and use of health services, there are large gaps between the higher and lower economic classes. As urbanization increases, many of the aggregate figures mask the reality for the urban poor. Half of the urban population resides in municipalities or secondary cities where 25% of the children live in households on less than $1 per day (UNICEF 2003). The poor are most vulnerable to disease and have the greatest barriers to accessing health services. For example, a poor-rich ratio of 1.85 for urban children implies that IMR in the poorest quintile is about twice the rate of the richest This information indicates that child survival situation for the urban poor children would be worse in the future because of rapid urbanization and urban poverty would increase particularly in the urban slums where the quality of life is extremely poor (Subir Kumar Saha).

Based on the 1960 Municipal Administration Ordinance, 1977 *Pourshava* Ordinance and 1983 City Ordinance, Municipalities/City Corporations are responsible for providing primary health care (PHC) and limited curative care. However, there are policy gaps between Ministry of Local Government and Rural Development and Cooperatives (MOLGRD&C) and Ministry of Health

and Family Welfare (MOH&FW). Limited coordination between the Ministries has resulted in a lack of adequate financial (health) resources leading to understaffing, absence of community health promotion and minimal involvement of private, and NGO service providers. Consequently, health services are not able to meet the growing needs of the municipal population, particularly the poor.

The 1995 MOLGR&C&C circular clearly stated that urban PHC services should be ensured through effective collaboration among the municipality, health providers and communities.

Specifically the circular called for the formation three committees:

1. at the national level an Inter-Ministerial Coordinating Committee;
2. at the municipal level a Municipal Essential Services Package Coordinating Committee (MESPCC); and
3. at the community level a Ward Health Committee (WHC).

Unlike the rural setting, where the MOH&FW has many health facilities and staff working on PHC services, many based a at the community level, in urban areas the MOH&FW has few facilities or staff. PHC services are provided by (MOH&FW) tertiary and second health facilities as well as private and NGO providers. Table 4 provides an overview of the roles of the Municipality and MOH&FW in coordinating and providing health services.

Table 4: Urban Health Roles and Responsibilities

	Municipalities (MOLGR&C&C)	MOH&FW	
Main Role	Coordination among all sectors (GOB,NGO, Private) to ensure population has access to primary health care and limited curative services	Manage Staff and Service Delivery at the Tertiary/Secondary Level (health Wing)	Manage Staff and Service Delivery at the Tertiary/ Secondary Level (FP wing)
Management	Municipal Health Department Medical Officer/Sanitation Inspector/ Vaccinator/Health Assistant Health Workers	Civil Surgeon	Deputy Director Family Planning
Tertiary Care	No Health Facilities	Medical College Hospital /District Hospitals provide some PHC services (EPI, ANC),CEmOC and IMCI,	MCWC provides (ANC,EPI, CEmoc)
Secondary Care	No Health Facilities		
Primary Care	No Health Facilities	Unlike in rural settings the Health wing does not have any PHC facilities in the urban setting	Unlike in rural setting the FP wing does not have any PHC facilities in the urban setting

Each municipality has a health department (MHD) that is suppose to plan and coordinate health activities with MOH&FW to ensure health activities and be managed by a (medical) doctor; however this position is largely vacant. If a doctor is not present, the Sanitary Inspector heads the MHD. The MHD staff does not have clinical skills; they are largely vaccinators, health assistants, and health workers. The service providers in urban areas are part of the MOH&FW, NGO, or private sector.

The Asian Development Bank (ADB) has supported urban PHC efforts that are currently in their second phase. This has focused on building PHC facilities and maternities in the city corporations and large municipalities through contracted NGOs. They are currently in the process of designing the third phase of the program

USAID/Bangladesh has supported urban child health, specifically immunization, for many years as well as supporting NGO clinics to provide family planning (FP) and MCH services (Smiling Sun franchise)

2. Project Overview

Concern Worldwide began operations in Bangladesh in 1972 by providing post-war relief to refugees and internally displaced populations. Over the last three decades, the organization has focused on advancement of the poor and most vulnerable people of the country. Reaching over one million direct beneficiaries in 2006, Concern Worldwide Bangladesh works in five sectors: Livelihoods Security, Education, HIV & AIDS, Emergency Response and Disaster Management, and Health and Nutrition.

Until the mid-1990s, Concern Worldwide provided primary health care services (PHC) in municipal areas targeted at slum dwellers. After an evaluation in 1995-96, Concern adopted a new strategy to improve cost-effectiveness and sustainability. As a result, the organization has shifted away from directly providing health services to harnessing the potential of municipal authorities and existing resources in the community through capacity building and the development of partnerships.

Concern Worldwide Bangladesh's current strategic objective for health and nutrition is *"to adopt innovative approaches which contribute toward developing and strengthening the health system in both urban and rural Bangladesh and to ensure quality health and nutrition services can be accessed by the extreme poor."* An essential aspect of achieving Concern's strategic objective for health and nutrition is the Municipal Health Partnership Program (MHPP), which employs an innovative approach to facilitating health system strengthening and aims to improve the health status of mothers and children in selected urban municipalities in northern Bangladesh.

3. Municipal Health Partnership Program (MHPP)

MHPP aims to scale-up Concern Bangladesh's successful predecessor grant in Saidpur and Parbatipur (1998-2004) that established a promising model for facilitating effective civil society and local government engagement with demonstrated improvements in health practices and outcomes.

Launched in October 2004, MHPP greatly expanded it's municipal program from Saidpur and Parbtipur municipalities and streamlined the model in seven new municipalities in Rajshahi Division: *Bogra, Dinajpur, Gaibandha, Joypurhat, Kurigram, Nilphamari and Rangpur.* Saidpur and Parbatipur were established as Learning Centers to provide a locus for national policymakers, municipality authorities and community members to observe and learn how to replicate and sustain the experience.

By scaling-up MHPP, Concern Bangladesh aims to demonstrate its applicability in municipalities that are larger and more diverse than the original two. In addition, MHPP aims to develop local capacity to sustain these efforts within the existing resources of local communities, municipalities and the Government of Bangladesh.

The Program goal is to reduce maternal and child mortality in seven municipalities reaching 225,122 women of reproductive age and 94,377 children under-five over the next five years.[3] Municipalities are classified by their population size and (tax) revenue generation, as outlined in Table 5.

Table 5: Population in the Program Location, 2005

Municipality	Wards	Population Estimated 2005	Women of Reproductive Age (15-49)	Children 0-11 months	Children 12-23 months	Children 24-59 months	Children 0-59 months
Nilphamari	9	42,297	10,997	922	922	2,766	4,610
Kurigram	9	62,826	16,335	1,370	1,370	4,109	6,849
Gaibandha	9	72,910	18,957	1,589	1,589	4,768	7,946
Dinajpur	12	175,917	45,738	3,835	3,835	11,505	19,175
Rangpur	15	283,448	73,697	6,179	6,179	18,538	30,896
Bogra	12	182,490	47,447	3,978	3,978	11,935	19,891
Joypurhat	9	45,966	11,951	1,002	1,002	3,006	5,010
Sub total	**75**	**865,854**	**225,122**	**18,875**	**18,875**	**56,626**	**94,377**

Note: WRA and under 5 children are calculated considering 26% WRA and 11% children of total urban population. Annual urban growth rate 3.1%. Data Source: BBS, Planning Division, Ministry of Planning, GoB, July 2003

MHPP objectives are to:1) sustain improvements in quality of MNCH systems; 2) improve household prevention and care-seeking practices for sick children; and (3) improve maternal and newborn care practices. Priority interventions include:

- Maternal and newborn care (40% level of effort [LOE]),
- Pneumonia case management (25% LOE),
- Nutrition and micronutrients (20% LOE) and
- Diarrheal disease control (15% LOE).

Interventions are in line with national priorities from the Bangladesh Health, Nutrition, and Population Sector Program (2003-2006); the Essential Services Package; the National Maternal Health Strategy 2001-2010; and the Facility and Community-Integrated Management of Childhood Illnesses (C-IMCI) Strategies.

Most importantly, MHPP aims to turn the municipal health structure, which existed only on paper (1995 circular) into something that functions and improves the health status of the population. The four major MHPP strategies are to:

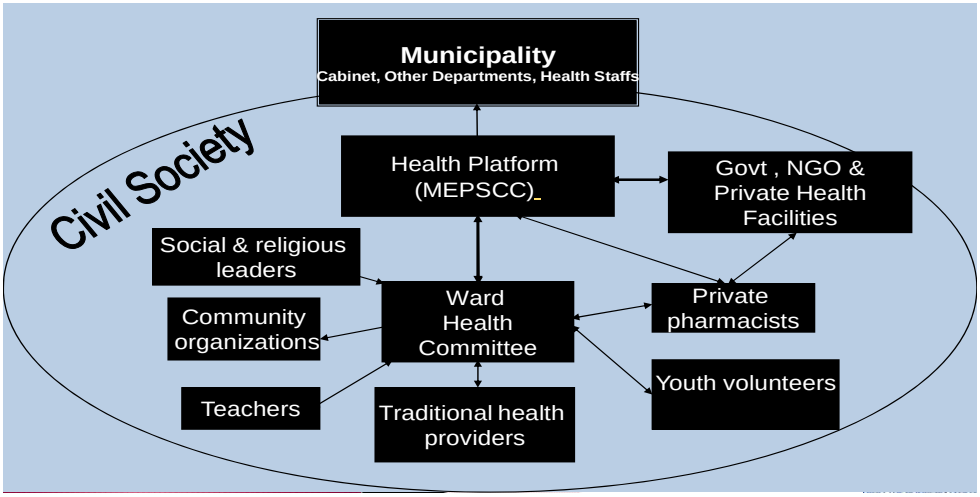
1. Foster learning and networking across and within municipalities;
2. Strengthen partnership and technical capacity among the municipality health departments and private, government and NGO service providers;
3. Build more effective management capacity of the municipal authorities; and
4. Advance community led health promotion emphasizing male involvement, participation and social support for income poor households.

[3] An additional 49,500 WRA and U5s are indirect beneficiaries of sustained and reinforced child survival interventions in Saidpur and Parbatipur. The MHPP includes activities that will directly affect the population, but due to the changed role as a Learning Center, they are not counted as direct beneficiaries.

MHPP Hypothesis: Replicating a model that creates/ enhances coordination mechanisms, builds municipal capacity and increases community involvement for health will result in better health outcomes for women and children

The primary implementation partners are the Municipal Authorities under the (MOLGR&C&C) and District Civil Surgeon's (CS) offices and Deputy Director Family Planning offices under the MOH&FW in all municipalities. Saidpur and Parbatipur are also involved, to a lesser degree, as Learning Centers.

Figure 1: Urban Health Structures



In addition, MHPP collaborates with UNICEF, Lutheran Aid to Medicine in Bangladesh (LAMB), International Centre for Diarrhoeal Disease and Research in Bangladesh and the USAID-supported Smiling Sun Program. MHPP was designed to have all these organizations participate on a Project Advisory Committee to provide overall technical guidance, advocate for its objectives and disseminate learning to external audiences.

In Rajshahi Division, health services are delivered by a variety of public, NGO and private providers. They include both outpatient and inpatient child health care through district and medical college hospitals. In addition, ANC, normal delivery, postnatal care, comprehensive emergency obstetric care (CEmOC) and FP services through district and medical college hospitals and maternal and child welfare centers (MCWC).

In the private sector, there are a plethora of individual and group health provider, from qualified physicians to multiple informal "private practitioners" such as homeopaths, rural medical practitioners (RMPs) and barefoot/untrained doctors. Health services are largely concentrated in urban centers reducing access for peri-urban residents.

USAID/ Bangladesh-funded Smiling Sun NGOs work in 6 of the 7 MHPP municipalities. MHPP collaborated with these NGOs to build their community mobilization and behavior change capacity and to increase access to services for the community. It was thought that these NGOs would be able to take over the (catalytic) role of the MHPP after the end of the project.

Three operations research studies were carried out under MHPP including:

1. Post-intervention sustainability assessment (+3, +5 years) in the Learning Centers: this document is currently being finalized and will be available the January 2010.
2. Cost-effectiveness of scaling-up the Municipal Health Partnership Model **(Annex 14.4)**
3. Reduce exposure to indoor air pollutants **(Annex 14.1)**

A fourth study to test of effective delivery systems for increasing use of iron folate (IFA) and postpartum Vitamin A in municipal households was determined to not be appropriate during the midterm review.

4. Mission Collaboration

MHPP received US$300,000 in the form of **field support** from the USAID mission in Dhaka. It is quite unusual for a USAID mission to allocate their own resources to a centrally funded child survival grant. The USAID mission has been very supportive of MHPP throughout the life of the project. More recently, USAID has revitalized their monthly meetings and Concern Bangladesh has been participating in these meetings and sharing their experiences.

The Team met with the USAID/Bangladesh staff prior to the field visits to solicit their input. It is clear from the meeting that USAID staff have a good understanding of MHPP and have been involved throughout the life of the project. They stated that they view this as a very innovative and unique model that other organizations can learn. USAID/Bangladesh was also participated in national stakeholder meeting in Dhaka.

D. Assessment of Results and Impact of the Program

This section of the report provides the findings and key results of the three results outlined in the MHPP proposal. **Annexes 11.1-11.7** provides a summary of progress by municipality that was shared with the Mayors during the debriefing in Rangpur. In addition, this section crosscutting issues such as mortality, reaching the poor, dissemination the model and sustainability and potential scale-up of the MHPP model.

Table 6 provides an overview of the monitoring and evaluation framework for MHPP. The complete monitoring and evaluation framework is available in **Annex 12**.

Table 6: Summary of MHPP Monitoring and Evaluation Outcomes

	Indicator	Baseline (2005)	Final (2009)	EoP Target	Explanation
Result 1: *Sustained improvements in the Quality of Maternal, Newborn and Child Health Planning and Coordination Mechanism within Municipalities*	Establish 7 functional MESPCC	0	7	7	Met
	Establish 73 functional WHCs	0	73	75	Almost Met
	At least 75% of Municipalities see a one step increase in capacity (HICAP Score)	N/A	1.1	1	Met
Result 2: *Improved Household Prevention and Care-Seeking Practices for Sick Children*	Knowledge of 4 dangers signs of sick child	15%	60%	35%	Exceeded
	ARI – seek treatment	45%	58%	60%	Almost Met
	Use of ORT	71%	73%	80%	Almost Met
	More food/liquids during diarrhea	38%	27%	50%	Not achieved due to strong cultural practices, further discussion below
	Diarrhea prevalence	13%	9%	NA	
	Mothers hand washing at 5 critical times	16%	17%	30%	Not achieved due to strong cultural practices further discussion below
	Complementary feeding (6-11 months)	57%	92%	45%	Exceeded
	Vitamin A (12-23 months)	59%	92%	85%	Exceeded
Intermediate Result 3: *Improved Maternal and Newborn Care*	Iron supplementation (90 days)	42%	52%	60%	Increased but not met
	More food than usual during pregnancy	32%	43%	45%	Increase and almost met
	Birth preparation	16%	16%	30%	Pregnancy is not considered a risk
	Delivery with Skilled Birth Attendant (SBA) (1)	49%	58%	60%	Increase and almost met, further discussion below
	Delivery with Community Birth Assistant (CBA) (2)	18%	28%	20%	Exceeded
	Vitamin A postpartum	25%	49%	50%	Increase and almost met
	Breastfeeding initiation (within 1st hour)	42%	42%	60%	No change, strong cultural practices
	Newborn immediately wrapped w/clean cloth	17%	16%	30%	No change, unclear
	Newborn care within 48 hrs after birth	24%	45%	N/A	Increased

Skilled Birth Attendant: Doctors, Nurse, FWV. CBAs: Trained Traditional Birth Attendants

1. Intermediate Result 1: *Sustained improvements in the Quality of Maternal, Newborn and Child Health (MNCH) Planning and Coordination Mechanism within Municipalities.*

MHPP catalyzed the Mayors, Councillors, municipal health departments (MHD), communities and health providers to develop planning and coordination efforts among all stakeholders, based on the 1995 MOLGR&D circular as depicted in Figure 1.

a. Municipal Leaders: MHPP aimed to support the municipal Cabinet members, notably the Mayors and Councillors to clarify their role(s) in health and increase their support for and involvement in health. A main focus was to build the capacity of municipal officials. As outlined in Table 7, the largest gains were in human resources among the municipal health department (MHD) that included: filling vacant positions, enhancing ssupervision, clarifying roles and responsibilities, and training of CHV. The second largest area of increase was in municipal leadership, which measures the Mayors' and Councillors' motivation, vision and sense of responsibility on health issues. Several of the municipalities, due to their smaller size and high proportion of EPPs (e.g., Kurigram) in the population found it challenging to mobilize adequate funds to support health activities. While there have been significant gains in capacities, further improvement can still be achieved. The Team identified that the municipal leaderships could still use support from Concern in strengthening their leadership skills.

Obviously, there is variation among the municipalities. It is interesting to see that some of the smaller municipalities had lower levels of capacity at the outset of the project but were able to develop their capacity to the levels of the larger municipalities. However, some of the municipalities with higher capacities, such as Rangpur and Bogra did not see significant change in certain areas.

Findings: The Team found that initially the municipal officials and MHD staff were very skeptical about the MHPP model, particularly the volunteerism aspect. The cross-visit to the Learning Centers was a major turning point. Participants reported that it was very powerful in changing their attitudes and motivating them to implement the MHPP approach in their areas. The Team found that the municipalities where the Mayor, all the Councillors and Civil Surgeon were able to make the visit together were the quickest to start the WHCs.

It should be noted that Bangladesh had a major political upheaval between 2006-2007. As a result, some of the political officials were jailed and/or were in hiding due to a crackdown by the law enforcement agencies. This made working with the elected officials difficult, particularly at the municipal level. Since the establishment of the new government the situation has been stable, although municipal elections are planned for February 2010.

Table 7: Municipality Capacity (HICAP) Scores by Municipality, 2006 vs 2009

Capacity Area	All	Kurigram	Joypurhat	Gaibandha	Bogra	Dinajpur	Rangpur	Nilphamari
Human Resources	1.9→37	2.2→3.2	3.2→4.2	1.6→3.0	2.6→4.0	1.2→4.0	4.0 → 4.0	2.0 → 4.3
Municipal Authority Leadership	2.8 → 3.8	2.0 → 2.8	3.5 → 4.8	1.8 → 3.0	3.8 → 4.0	2.8 → 3.8	2.0 → 4.0	2.0 → 4.0
Planning/ Implementation	2.3 → 3.4	1.7 → 2.0	3.7 → 4.0	1.0 → 3.0	1.0 → 3.0	2.0 → 3.3	4.0 → 4.0	1.7 → 3.3
Coordination/ Resource Mobilization	2.8 → 3.4	2.3 → 3.3	3.3 → 3.7	2.3 → 3.0	3.7 → 4.0	2.7 → 3.0	2.2 → 4.0	1.2 → 4.0
Monitoring/ Evaluation	1.9 → 3.5	1.4 → 2.8	3.0 → 4.4	1.6 → 3.0	3.3 → 4.0	2.2→ 4.0	2.8 → 4.0	1.6 → 3.4
Overall Scores	2.35 →3.55	1.9 →2.8	3.3→ 4.2	1.7 → 3.0	3.0 → 3.8	2.2 → 3.6	2.8 → 4.0	1.6 → 3.4

Note: HICAP is a 1-5 point scale, 5 being the ideal level

Despite the political challenges, the Team found that all the Mayors were supportive of the MHPP approach. There seemed to be a good working relationship among the Mayor and Cabinet members in most municipalities. The Team thought that the Councillors and WHC had strong relationship but there was not a clear link with the Cabinet members and this should be strengthened. Even though the Mayor and Cabinet members were supportive of health, the Team thought that it would be useful to have health as a agenda items so that it would be discussed regularly rather than on a more ad hoc basis

The Team found that participation of the female Councillors was low overall, but when they were involved, they were more active than their male counterparts. It was clear in our discussions that health had become a priority, particularly ensuring support for extremely poor people (EPP).

The Team found numerous examples where a Mayor or Councillor had intervened to facilitate access to services, either by contacting the MCWC or District hospital staff or by arranging money for a woman, usually for a delivery. In a few of the municipalities the CBAs had the Mayor's direct phone number so they could reach him if there was a problem.

In order to assess the municipal capacities, Concern Bangladesh applied the Health Intuitional Capacity Assessment Process (HICAP) tool which was developed in Saidpur and Parbatipur municipalities. As part of the streamlining process, a HICAP facilitators' guide was produced with predefined capacity areas and measurement standards (Annex O). This was a self-assessment conducted by the municipalities in 2006 and 2008. The aim was to have at least 75% of the municipalities have a one-step increase in their capabilities, which was exceeded **(+1.1)**. Results of these assessments were visibly posted in the all the Mayor's offices visited by the Team.

Municipalities have two budgets that they can support health efforts. First, the revenue raised through tax collection is the sole authority of the municipality. Thus, they can determine what proportion of this budget can be used to support health interventions (e.g., MHD, WHCs). Second, they also may receive a development budget that comes from the national ministry, provided by international donors. These funds are usually earmarked for specific activities. All the municipalities have some funding for water and sanitation efforts from the development budget.

Table 8 outlines the actual health expenditures for fiscal year 2007-08 and projected budgets for 2008-09. Based on these figures, there was an overall increase in the health budget of about 13M taka ($188,000) in all seven municipalities, between the two years. Dinajpur had the greatest increase ($97,000US), Bogra ($38,000) and Nilphamari ($23,000).

Table 8: Municipal Health Budgets, 2007-08 vs 2008-09

Municipality	2007-08 Health Expenditure (Taka) (1)	2008-099 Health Budget (Taka) (2)	2008-09 Health Budget ($US)	Difference between 2008-09	2007-08 Health as % of revenue Budget (3)	2009 Health as % Revenue Budget (4)
Dinajpur	2,655,506	9,353,021	$ 135,551	6,697,515	5.4%	10%
Bogra	1,408,848	4,050,000	$ 58,696	2,641,152	2.2%	3%
Gaibandha	7,066,736	7,299,484	$ 105,790	232,748	27.8%	26%
Nilphamari	1,990,130	3,636,412	$ 52,702	1,646,282	11.0%	7%
Joypurhat	3,605,832	4,213,710	$ 61,068	607,878	7.9%	12%
Kurigram	270,000	470,000	$ 6,812	200,000	1.5%	2%
Rangpur	4,280,000	5,220,000	$ 75,652	940,000	6.9%	8%
Total	**21,277,052**	**34,242,627**	**$ 496,271**	**12,965,575**	**8%**	**8%**

(1) Health Budget based on 2007-08 expenditures for financial support for poor people; medicine and treatment; EPI, PHC, Waste disposal, MHPP and MHD Staff salary. (3) Based on expected health expenditures for 2009 (3) Based on 2007-08 actual revenues and expenditures and (4) Based on 2008-09 projected revenues and expenditures.

As previously mentioned the municipalities vary in size, A being the largest, and their ability to raise revenue. It is interesting to note that Bogra only has 3% of the budget directed toward health while Gaibandha clearly prioritized health within their revenue budget. It is not surprising that Kurigram and Nilphamari had lower percentages because they are smaller and have a higher ratio of EPP, who are less able to pay taxes.

While the municipalities also get a development budget, the Team was not able to determine how much of this funding was for health activities. It may be that Bogra is able to use some of the development budget for health activities.

Table 9 looks at the health expenditures/budget per person then Gaibandha is the highest ($1.45) followed by Joypurhat ($1.33) and Nilphamari ($1.25). Interestingly, Bogra ($0.33) and Rangpur ($0.37) are even lower, even though they have larger budgets. The Team found that a few of the municipalities had added a line item to support EPP access health services. Dinajpur municipality had a MHPP line item (Tk 200,000), primarily to support WHCs.

Table 9: Municipal Health Budgets per Population, 2007-08 vs. 2008-09

Municipality	Municipal Population	2007-2008		2008-2009	
		Budget Per Population (Taka)	Budget Per Population ($US)	Budget Per Population (Taka)	Budget Per Population ($US)
Dinajpur	175,917	15	$ 0.22	53.17	$ 0.77
Bogra	182,490	08	$ 0.11	22.19	$ 0.32
Gaibandha	72,910	97	$ 1.40	100.12	$ 1.45
Nilphamari	42,297	47	$ 0.68	85.97	$ 1.25
Joypurhat	45,966	78	$ 1.14	91.67	$ 1.33
Kurigram	62,826	04	$ 0.06	7.48	$ 0.11
Rangpur	283,448	15	$ 0.22	18.42	$ 0.27

There were four key recommendations for the municipal leadership to continue working on after the end of MHPP.

Recommendation: *Local Stakeholders #1: Municipal leadership should continue to sustain/increase the health budget, particularly support for WHCs and EPPs.*

Recommendation: *Local Stakeholders #2: Municipal leadership should make health a regular agenda item at the monthly Cabinet meetings.*

Recommendation: *Local Stakeholders #3: Municipal leadership should continue to develop annual health plans with significant input from the WHCs, MHD, and MESPCCs*

Recommendation: *Local Stakeholders #4: Municipalities should strengthen coordination among the Cabinet and WHC members.*

The Team felt that Concern Bangladesh should continue to work on with the municipalities to build their capacity to successfully phase-out the project.

Recommendation: *Concern #1: Municipalities, with support from Concern Bangladesh, should identify methods to further develop their leadership in health.*

b. Municipal Essential Services Package Coordinating Committee (MESPCC): A 1995 (MOLGRD&C) circular sanctioned the MESPCC, but none of the municipalities had established these forums. The aim of this committee is to facilitate planning, coordination and problem-solving, particularly between MOLGRD&C and MOH&FW.

Findings: The Team found that MESPCCs were established in all of the municipalities and are being actively led by the Mayors with significant involvement of the Civil Surgeon and Deputy Director-Family Planning. Some of the MESPCC also included district level officials from other ministries such as education, water and sanitation officials and NGOs in addition to private service providers.

In discussions with MESPCC representatives, they stated that this is a useful platform because before they did not know each other and had no way to plan or discuss issues. These are relatively new groups so their capacity is still growing, but there were some good examples of effective problem solving. Since Vitamin A distribution was low, the MESPCC facilitated discussions with the CS who provided Vitamin A to be distributed to children and postpartum women through the CHVs. In another municipality, the Mayors spoke with the CS about CBAs being treated badly by MCWC staff.

In hindsight, it was probably important to begin the MESPCCs with only government representatives in order to develop relationships and the collaboration mechanism between the two ministries. As mentioned, Concern Bangladesh thought that the USAID supported Smiling Sun NGOs would be able to take over the catalyst role undertaken by MHPP staff. However, with the evolution of the Smiling Sun strategy, it became clear that this is no longer a viable option. Some of the MESPCC's have expanded to include other NGO service providers. The Team thinks should continue and be expanded.

There were two areas that the municipalities should continue to work on in terms of strengthening the MESPCCs.

Recommendation: *Local Stakeholders #5: MESPCC should identify/cultivate a relationship with a NGO (s) to support their work and continue the catalytic role that was played by MHPP.*

Recommendation: *Local Stakeholders #6: MESPCC should enhance collaboration with private sector health providers.*

c. Municipal Health Department: MHPP worked with the MHD staff to improve their knowledge on MNCH concepts, behavior change strategies, facilitation skills and use of the HMIS data. Several staff members were trained as trainers for the community health volunteers (CHVs).

***Findings**:* Despite the progress indicated in the HICAP, all of the MHDs are under-staffed, with several posts remaining vacant. In addition, many of the positions are not permanent; staff are employed through master roll (short-term contracts). One of the worries is that with the upcoming elections a new administration may release trained staff and may not continue the commitment to health.

The MHD's knowledge about MNCH issues greatly increased. Many of the MHD staff are not clinicians so they were very eager to gain this new information. They described several innovative strategies used to encourage women to change their attitudes and behaviors.

The HICAP score (Table 7) for planning and implementation of health activities by the MHD increased from 2.3 to 3.4 out of a total of 5. As previously discussed, (Table 5) the capacity of MHD varied from a low of 1 (HICAP score) in Gaibandha and Bogra but increased by two points.

Most of the MHD staff actively participate in the WHCs, usually as the member secretary. In some municipalities staff shortages limits their participation in WHCs.

The staff said that they were comfortable training the CHVs and meet with them regularly.
They thought that it would not be a problem for them to continue the training for new CHVs. While they know, which wards need new CHVs, because of their participation in the WHCs, the process of articulating how they will plan, arrange, and finance the training seemed unclear to the Team. Many of the MHD staff thought that the CHVs are an extension of the MHD, enabling them to better serve the community.

The MHD staff work closely with the CHVs, particularly in terms of HMIS data. They review the data with the CHVs at their monthly meetings. In discussions with the MHD staff, they are very happy to have this data so they can see "what is happening". Before they had to wait for the census or do a special survey. Even more encouraging is that they are actively using the data for follow-up. They reported that when they reviewed the data they found three children with measles in different wards. They visited the families and ensured that the rest of the children in the area were vaccinated.

Recommendation: *Concern #2: Concern Bangladesh should assist the municipalities to develop a mechanism to promote cross municipal learning after the end of the project.*

Recommendation: *Concern #3: Concern should assist the MHD to develop a system to train new CHVs and continue to monitor existing CHVs*

Recommendation: *Concern #4: Concern should assist the MHD to develop a strategy to create and strengthen the linkage with MCWC staff and CBAs. This may be through encouraging CBAs to attend the monthly CHV meetings and/or having MHD staff attend the MCWC/CBA meetings. This will help to ensure consistent messaging among the CHVs and CBAs.*

d. Ward Health Committees (WHC): As previously mentioned, the 1995 circular called for the creation of a community health committee. MHPP worked with (elected) Councillors to form WHCs, through a participatory process, with broad community representation (e.g., teachers, Imams, Female Councillors, MHD staff, CBAs, CHVs , NGOs and other key community members). MHPP provided training on roles and responsibility, facilitation and support for the WHCs.

MHPP also worked with male Councillors to explain the importance of working with the female Councillors particularly that they were not their competitors. They also worked with the female Councillors to raise their visibility and provide opportunities for them to be more active in the community.

Findings: As previously mentioned, Councillors were very motivated to start WHCs upon their return from the Learning Centers. They told the Team that they also tried to convince the resistant Councillors that this was a good idea and they should adopt these practices. The municipalities where all the Councillors, Mayor and Civil Surgeon visited the Learning Centers as a team were the quickest to start their WHCs (e.g., Joypurhat in 4 months).

The Learning Center visits occurred in Jan-Feb 2005. Based on discussions with MHPP project officers, it took an average of 1-2 months of visiting the Councillors (10-15 times) to develop a relationship and discuss the specifics of creating a WHC, after they returned from the Learning Centers. The MHPP staff found that they were the most successful when they could help the Councillors visualize the link between his involvement with the WHC and access to family and community with his political vision were keen to setup the forum.

They also tried to identify community people who could positively influence the Councillor on health. The MHPP staff indicated that it took about 3-4 days of supporting the Councillor to plan the initial community meeting to introduce the idea of the WHC (e.g., sending out invitations, developing the agenda). In some municipalities, the MHPP staff spent 2-3 days sensitizing the community about the WHC prior to the meeting.

In most wards, the Councillor called a community meeting to explain the WHC's importance, benefits, and role. It was reported in many communities that attendance exceeded 1500 people. Then the community decided on representatives from key groups (e.g., teachers, Imams).

The Team met with representatives of 37 WHC out of 75 WHC established. Most (77%) of the WHCs were established within six months after the Learning Center visits. The Councillor is the Chair and the MHD staff serves as member secretary in most committees. The WHCs had diverse membership and many thought this was an advantage. One third of the WHC members are women. MHPP provided training and support for the WHCs in terms of MNCH issues, including C-IMCI, roles and responsibilities, organization capacity building, communication and facilitation skills, linking with the health providers, identifying EPP and developing support mechanisms.

Most WHCs stated that they were meeting monthly and all thought that the WHC was a good platform to discuss both progress, issues and develop solutions. As previously mentioned, from 2006-07 there was major political upheaval and many Councillors were jailed or afraid to be active. One strategy adopted by most (80%) of the WHCs was to elect a Vice-Chair so the WHC could still meet. To date, half of the Vice-Chairs are Female Councillors. This was a useful strategy in the past and should support the WHCs during the upcoming elections in December 2009.

Table 10 provides an overview of the combined capacity scores for 73 WHCs.. Two WHC did not conduct the capacity assessment. The two WHC (e.g., Dinajpur, Rangpur) that did not conduct the capacity assessment or implement the HMIS were due to poor relationships between the Councillor and the Mayor.

Most WHCs were formed in the summer of 2005 and were operating for about 2 years when the first capacity assessment was conducted in 2007. A WHC tool was developed based on self-assessment instruments drafted in the original program **(Annex 14.3**:WHC Facilitators' Guide).

Table 10: Ward Health Committee Capacity Scores for all Municipalities

Capacity Areas	2007-2008
Participatory Planning	3.6→ 3.9 (+0.3)
Leadership/Governance	3.5→ 4.0 (+0.5)
Resource Mobilization/Management	2.3→ 2.8 (+0.5)
Collaboration /Coordination	2.7→3.4 (+0.7)
Monitoring/Evolution	2.7→3.4 (+0.8)
Overall	2.7→3.4 (+0.8)

WHC Capacity Assessment is a five point scale. Baseline done in 2007 and final done in 2008

The changes in capacity may appear to be less dramatic than the HICAP scores, however, as these are new institutions, there baseline capacity was actually at level 1; further the reported measurements are only one year apart. MHPP had intended to conduct assessments annually but was unable to complete a final assessment in 2009 due to the precipitated final evaluation period and competing needs to complete the final KPC survey.

Recommendation: *Concern #5: Concern should assist the WHCs to conduct the final assessments before the end of the project. In order to fully capture capacity gains*

Based on discussion with MHPP staff, they indicated that the Councillors/Vice-Chairs, on average, could manage the WHC independently after a year of support. Similarly, the secretary, usually MHD staff, was able to perform their role within 8 months of support. The biggest challenges are raising funds for the poor and teamwork among WHC members.

A focus of MHPP was to improve access for the extremely poor people (EPP) to health services. Each WHC that we interviewed had a list of EPP. Table 11 shows the variation of percentage of poverty within each of the municipalities and families that were supported. The Team met with 20 women who had received assistance from the WHC, primarily delivery assistance. All of the women were accompanied by either a CBA or CHV to the health facility. In some cases the WHC provided funds to cover hospital fees or medications and/or they negotiated a reduce rate with the service provider.
The Team found that these local systems were working well and it was clear that these women and their newborns probably would have died without these efforts

Table 11: Percentage of Poor by Municipality over Project Life

Municipality Name	Total Population	Population of Poor	% Poor	# Families helped by WHC (05-09)
Rangpur	28,3488	1207	0.43%	1694
Nilphamari	41,507	570	1.37%	297
Kurigram	62,479	5,977	9.57%	127
Joypurhut	63,724	3,890	6.10%	5948
Gaibandha	54,617	2,833	5.19%	403
Bogra	134,186	2,308	1.72%	1076
Dinajpur	157,343	26,702	16.97%	1115
Total	797,344	43,487	5.45%	10660

It is interesting to note that Joypurhut and Gaibandha have relatively similar population size and proportion of poor people, but Joypurhut was able to provide more support to

families in need. Some of the reasons for this include: 1) an extremely supportive Mayor/ and Cabinet Members that regularly discuss progress for EPPs; 2) an agreement among MESPCC stakeholders that health staff will visit public hospitals to see if any EPP are hospitalized, if they are then they inform the WHC to ensure they are supported in receiving care; 3) good coordination between CHV and CBA supporting EPP; 4) issues of EPP regularly discussed in WHC meeting and all the WHC members knows that there is an emergency fund . Another contributing factor may be the ADB Funded Urban Governance Infrastructure Improvement Project (UGIIP), which operates with 18 staff members covering 900 poor families. Most of the field staffs are related with WHC.

Many of the WHCs are using the lists to provide other benefits to EPP. For example in Kurigram, CARE has a food for work program where the municipality/ WHCs worked to ensure that the poor were able to access this assistance. In Bogra, the municipality/ WHC linked poor widows with a government support program.

The WHC and community networks are useful platforms for other development partners to build on. In Bogra, the ADB urban health project is supporting PHC by contracting with NGOs and building some PHC facilities. The design of the ABD project called for community health committees and planned to train CHVs. Since MHPP preceded this project, the communities explained that this infrastructure already existed. As a result, the WHC are serving as the community health committees of the PHC facilities and the CHVs (MHPP) have also received training by the ABD program. This program has a focus on the urban poor and several WHCs stated that there were already prepared with their lists of EPP when the ABD program started which expedited the process.

The KPC findings were analyzed by asset quintiles, which show that health practices and outcomes have improved overall, with dramatic improvements among EPP. This is further discussed under Intermediate Results #2 and #3.

Recommendation: *Local Stakeholders #7: Municipalities/WHC facilitate sharing about further innovations in fundraising and management of WHC emergency funds*

e. Community Health Volunteers (CHVs): MHPP worked with the WHCs to develop a cadre of CHVs to provide information and assist with referrals. As previously mentioned, the MHD staff served as trainers and the municipal link with the CHVs.

***Findings*:** Many WHCs said that one of their major accomplishments was creating the CHVs. After the WHC was formed, a selection committee was developed to identify CHVs. Most of the CHVs are women and many are young students. A total of 3,609 CHVs were trained during the life of the project. The Team found that most CHVs covered about 50 households and regularly visit them, at least every other month to update the HMIS. Most CHVs interviewed said that they visited poor women more often, so that they would know what services and support they could receive.

The Team found that the CHVs interviewed were quite knowledgeable and very motivated. They all said they would continue to work, even if the WHC did not exist. The CHVs were provided with ID cards which gives them creditability within the community. The CHVs encouraged women and sick children to go to health services; they did not specifically promote MOH&FW or Smiling Sun clinics specifically. In several areas they provided ORS and Vitamin A, provided by the Civil Surgeon, directly to households,

particularly to the EPP. The municipality also used the CHVs for tasks beyond health, such as census data collection, birth registration, and sanitation survey.

The CHV turnover rate is quite low (15%) overall, ranging from 10% in Dinajpur to 30% in Joypurhat. CHVs are well respected by the community and are highly sought after positions. As a result, it is easy for CHVs to identify their replacements. Each WHC knows how many new CHVs need to be trained and they can easily inform the MHD staff since they are part of the WHC. However, as previously mentioned, it is unclear how the MHD will organize and finance the training after MHPP (See Recommendation Concern #3).

Participation of CBAs and CHVs on the WHC strengthened their relationship and coordination in the field, particularly in terms monitoring pregnant women and postnatal visits. In some areas, the CBAs attended the regular CHV meetings with the MHD, which provided a link between the MHD and CBAs.

Recommendation: *Local Stakeholders #8: Municipalities/ WHC/MHD should continue developing and sharing local solutions to recognizing the efforts of CBAs and CHVs*

f. National MOLGRD&C: MHPP achievements have been gained with virtually no support from the central level MOLGR&C&C.

Findings: The mid-term evaluation (MTE) found that although Concern Bangladesh made some efforts to increase the Ministry's participation by exposing key officials to the Learning Centers more effort was required. A key challenge is that there is no focal point for health within the central (MOLGR&C&C) ministry.

The MTE recommended that Concern Bangladesh should advocate for and facilitate the activation of an IMCC. While MHPP tired to engage the national ministry, but Concern Worldwide Bangladesh has not been able to develop strong a relationship with the national level MOLGR&C&C. It would have been useful if USAID and other donors had assisted Concern Bangladesh to activate the IMCC.

In 2007, Concern did make good headway including formally discussing the model and implementation experience with the Secretary-General.

Recommendation: *Concern #6: Concern Bangladesh should seek donor support to participate and support with activation of the ICMM.*

2. Intermediate Result 2: *Improved Household Prevention and Care-Seeking Practices for Sick Children*

In Bangladesh, under-five mortality rate (CMR) is 65 per 1,000 live births (BDHS, 2007) down from 88 per 1000 in 2004 with leading causes of death of pneumonia, diarrhea, malnutrition, accidents, and neonatal complications. The CMR for Rajshahi Division was 71/1,000 during the same period (BDHS 2007).

MHPP had three key interventions to improve outcomes for sick children: 1) pneumonia identification and case management (25% LOE); 2) community level management of diarrhoeal disease (15% LOE); and 3) childhood nutrition and micronutrients (20% LOE). These efforts were combined through the development of Community-based Integrated Management of

Childhood Illness (C-IMCI). At the time of MHPP's design, Concern was an active member of MOH&FW's IMCI Working Group and collaborating in the development of the community protocols. The MHPP sites served as the national pilot for C-IMCI tools in urban areas in 2007.

Prevention and treatment of ARI and diarrhea, as part of C-IMCI, was a key aspect in the training of all the stakeholders, especially the CHVs, WHC members, Imams and Rural Medical Practitioners (RMPs).

Findings: MHPP initially had proposed a Project Advisory Committee consisting of key partners and government officials. It met during Year 1 but the staff found that existing groups could serve that purpose for specific intervention areas.

Concern Bangladesh played an essential role, as a member of the IMCI working group, in developing the training/ negotiation guides for RMPs and Imams. The RMP guide was adopted by the MOHFW and used as part of the C-IMCI training protocols throughout the country. The Imam module is underway for final endorsement by the Ministry and was field-tested in MHPP in 2008

Table 12 highlights major improvements in child health outcomes, meeting and/or exceeded most of the targets. In the project areas, there has been a reduction in the prevalence of both acute respiratory infections (ARI) (17% to 7.6%) and diarrhea (13% to 9%). These rates are higher than the Division as whole, ARI 5.7% and diarrhea was 7.6% which is not surprising for urban centers (2007 BDHS).

It is clear that CHVs were very successful in raising awareness about danger signs (15%-60%) of a sick child, particularly for pneumonia and diarrhea, significantly exceeding the target. However, in discussions with the WHCs and CHVs, there was less discussion about ARI or diarrhea. The Team was unclear if this was because there were fewer sick children and/or if because most people could manage to get services with minimal support from the WHC. None of the of the families in crisis interviewed had a sick child which seemed to indicate that families were able to manage careseeking and treatment within their existing coping mechanisms.

Table 12: Child Health Results, 2005 vs 2009

Indicator	Baseline (2005)	Final (2009)	EoP Target
Knowledge of 4 dangers signs of sick child	15%	60%	35%
Knowledge of danger signs of pneumonia	33%	66%	45%
ARI – seek treatment	45%	58%	60%
ARI prevalence	17%	7.6%	NA
Knowledge of danger signs of diarrhea	32%	69%	50%
Use of ORT	71%	73%	80%
More food/liquids during diarrhea	38%	27%	50%
Diarrhea- seek treatment	79%	90%	N/A
Diarrhea prevalence	13%	9%	NA
Mothers hand washing at 5 critical times	16%	17%	30%
Immunization (12-23)	82%	91%	N/A

Source: MHPP 2009 KPC

The two child health outcomes that remained unchanged were: 1) providing more liquid/food during diarrhea; and 2) handwashing at five critical times, which are discussed below.

a. Acute Respiratory Infections (ARI): The 2009 KPC found that more caretakers were able to identify signs of ARI and sought care from a trained provider, from 45% to 58%. The survey also found that there was an increase in advice/services sought from NGO workers (2.2% to 28%) and a decreased use of traditional healers (21% to 1%). The BDHS only includes medical providers so the figures are not comparable.

A key strategy for MHPP was to train homeopaths (23) in Nilphamari and RMPs (236) in all the municipalities since they were a major service provider. The KPC found that care seeking by families to RMPs for treatment of ARI did not change during the program intervention. This was unsurprising as the project's strategy was to improve the case management and referral for sick children rather than to alter care-seeking patterns. The Team found that the RMPs were referring severe cases of sick children to the District Hospital. However, the training happened late in the project and the referral system is still quite new so it is too soon to evaluate.

MHPP had discussions with the Deputy of Director of Family Planning after the MTE, to ensure that MCWC staff would also be trained on IMCI. While the project though this would happen during the life of the project, the MOH&FW's has not been able to prioritize this staff for these staff.

Imams assisted MHPP in the development of the C-IMCI protocol for Imams that were adopted by the national IMCI working group and further endorsed by the National Steering committee to be used in C-IMCI training throughout the country.

The Imams identified verses in the Quran that supported MNCH issues. Imams told the Team that they were very excited about participating in the WHCs because they had felt socially isolated and liked working for the social good of the community. Imams interviewed by the Team are actively participating in the WHCs and highly respected by the other WHC members.

A total of 376 Imams were trained on C-IMCI. The Team found the Imams to be quite knowledgeable. They reported that they provide health messages, based on Quran, verses in the Friday prayers. They said that when people came to them before they did not know what to tell them. Now they provide information about where to get health services as well as praying for them.

b. Diarrheal Disease: Use of oral rehydration therapy was high at the baseline and remained about the same, slightly missing the EOP target. This was slightly lower than the use of ORT found in the 2007 BDHS for the Division (88%). It is notable that ORS use increased in the lowest baseline municipality of Gaibandha from 49% to 80%.

In contrast, there was a decline (27%) in the provision of additional liquids/food during a diarrhea episode, which is slightly lower than the 2007 Division figure 35%. Although this was a key message for CHVs, many of them told the Team "it is our cultural practice not to give more food and liquids which is a hard practice to change".

Handwashing at five critical times remained unchanged. Most people washed their hands with soap and water after defecating (77%) and toileting a child (79%), while less than half (46%) used soap and water before feeding a child**. Most people rinsed their hands with water before preparing food (51%) or eating (76%), but were not washing with soap.**

Immunization was not indicator intervention because the baseline was so high (82%) and mechanisms were in place to sustain the efforts through WHO's GAVI program. However, MHPP complemented these efforts. For example, the MHD staff stated that the HMIS was very helpful to identify children who did not complete their immunization. This may have contributed to the increase as well as the follow-up of drop-outs by the CHVs and the WHCs work in communicating about EPI satellite clinic days.

c. Childhood Nutrition: Childhood malnutrition, both stunting and wasting and micronutrient deficiency, is a longstanding problem in Bangladesh. According to the BDHS, there have been some improvements from 2004 to 2007 in terms of underweight levels which fell from 43% to 41% and a reduction in stunting from 51% to 43% (41% in the Division)However, there was an increase in the most severe level of malnutrition (wasting) from 15% to 17% (19% in the Division).

The 2009 KPC found that overall there was a reduction in underweight (-2SD weight for age) children from 30% to 28%, compared to 41% in the Division (BDHS 2007). Children severely underweight dropped in the MHPP area from 7.6% to 6.6% (compared to 10% of the Division). Malnutrition rates for the MHPP areas were highest in Kurigram and Joypurhat; two of the poorer municipalities. Concern Bangladesh has developed integrated nutrition and food security plans from its work in the city corporations for a demonstration project in Kurigram which it hopes to start later this year.

Breastfeeding: Breastfeeding is a key first step towards good nutrition. Both the CBAs and the CHVs promoted immediate and exclusive breastfeeding (EBF). Immediate breastfeeding was unchanged and is further discussed under Result #3. Although the project did not have a specific EOP target, EBF increased from 64% to 71% as outlined in Table 13. The 2007 BDHS found that only 43% of women EBF their children until 6 months.

Table 13: Childhood Nutrition Results, 2005 vs 2009

Indicators	Baseline (2005)	Final (2009)	EoP Target
Exclusive Breastfeeding	64%	71%	N/A
Complementary feeding (6-11 months)	57%	92%	45%
Vitamin A (12-23 months)	59%	92%	85%
Underweight (-2SD)	30%	27.7%	N/A

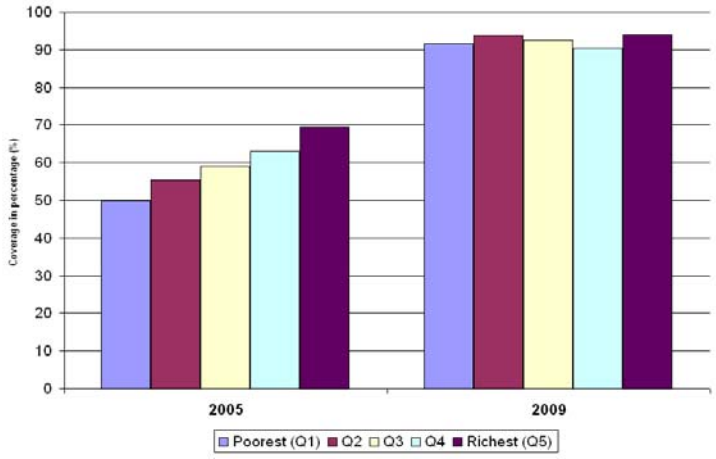
Source: MHPP 2009 KPC

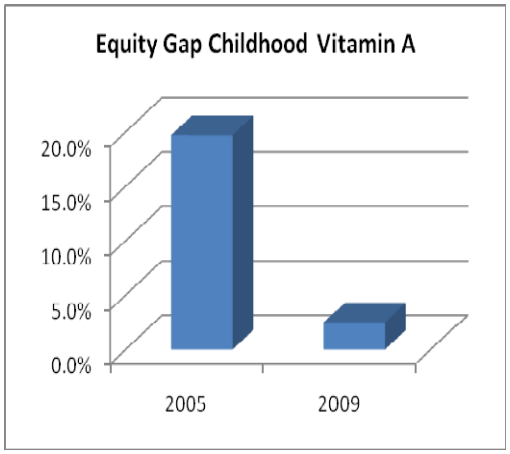
Complementary Feeding: Women who both continued to breastfeed and provide their child aged 6-9 months another food at least three times within 24 hours rose from 56% to 92%, significantly exceeding the target. The 2007 BDHS found that overall complementary feeding improved from 62%-74%.

Vitamin A Supplementation: Ensuring that children received Vitamin A was a major priority for all stakeholders. As a result, there has been a dramatic increase in Vitamin A coverage from 59% to 92%, exceeding the target. Gaibandha achieved nearly universal (98%) coverage. This is largely due to the CHVs providing Vitamin A to EPP house-holds and the support that they and the WHC provided to raise community awareness; similar results (88%) were found at the Divisional level (BDHS 2007).

As previously mentioned, MHPP had a special focus on improving access to health services for poor people. Figure 2 shows that while there were improvements in Vitamin A use by all economic classes, the greatest increase was among the poorest. For example, the increase of Vitamin A supplementation among the poor (Q1) went from 50% to 92%, a gain of 42% while the wealthiest (Q5) went from 70 to 94%- a gain 24%. **As a result, the equity gap dropped from 19.7% to 2.5%.** This clearly demonstrates that MHPP was successful in improve adoption of health behaviors among all economic classes.

Figure 2: Childhood Vitamin A Supplementation by Asset Quintile





3. Intermediate Result #3: Improved Maternal and Newborn Care

Maternal and newborn care was a major focus of the project (40% of the LOE). As mentioned, the MCWCs were selected as the training and referral site for CBAs. CBAs were trained to encourage women to attend ANC, plan for their births, conduct normal/ clean deliveries, identify danger signs and refer women with complications.

a. Antenatal Care: The CBAs, and to a lesser extent the CHVs, were the main MHPP intervention to increase use of ANC services from any qualified health source--public, NGO or private provider.

Findings: As outlined in Table 14, there was a significant increase in women receiving three or more ANC visits, which is consistent with an increase in CBA referrals. One concern is that the GOB strategy is to only provide ANC services twice a week at the MCWC. As CBA referrals for ANC have increased, many MCWCs are overcrowded on these days. Based on a review of MCWC data for January 2009, they averaged about 435 ANC visits a month.

Even though ANC attendance increased, the quality still needs improvement. Most women had their blood pressure (88%), weight (86%), and fetal position checked (82%) and about half (55%) received IFA tablets. Unfortunately, less than half of the women received nutrition counseling (48%), urine check (40%), or health education/birth plan (9%).

Despite the lack of emphasis during ANC visits, more pregnant women took IFA for 90 days, from 42% to 52%, largely due to the support of the CHVs and CBAs. There was an increase in government/health workers as the main source of IFA from 31% to 50%, followed by NGOs 20% from 28%. Fewer women received IFA from pharmacies dropping from 19% in 2005 to 6% in 2009.

Table 14: Antenatal Care Results, 2005 vs. 2009

Indicator	Baseline 2005	Final 2009	EoP Target
ANC – 3 or more visits	58%	73%	N/A
Iron supplementation (90 days)	42%	52%	60%
TT Coverage (2)	64%	67	N/A
More food than usual during pregnancy	32%	43%	45%
Birth preparation	16%	16%	30%
Knowledge of 5 pregnancy and labor danger signs	23%	42%	N/A

Source: MHPP 2009 KPC

Most women in Bangladesh have received at least two doses of tetanus toxid (TT). While CBAs/CHVs encouraged women to receive TT, this was not a major focus of the project.

Maternal Nutrition: While it is difficult to encourage women to eat more because they are afraid of having a big baby, MHPP made significant progress in this area, from 32% to 43%. This indicates that changes have occurred, not only with the woman, but also within the family, because culturally women would not be able to eat more without the support of their husbands and/or mother-in-laws.

Birth planning is still a relatively new concept. Many women/families do not see the importance of planning for their birth since they feel fine and most deliveries occur normally, many at home. While the CBAs indicated that they spoke with women about these issues it was not reinforced during ANC (9%), which may be why there was no change in this practice. Even some of the woman that we interviewed who were told that they needed to have a C-Section well before their delivery date did not make any arrangements until they needed to go to the hospital.

Knowledge of Danger signs: Overall most women (92%) know two of the five national recognized pregnancy and labor danger signs, while only 23% knew all five danger signs at the baseline. This rose significantly to 42%**.**

While most women (92%) knew at least two maternal (antenatal) danger signs, only a third knew 5 out of the 8 danger signs, up from 23%. Fewer women, 73% knew at least two maternal (postpartum) danger signs up from 65%. Only 10% of women knew 4 out of the 6 danger (postpartum) signs.

Information about specific danger signs varies and needs further attention, even though most of the knowledge levels increased. As outlined in Table 15, less than half of the women know that hypertension/swelling, convulsions, mal-presentations, retained placenta, blurred vision or fever are antenatal danger signs.

Table 15: Knowledge of Maternal Danger Signs, 2005 vs 2009

Danger Signs	Antenatal		Postpartum	
	2005	2009	2005	2009
Antenatal Bleeding	43%	52%	N/A	N/A
Hypertension/Swelling face/arms	31%	43%	19%	25%
Severe headache/Blurring Vision	26%	40%	25%	30%
Convulsions	33%	44%	40%	49%
Prolonged Labor	49%	64%	N/A	N/A
Malpresentations	23%	43%	N/A	N/A
Retained Placenta/Heavy Bleeding	25%	44%	70%	76%
Fever	17%	21%	21%	25%

In terms of postpartum, there is better recognition about bleeding, however, less than half of the women know that convulsions after delivery is a problem. Post-partum eclampsia comprises 25% of all preeclampsia/eclampsia cases so this important information for women to know. More worrisome is that less than a third of women think that swelling face/hands, blurred vision/headache or fever are post-partum problems.

Recommendation: *Concern # 7: Concern Bangladesh should reinforce maternal and newborn danger signs for CBA and CHV trainers and CBAs and CHVs. This could be through refresher training and/or through regular monthly meetings.*

b. Normal Delivery Care: CBAs were trained mainly on normal deliveries and referrals of pregnancy related complications. CBAs had lists of pregnant women, particularly EPP. Pregnant women were informed about their due dates and told to contact to the CBA or CHV if they had any problems.

In partnership with LAMB, MHPP conducted a review of MNCH services in the seven municipalities in 2005. While there were quality of care issues, it was determined that the MCWCs would be the best site to serve as a referral center for ANC, delivery and postpartum care as well as a training site for community birth assistants (CBAs).

MHPP supported training for the Medical Officers (MCWC) at LAMB hospital Management of Obstetric Emergency Trauma and Perinatal Death Audit This will be further discussed under Intermediate Results #3

The MOH&FW had largely stopped training for traditional birth attendants (TBAs) because in rural areas they were focusing on upgrading the skills of family welfare assistants (FWAs) and health assistants (HA) to become community based skilled birth attendants. MHPP, through LAMB pushed to get TBA training back on the agenda and developed a training curriculum. LAMB trained the MOH&FW family welfare visitors (FWV) as trainers for the CBAs.

Findings: A total of 30 FWVs were trained as CBAs trainers; about one third had been transferred or retired. The FWVs seemed to have a good relationship with the CBAs. In discussions, they seemed knowledgeable and were comfortable in their training role. While LAMB was very helpful in conducting the TOT there was little follow-up of the trainers or the CBAs which may have been useful.

On average, the CBAs had been conducting deliveries for 10-15 years. Most had never received any training. The CBAs (258) were trained by the MCWC trainers; the drop-out rate was less than 1%. They indicated that they had adopted several new practices as a result of the training including: encouraging mothers to ensure a clean place for delivery, importance of rest and more food during pregnancy, benefits of colostrum and need to wrap the baby immediately after birth. They also said that having the identity card helped raise their status in the community and more women are willing to come to them. They said that they are willing to refer women because they know the staff at the MCWCs- "they are like our family". The MCWC staff said that there has been an increase in ANC referrals and CBAs are referring complications earlier.

There was a lot of variation among the CBAs interviewed in terms of the number of deliveries conducted (1-7/month) and (delivery) referrals made to MCWCs (1-9/ month). All the CBAs stated that they do fewer deliveries after the training. This is due to women having fewer children, with the success of FP efforts, and the CBAs are referring more women for services. As a result, their income has decreased and they wanted access to income generating opportunities.

Recommendation: *Concern #8: Concern should identify microcredit/income generating activities for the CBAs and possibly the CHVs. One possibility is to consider forming an association.*

Findings: *Skilled Attendance at Birth:* Based on the 2007 BDHS, 32% of deliveries in urban areas occur with a SBA, 30% occur in health facilities and 11% with trained traditional birth attendant. In Rajshahi Division, only 12% of deliveries occurred with a SBA and in health facilities and only 13% of deliveries occurred in health facilities and 8.5% by trained traditional birth attendants.

While it is encouraging that more deliveries occurred in health facilities, from 44% to 55%, the main aim of MHPP was to ensure that more women delivered with a skilled birth attended (SBA), which only includes medical personnel (e.g., MD, MO, FWV, Nurse).

Table 16 demonstrates that more women delivered with a SBA, from 49% to 58%, just shy of the EOP target and much higher than the 2007 BDHS Divisional data (13%) and urban data (30%). This is a significant achievement because there are many decisions that a woman and her family (e.g., funds, arranging transport) have to make to ensure that they can access a SBA.

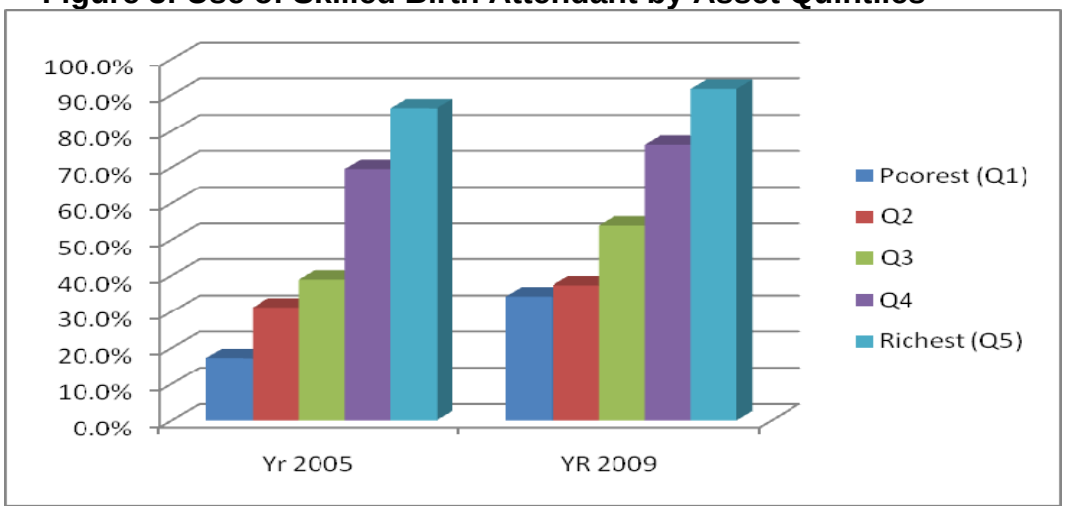
Table 16: Delivery and Post Partum Care Results, 2005 vs 2009

Indicator	Baseline (2005)	Final 2009	EoP Target
Delivery in Health Institution	44%	55%	N/A
Delivery with Skilled Birth Attendant (SBA) (1)	49%	58%	60%
Delivery with Community Birth Attendant (CBA) (2)	18%	28%	20%
Post-partum Visit within 48hrs	81%	39%	n/a(1)
Vitamin A postpartum	25%	49%	50%

Source: MHPP 2009 KPC (1).SBA only includes medical personnel (e.g., MD, MO, FWV, Nurse).(2) CBA only includes traditional birth attendants who were trained by MHPP. (1) Note: Indicator added as part of MAMAN technical assistance in 2006 by the Child Survival Technical Support Project but no target had been set by the team.

One of MHPP's objectives was to ensure poor women could access delivery services. Figure 3 shows that there was an increase overall in deliveries with skilled birth attendants (SBAs). In addition, it shows that the poorest quintile had the greatest increase from 17% to 34% followed by the third quintile from 39% to 54%. As a result, the overall **equity gap dropped from 69% to 57%.**

Figure 3: Use of Skilled Birth Attendant by Asset Quintiles



Use of a skilled attendant at birth is harder to change than Vitamin A supplementation because it requires: 1) access to a SBA at any time during the day or night; 2) clean environment; and 3) some type of payment or cost. Thus, this is a major achievement of the project.

Findings: *Community Birth Assistants (CBAs):* The KPC indicates that the main reasons for home deliveries are low perceived risk of the birth (80%), financial costs (34%), fear of going to the hospital (35%) and unable to reach the hospital in time (20%). As previously mentioned the CBAs had been doing deliveries for 10-15 years without receiving any training prior to MHPP. The Team was told that there was an increased willingness from the community to use the CBAs, which is demonstrated with an increase in their rate of deliveries from 18% to 28%.

c. Management of Pregnancy Related Complications: There has been growing concern within Bangladesh that there is a significant rise and possible misuse of C-Sections. This is a multi-faceted issue stemming from a: 1) desire for higher revenues and convenience for the providers, particularly in the private sector, which is largely unregulated; 2) lack of skills (e.g., MVA) and medicines to manage complications through other approaches; and 3) growing demand from consumers.

Even though CEmOC was not a key component of MHPP, a few activities to address this issue warrant some discussion. As previously mentioned the MHPP supported training of MOs (MCWCs) on CEmOC services at LAMB hospital.

Findings: Based on discussion with the staff, it does not appear that there was a clear plan for follow-up by the LAMB trainers. The relationship between LAMB and Concern, while amicable, has not worked that well in the field. At the beginning of the project LAMB staff was readily available. However, during the life of the project, LAMB's reports were incomplete and late. This is unfortunate because the Team found the quality of care provided by the MCWC quite poor.

The MTE found that the quality of care at the MCWCs had not really improved, especially the ability to manage complications. In addition, key complications such as post-partum hemorrhage and eclampsia were not being managed at the MCWC, they were transferred to the district hospital, delaying their care. This was largely due to the lack of skilled staff and shortage of supplies (e.g. oxytocin, magnesium sulfate, valium)

Especially worrisome was the inadequacy of CEmOC services. This is due to insufficient levels of health providers at the MCWCs, limited skills of existing staff and unavailability of key medications (e.g., oxytocin in Kurigram for active management third stage, magnesium sulfate/valium to manage eclampsia). All the MCWCs perform C-Sections (112 in Jan 2009) but none of the staff that the Team interviewed was using the partograph, even though they reported being trained. Thus, the indications for the C-Sections were unclear. The Team was told that if woman came with a hemorrhage or eclampsia they were referred to the district or medical college hospitals, causing delays in their care. A review of MCWC data found that only 2 out of the 7 MCWCs were managing complications, other than providing C-Sections.

It appears that CBAs are referring women with complications in a timelier manner, which can lead to better outcomes. As mentioned, all the families in crisis interviewed by the Team were women requiring delivery assistance, most for complications. The WHC support systems played a vital role in supporting women to access health services and even though the quality may be poor, the health system was able to provide life-saving services for these women.

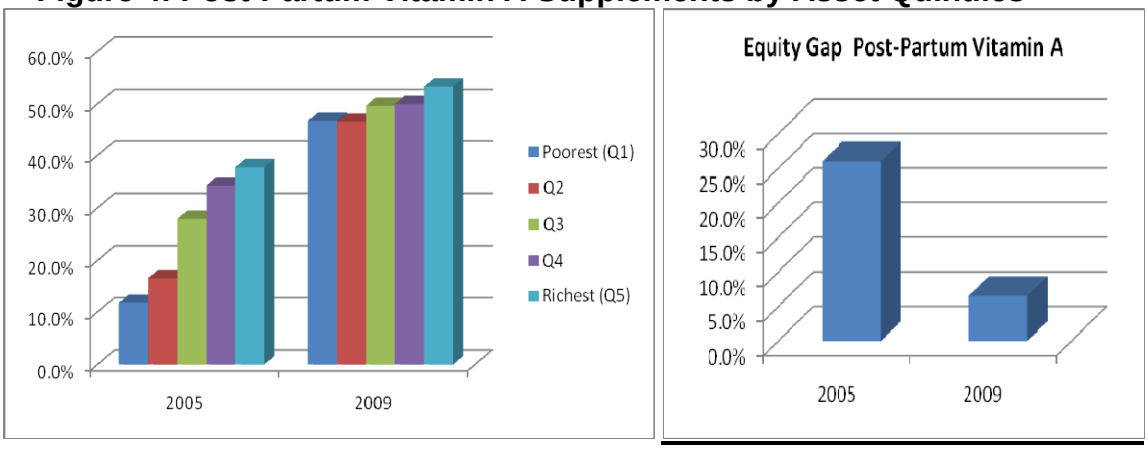
Recommendation *Concern # 9: Concern Bangladesh should make sure that the Deputy Director of Family Planning and the UN are aware of the quality of care issues with MCWC so they can address these issues.*

d. Post-Partum Care: As previously mentioned one of the key strategies to enhance care was to have the CBAs and CHVs follow-up with all pregnant women, particularly those who delivered at home.

Findings: The 2009 KPC found a significant increase in postpartum care (PPC) for mothers by a skilled or trained within 48 hours after delivery rose from 24% to 45%. The gain was largely made among institutional deliveries. It is unclear how successful CBAs have been in providing postpartum care because only 8% of the women who delivered at home received a PPC visit, while 45% of the births occurred at home. However, during our interviews with mothers in crisis, a good number of them (5 from our group) had been supported by a CBA during retained placenta or heavy bleeding (PPH).

A key aspect of PPC was ensuring that women received Vitamin A. There was a significant increase among post-partum women from 16% to 41%. This was higher than the rate for Rajshahi Division (20%). As seen with childhood Vitamin A supplementation, the greatest increase in Vitamin A among post-partum women was among poorest quintile, from 17% to 34% followed by the third quintile from 39% to 54% as shown in Figure 4. As a result, the overall **equity gap dropped from 26% to 6.5%.**

Figure 4: Post-Partum Vitamin A Supplements by Asset Quintiles



e. Newborn Care: The risk of dying in the first month of life (37 per 1,000) is nearly two and a half times greater than in the subsequent 11 months (15/1,000). Deaths in the neonatal period account for 57% of all under-five deaths (BDHS). Newborn care within the first week of life has shown to be essential to improving outcomes.

Newborns receiving a check-up by a trained person within 48 hrs of birth increased from 24% to 45%. This is much higher than the 2007 BDHS for the Division (24%).

Findings: Knowledge of Newborn Danger Signs: There has been an increase in knowledge of neonatal danger signs, 40% women know at least 2 out of 11 danger signs. Most women (84%) knew that fever was a danger sign and 63% knew difficulty breathing. However, less than half of the women knew that jaundice, chest in-drawing, poor feeding, not crying, bluish body color were danger signs. As suggested in **Recommendation Concern #7,** there should be a review of maternal and newborn danger signs with MCWC and MHD trainers and CBAs and CHVs.

Findings: Immediate *Breastfeeding*: Most women in Bangladesh believe that Colostrum is not good for the child- "it is not full milk"- and thus they discard it. Prelacteral feeds, primarily honey and cow milk, are also common (62% 2007 BDHS). The BDHS reported a comparable level 43.5% for Rajshahi division vs. 42% in the MHPP areas. All the CBAs and CHVs interviewed by the Team were supportive of giving Colostrum. Many of the CBAs indicated that women are less likely to provide prelacterals now. This is a good sign but it has not yet translated into behavior change.

Cutting the cord: This indicator was high at the baseline so was not a key focus of the project. It is included in the measurement reports as a MAMAN indicator. Table 17 shows that this practice has been adopted by the community and maintained throughout the project life

Table 17: Newborn Care Results, 2005 vs 2009

Indicator	Baseline (2005)	Final 2009	EoP Target
Breastfeeding initiation (within 1st hour)	42%	42%	60%
Cord cut with clean instrument	87%	96%	N/A
Newborn immediately wrapped with clean cloth	17%	16%	
Newborn bathed after 24hrs	74%	86%	N/A
Newborn care within 48 hrs after birth	24%	45%	N/A

Source: MHPP KPCs

Newborn Immediate Wrapping with warm cloth: It should be noted that most babies are wrapped immediately following birth(98%). MHPP indicator's was to have the newborn wrapped with warm cloths which did not change between surveys. There may be some confusion about the indicator that affected responses. First, the question asked mothers who may not know when a health provider or CBA wrapped the newborn. Second, the definition of immediate may be unclear. The 2007 BDHS for Rashahi division found that 0.4% of newborns were wrapped within 0-4 minutes, 15.4% were wrapped from 5-10 minutes; and 49% were wrapped after 10 minutes. Reviewing this data, MHPP findings are comparable to wrapping within 5-10 minutes.

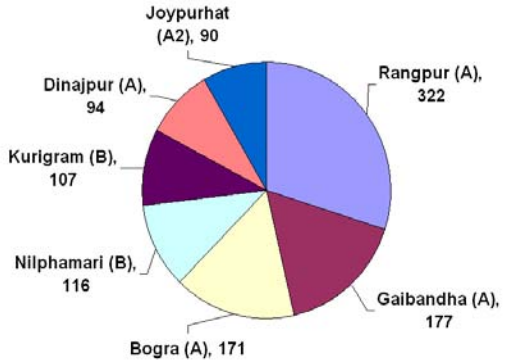
4. Cross-Cutting Results

This section discusses cross-cutting issues such as mortality, reaching the poor, dissemination the model and sustainability and potential scale-up of the MHPP model.

***a*. Mortality:** The overall goal of MHPP was to contribute to a reduction in maternal and child mortality and morbidity. Studies have shown that women are less likely to die from a maternal complication if they deliver with a SBA. While MHPP cannot directly indicate that there was a reduction in maternal deaths, it is clear that there was an increase in deliveries with SBA (Table 15) that has been demonstrated to increase a woman's chances of a healthy outcome.

As discussed above, there was a reduction of ARI and diarrheal disease prevalence in the project areas (Table 13). The Life Saved Calculator, shows that the result of MHPP activities contributed to **1,077 child deaths were averted**. Figure 5 shows that Rangpur had the greatest increase, due to their large population and significant increase in health outcomes, followed by Gaibandha and Bogra.

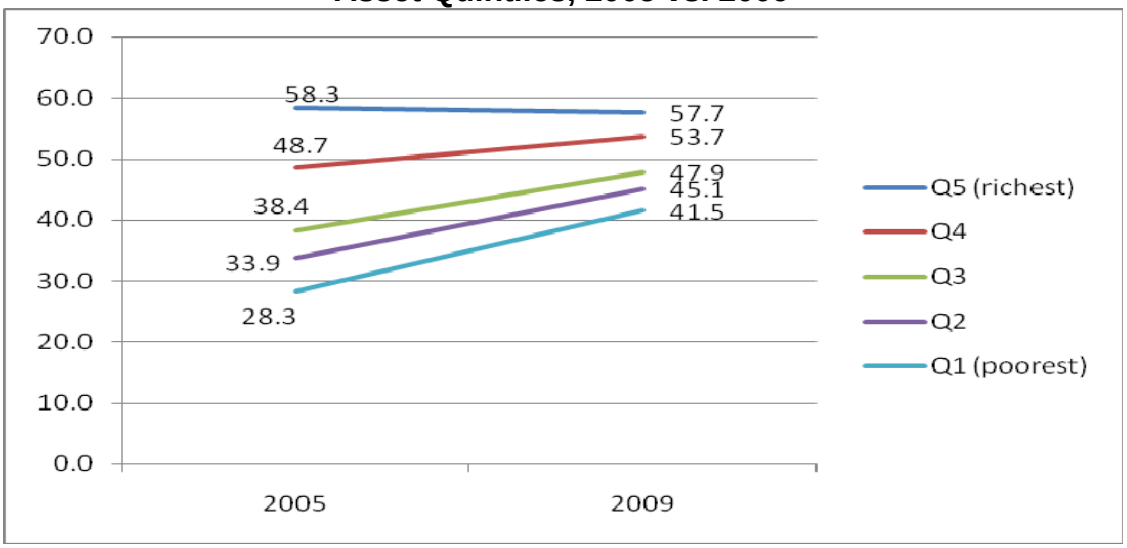
Figure 5: Lives Saved By Municipality



In terms of costs per beneficiaries, the average was $1.23 per year. Rangpur ($0.64) and Bogra ($0.99) had the lowest costs because they were larger while Nilphamari (B) was the highest ($2.66).

b. Equity/Reaching the Poor: As discussed throughout this report, MHPP had a specific focus on reaching the poor. It has been shown with specific indicators (e.g. Vitamin A supplementation) that while the entire population benefited but the greatest gains were among the poor. Figure 6 provides a composite of MNCH indicators that shows the greatest increase has occurred among Q1(poor), from 28% to 41%, a 13% increase. This was followed by an 11% improvement for Q2 and 9% increase for Q3. A smaller gain was seen for Q4 and no change among the richest residents. *Overall the* equity gap dropped from 29.9% to 16%. **Thus, it is clear the MHPP was successful in improving health outcomes among the poor** (see Annex 1: Result Highlights)*.*

Figure 6: Composite Maternal, Newborn, Child Health Indicators by Asset Quintiles, 2005 vs. 2009



c. Program Management: It is clear that the urban health model has evolved as a result of learning from quantitative and qualitative data in both the Learning Centers and the replication municipalities. The skill set of the staff has also significantly grown to meet the changing needs to model. Many of the staff at the project and HQ levels has been with the project throughout, this has facilitated institutional learning. Without this consistency, the model could have very easily gotten off track.

The project kept detailed cost data throughout the project. Project costs were tracked by five broad project components across each of the municipalities, which included salaries, travel, training, and other project costs. The cost distribution was: 24% for advocacy with the municipal officials; 22% for strengthening community networks (CHVs, CBAs, RMPs, and Imams); 20% for the WHCs; 17% supporting MHDs and 17% research. This is essential information for organizations who may want to replicate and/or expand the model as well as looking at cost effectiveness. (See Annex 3 for Program Management discussion)

d. Sustainability of the Urban Health Model: The Child Survival Sustainability Framework has informed the design and assessment focus of this program on outcomes and capacity changes.

As recommended by the MTE, Concern Bangladesh developed a phase-out plan. One component of this plan is an Operations Manual for Strengthening Urban Health Systems that will be finalized by January 2010. This manual is being developed as a key lesson learned from the original municipalities which had a more abrupt withdrawal of Concern's support. The manual will include guidelines, curricula, tools, and provide a step-by-step instructions on how to implement the model as well as success stories.

Consistent with the MTE findings, the Team found that even though the Municipal officials and WHC members listed all their independent accomplishments they said Concern should stay for three more years. The MTE called this **"process dependency"** which is summed up by one of the WHC members…

> "We can continue to have meetings, Concern never gave us money, they gave us ideas. So who will keep pushing us and giving us ideas?"

Several recommendations, previously discussed, were made to ensure that an entity (e.g., MHD staff and/or NGOs is identified be responsible to continue the important catalytic role played by Concern under MHPP. The Team also believes that developing a cross-learning mechanism among the municipalities (Recommendation Concern #2) will also serve to catalyst for the municipalities.

As previously mentioned, the municipal and community capacity and infrastructure, developed during MHPP, can significantly benefit other government and development programs and is key for their sustainability.

The Team believes that Concern Bangladesh should maintain a learning relationship with these municipalities to both act as their advocate with other development partners and to inform Concern Bangladesh's future urban programming.

Recommendation *Concern # 10: Concern Bangladesh should maintain a learning relationship with the (nine) municipalities. This may include basic monitoring and bringing the municipal/community groups together on a yearly basis.*

A major concern expressed by all stakeholders is the upcoming elections. Even though many of the municipalities and WHC are functioning fairly well, they do not have a plan to orient the candidates and/or new political leadership to support health or new WHC members for that matter. One WHC was in the process of registering itself as an independent association to try to buffer itself from any effects for the elections.

Recommendation: *Concern #11: Concern Bangladesh should assist the WHCs, particularly the Vice-Chairs, to develop a strategy of how to orient candidates and/or newly elected officials that may take office after the upcoming election.*

e. Disseminating the Urban Health Model: Based on the national stakeholder meetings, the Team thought that there is not a good understanding of the MHPP model. Many of the participants were skeptical about the sustainability of the model, particularly of WHCs and CHVs. The final sustainability assessment of Saidpur and Parbatipur, five years post-intervention, will provide an excellent opportunity to address some of these issues.

The Operations Manual should facilitate the replication/ transfer of the model to other implementing organizations, if they desire. In addition to the traditional dissemination of the model results and processes, Concern Bangladesh needs to "market" the model, particularly to key urban health decisions makers. It would be especially important to outline how much it would cost and how long it would take to see results.

Recommendation: *Concern #12: Concern Bangladesh should ensure that model is well documented, packaged, and marketed to facilitate transfer. In addition, this should be actively shared with key urban health decision-makers (MOLGR&C, MOH&FW, ADB, USAID, DFID, World Bank, donor forums)*

f. Scaling–up of Urban Health Model: MHPP has clearly demonstrated its effectiveness with evidence to support its results. As previously mentioned, The Team believes that in order to both sustain the model and enhance the likelihood of its replication Concern Bangladesh needs to maintain a learning relationship with these municipalities (Recommendation #9 Concern).

The Operational Manual will assist in disseminating and transferring the "technology" of the model. However if the model is to be adopted by the MOLGR&C or donors it needs to be "packaged" in a way that is more understandable and easy for donors to "buy".

The Team explored if the model worked better in larger (more urban) municipalities vs. smaller (more rural) municipalities. The Team found that the model was adaptable enough to work in any size of municipality. However, as evidenced by the HICAP and other analysis, there are differing initial levels of (absorptive) capacity. In the larger

municipalities, the officials are slightly better educated and have more exposure to a variety of different approaches.
Thus, once new skills are learned they can more quickly be incorporate into their practices with other partners. Smaller municipalities may take longer because they have not had as much exposure and they usually have fewer resources. It should be noted that even though some of the smaller municipalities had lower HICAP scores initially they increased to almostthe same levels of the larger municipalities by the end of the project.

E. Contextual Factors

The main contextual factor that challenged implementation was the major political upheaval between 2006-2007. As a result, some of the political officials were jailed and/or were in hiding due to a crackdown by law enforcement agencies. This made working with the elected officials difficult, particularly at the municipal level because there was genuine fear about their safety. In addition, the government stated that there should not be any public gatherings, which made implementation at the ward level challenging. The project and communities were able to develop some innovative solutions, such as the WHC Vice-Chairs, but there is no doubt that implementation slowed during this period. Thus, MHPP was able to meet and exceed its targets seen with these delays.

Initially some of the community members thought that it would be difficult to have young women be CHVs because of the cultural issues about single women moving about the communities. After much discussion with the WHC members, the parents of these girls, this has proven to be a very successful strategy and now they are well respected by the community.

F. Recommendations and Conclusions

1. Recommendations

Recommendations are provided throughout the document. They have been divided into three categories. First, the report gives guidance to the local stakeholders to reinforce the capacities that they have established and should continue to further develop and strengthen. Second, are specific recommendations for the Concern Bangladesh/MHPP Team to focus on during the remaining quarter to successfully end the project. Third, the Team provides steps to disseminate and scale-up MHPP that may contribute to further urban programming. Table 18 provides a summary of these recommendations.

Table 18: Summary of Final Evaluation recommendations

Local Stakeholders	Concern/MHPP Team	Concern Bangladesh Future Urban Programming
***#1*:** Municipal leadership should continue sustain/**increase the health budget**, particularly support for WHCs and EPPs.	**#1** Concern should assist the municipalities to identify ways to further **develop their leadership** in health.	**#6*:*** Concern should seek **donor support to activate the ICMM.**
#2: Municipal leadership should make **health a regular agenda item** at the Cabinet meetings.	***#2:*** Concern should assist the municipalities to develop a **mechanism to promote cross municipal learning** after MHPP.	**# 11:** Concern should maintain a **learning relationship** with the (nine) municipalities.
#3: Municipal leadership should continue to develop **annual health** plans with significant input from the WHCs, MHD, and MESPCCs	**#3:** Concern should assist the MHD to develop a **system to train new CHVs** and continue to monitor existing CHVs	**#12:** Concern should ensure that **model is well documented, packaged, and marketed to facilitate transfer**. In addition, this should be actively shared with key urban health decision-makers
#4: Municipalities should strengthen **coordination among the Cabinet and WHC members.**	**#4**: Concern should assist the MHD to **develop a strateg**y to create/strengthen the **linkage with MCWC staff and CBAs**.	
#5: MESPCC should identify/cultivate a r**elationship with a NGOs**	**#5**: Concern should assist WHCs in completing the **final capacity assessments**	
#6: MESPCC should collaborate with **private sector health providers**.	***# 7:*** Concern should **reinforce maternal and newborn danger** signs for CBA/ CHV trainers, CBAs and CHVs.	
#7: Municipalities/WHC facilitate **sharing about innovations in fundraising** and management of WHC emergency funds	***#8:*** Concern should identify **income generating activities for the CBAs/CHVs**	
#8: Municipalities/ WHC/MHD should continue developing and sharing local solutions to **recognizing the efforts of CBAs and CHVs**	***#9:*** Concern should make sure that the MOH&FW and the UN are aware of the **MCWC quality of care issues**.	
	#11: Concern should help the WHCs, particularly the Vice-Chairs, to develop a **strategy of how to orient newly elected officials** after the upcoming election.	

2. Conclusion

In summary, MHPP met or exceeded the majority of its targets, even thought there was at least one year of political turmoil that limited implementation. The evidence clearly proves MHPP's hypothesis that "enhancing coordination mechanisms, building municipal capacity and creating community demand can result in the adoption of healthy practices and improvements in health outcomes".

Self-assessments of municipal officials and WHCs showed significant gains in capacity, although there is still remove for some improvement. The Team found that the model is effective in both large and small municipalities, but the time required may vary due to differences in initial capacity levels.

MHPP aim was not only to improve health status of the population, but it had a particular focus on improving conditions for the poor. The data clearly indicate that MHPP has been successful in ensuring that messages and services reach the poor, with an overall reduction in equity gap from 29.9% to 16%.

While the final sustainability assessment is underway, the 2007 results showed that the Learning centers were able to maintain most of their health outcomes three years after the end of the project. The Team feels that with the change in MHPP strategy, where Concern Bangladesh is a facilitator rather than a direct provider, seems to be working well. The municipal officials, WHC members, and CHVs and CBAs stated that they are committed to continue these efforts after the departure of MHPP.

It is clear that MHPP, and it predecessor grant in Saidpur and Parbatipur, have made an enormous impact on Concern Bangladesh and Concern Worldwide approaches to child survival and health programming. There are seven key ways that MHPP has influenced survival and urban health programming as well as successful strategies to reach the extreme poor.

First, the fact that post-project data collection and analysis of both municipal and ward level capacities and health outcomes in the Learning Centers provides lessons and solid evidence of what it takes to sustain efforts, which is rarely captured.

Second, maintaining a relationship with the Learning Centers, allowed MHPP to demonstrate the model's success and more quickly implement this approach in the new municipalities. It also allowed MHPP to continue the learning process.

Third, it is clear that Concern was and continues to be searching for a different replication model – rather than working in more municipalities or in more technical interventions areas. Thus, the model was significantly changed between the two grants and it was allowed to be adapted as it was implemented. Projects change their focus, but many don't realize that this requires dramatic shift in staff competence to successfully implement the new approach. Often times this is the main limitation of the project. Concern Bangladesh recognized this and ensured that staff was trained and supported in these new skills.

Fourth, MHPP has a robust monitoring and evaluation system that provides solid data on key issues, such as cost, that demonstrates the model's success. One of the key elements of the model was reaching the poor. While many programs say that this is their aim, they often do not have data to support this desire. MHPP clearly demonstrated a successful model of reaching the poor that the communities can now use with other development partners.

Fifth, the development of the Operations Manual will provide a guide to foster replication in other municipalities in Bangladesh and potentially in other settings.

Sixth*,* through the cross-visits and Concern Worldwide US's Health Advisor, many of the MHPP lessons learned have been incorporated in other child survival programs (e.g. Rwanda).

Seventh, Concern Bangladesh and Concern Worldwide have presented the MHPP results within Bangladesh and at international fora with other organizations interested in urban health (e.g., USAID, Clinton Foundation, Pop Council, Gates Foundation). This potentially could influence how other organizations think about urban health programming and reaching the poor.

G. Future Directions for Urban Programming

The Team was also asked to discuss future opportunities for the MHPP model. In discussions with Concern Bangladesh staff and other stakeholders in Bangladesh, the following ideas arose, although the Team did not have time to assess the viability of any of these options. It should be emphasized that these options are not mutually exclusive.

First, Concern Bangladesh could work more closely with the MOLGR&C, possibly seconding a staff to the Ministry, to enhance overall municipal processes (planning, coordination).

Second*,* Concern Bangladesh could work with donors to (re-)establish a coordination mechanism, such as the IMCC, among the MOLGR&C and MOH&FW to address key urban health policy issues. Another coordination option maybe working with the ADB to expand their network of city corporations and municipalities.

Third, it may be possible to work with the Mayor's Association, using the existing MHPP Mayor's as champions for the model. They also may be able to provide some entry points into the MOLGRD&C.

Fourth**,** Concern Bangladesh could explore the possibility of building the model more closely linked with urban water and sanitation efforts in municipalities, where there seems to be ample development funding.

Fifth**,** it seems that one way to scale-up the model is for Concern Bangladesh to continue its facilitation approach, instead of working directly in more municipalities. This may mean building the capacity of other NGOs to play the catalytic role of the model, played by Concern during MHPP, in other municipalities.

Annexes

Municipal Health Partnership Program

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Annex1: Result Highlight

Proceedings of the 8th International Conference on Urban Health,
ICUH 2009, Nairobi, Kenya
October 18 – 23, 2009

Measuring the reach of health outcomes on the urban poor using principle component analysis in Bangladesh

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Abstract. Background: An innovative intervention focused on reducing the coverage gap of essential maternal, newborn and child health services across seven municipalities in poverty stricken Rajshahi Division of Bangladesh from 2005-2009. Components included health advocacy with municipal authorities, establishment of neighborhood health promotion committees, volunteer networks creation, and capacity strengthening of local health department staff. **Objective:** To determine the interventions´ reach to the poorest families, baseline and final household coverage survey instrument included principle components analysis (PCA) to compare of health outcomes across proxy wealth quintiles. **Methods:** Using lot quality assurance sampling across all 75 wards in the seven municipalities, the surveys were carried out by a national contractor and included responses from 3000 mothers with children aged 0-23 months. Coverage of all 12 of the project's outcome measures were analyzed across wealth quintiles; statistical changes in equity gap assessed. **Results:** Significant improvements in coverage of the package of outcomes were found for the lowest three wealth quintiles. The aggregate coverage gap between the richest and poorest families declined by 63%, closing the overall gap from 30% to 16% in five years. **Conclusion:** The focus of all the municipal actors on improving health of the extreme poor who have no reliable income or assets, resulted in raising the coverage of health among the poorest families closer to the level of the richest. The inclusion of PCA in large-scale health surveys in urban settings can provide powerful information regarding the equity of health coverage.

Keywords: Equity; Coverage; Poverty; Household Survey; Bangladesh

1. Introduction

Bangladesh, has achieved substantial gains in the field of health during last three decades despite modestly declining poverty and inadequate health services. However, Infant Mortality Rate (IMR) and Maternal Mortality Ratio (MMR) continue to be unacceptably high compared to many other developing countries, with persisting socioeconomic differentials. According to the UN Children's Agency (UNICEF) State of the World's Children Report 2008, Bangladesh has the worst MMR in South Asia at 570 per 100,000 live births compared to neighboring India and Pakistan are 450 and 320 respectively, According to Bangladesh's 2007 Demographic and Health Survey, 21,000 mothers die annually of pregnancy and childbirth-related causes. Different studies have shown that the health indicators of the urban poor are worse than those of the rural poor because of poorer living conditions, and limited urban primary health care (PHC) services. It is now a well established fact that the poor and marginalized segments of society have a greater need for health care than their rich counterparts. Despite the commitment from the government of Bangladesh to pursue pro-poor health policies and interventions vigorously, in Bangladesh the level of inequity in health status and access to basic health care

interventions remains high. Concern Worldwide Child Survival program focused on reaching the poorest populations to reduce the coverage gap of essential maternal, newborn and child health (MNCH) services across seven urban municipalities in poverty stricken Rajshahi Division of Bangladesh. This study attempts to measure the interventions´ ability to reach the poorest families, and to compare of health outcome indicators across wealth/asset quintiles.

Concern's Intervention. Municipalities are supposed to provide preventive health and limited curative care to their dwellers with support from Ministry of Local Government, Rural Development & Cooperative (MOLGRD&C). However, paucity of technical capacity from the MOLGRD&C and broken political and administrative lines with the Ministry of Health and Family Welfare (MOHFW) as well as limited resources of municipalities have prevented community health services from meeting the real needs of the poor residents of municipality. Concern has been working to develop a sustainable urban health system in Bangladesh with a special focus on improving access to health services for poor people. The Concern CSP extends access of poor people to the improved maternal, newborn and child care facilities of municipalities through building a partnership with seven municipalities. The Concern-Municipality partnership is a capacity building partnership at four levels of the municipalities: Municipal cabinet, Municipal health department, Municipal central health committee and neighborhood ward level health committees. The major program strategies include developing the management capacity of the municipality managers and supervisors, developing the technical capacity of the municipality's health staff on child survival activities and strengthening the municipality's community approach through training, facilitation and supporting the formation of neighborhood health promotion committees, volunteer networks creation. Concern Bangladesh provides training and other inputs as an attempt to change staff behavior, increase in quality of care and sustainability. Concern Bangladesh aim to develop local capacity to sustain these efforts within the existing resources of local communities, municipalities and the Government of Bangladesh.

2. Methods

The study was integrated into the design of the intervention and final evaluation (January 2009) and baseline (January 2005) household coverage surveys. Surveys were carried out using lot quality assurance sampling across all 75 wards in the seven municipalities. Results included 3000 mothers with children aged 0-23 months for both baseline and final surveys. The survey was conducted by an independent national contractor.

A separate wealth/asset index was constructed for baseline and final surveys using the Principal Components Analysis (PCA) based on clustering of key assets including: electricity, furniture, television, and construction of housing materials. Project has 12 outcome indicators related to MNCH. Coverage of all 12 of the project's outcome indicators were analyzed across five asset quintiles. To assess the inequity, results of the twelve outcomes indicators were aggregated and present the findings using a new measure, the 'coverage gap'. Also, to see how the project interventions reached to the poorest, results of the twelve indicators are also compared between the poorest quintile (Q1) of baseline and poorest quintile (Q1) of final evaluation.

A. Construction of the Wealth Index

Measuring household economic status in developing countries is difficult. In this study, respondents were categorized into different socio-economic levels using an index of asset ownership or wealth and availability of basic household services. While there has been some controversy about the relative merits of using assets instead of consumption or income data to measure socio-economic status, research suggests that the asset consumption correlation is quite accurate. Asset consumption is an indicator of level of wealth that is consistent with expenditure and income measures (Filmer and Pritchett 1998; Gwatkin et al. 2000).

The four steps in the construction of the asset index:
1. Determination of indicator variables (assets)
2. Dichotomization (i.e., variables that take a value of 1 if the household owns the asset and 0 if the household does not own the asset)
3. Calculation of indicator weights and the index value
4. Calculation of distribution cut-off points

The indicator variables i.e., the main assets for which information was collected in this study include presence of electric fan, bicycle, motor cycle, color television, black and white television, electricity, floor mat, table or chair, sofa set, type of toilet, housing materials (roof, walls and floors).

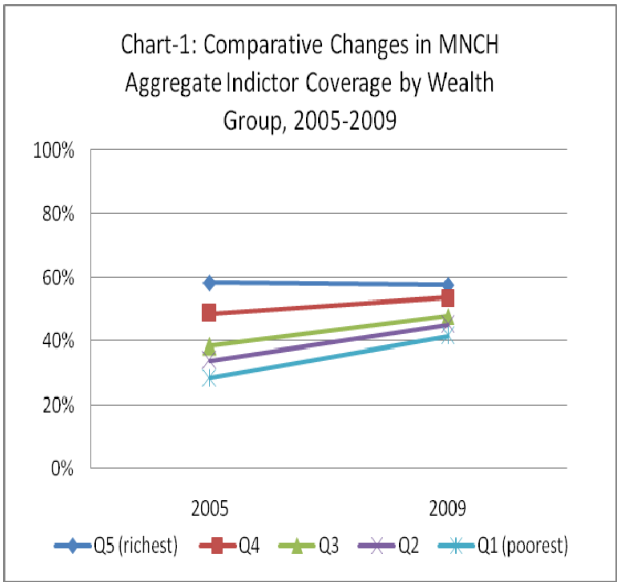
The asset index was constructed using the method of PCA following the SPSS factor analysis procedure which assigns each asset a factor score (weight). The resulting scores were standardized in relation to a normal distribution with a mean zero and standard deviation of one. Each household was assigned standard scores for each asset calculated based on the formula presented below:

$$\text{Household asset score} = \left(\frac{\text{value of asset variable - unweighted mean of asset variable}}{\text{unweighted standard deviation of asset variable}} \right) \times \text{weight (factor score)}$$

Each woman was assigned a total household asset score for her household based on the sum of her standard household asset scores. The women were then ranked according to their total scores and divided into five quintiles equally (20% each). These groups represent the poorest (Q1) up to the richest (Q5) quintiles of the population.

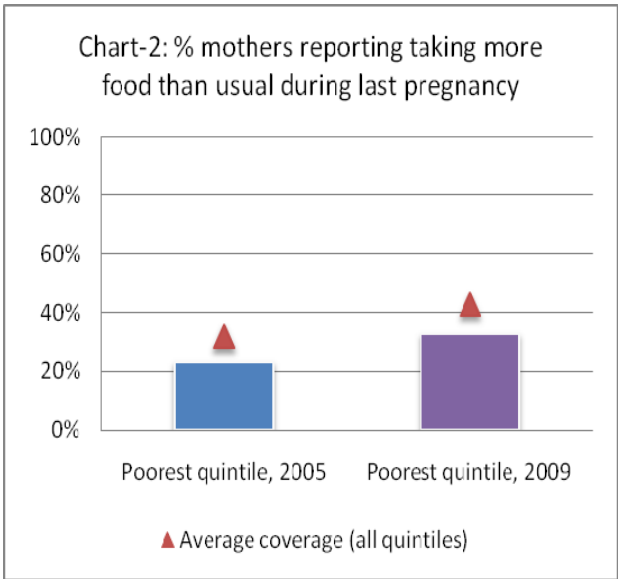
3. Results and discussion

As mentioned earlier, the mission of Concern is to alleviate people living in extreme poverty. Coverage of all 12 project outcome indicators were analyzed across asset quintiles. From baseline to final evaluation, significant improvements were observed in the lowest three asset quintiles with respect to project outcome indicators. Chart 1 provides a composite of twelve indicators which show the greatest increase has occurred among wealth Quintile 1 (poor), from 28% to 41% during the final survey. This is a 13 percentage point increase from the baseline measurement to final survey. This was followed by an 11 percentage point improvement for Q2, 9 percentage point increase for Q3. A smaller gain was seen for Q4 and no change among the richest residents with respect to the indicators. The aggregate coverage gap (difference between the richest and poorest quintile) declined by 53%, reducing the overall equity gap from 30% to 16% in five years (2005 to 2009). The difference between the poorest and richest quintiles indicates the patterns of inequality i.e., larger the difference higher the inequality.



Results indicate that the program reduced inequity by nearly a half, thereby improving MNCH outcomes particularly for the poorest populations.

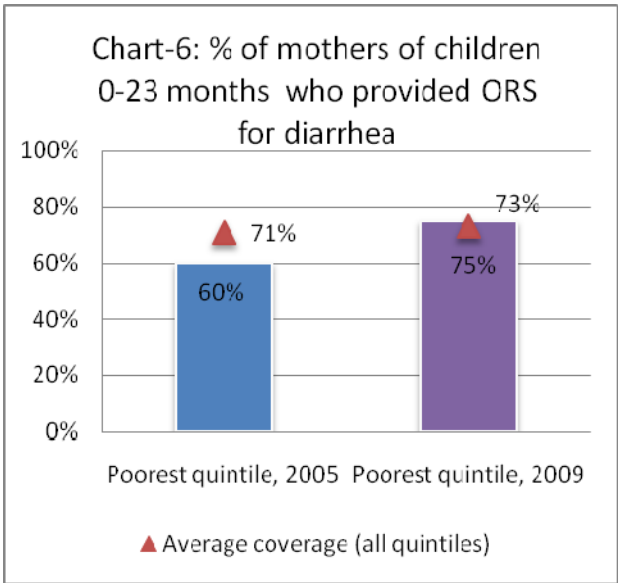
One of the main program objectives was to increase the access to health facilities and improve household health practices among the poorest and most marginalized populations. This study also analyzed baseline (2005) and final (2009) data for all outcome indicators, to determine the ability of the program to reach the poorest (Q1) families and the impact on health outcomes. Of the twelve outcome indicators, nine positively improved from the baseline (2005). Among these nine indicators, six were significant. Chart-2 to Chart-6 presents the comparative health findings from baseline to final survey among the asset poorest families (Q1).

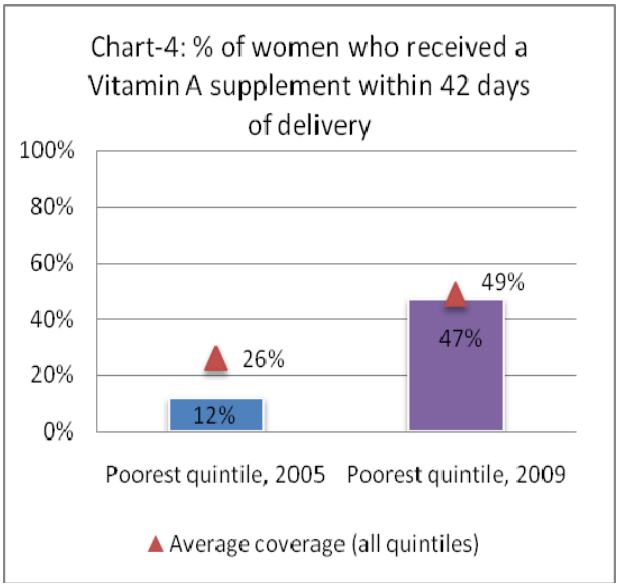


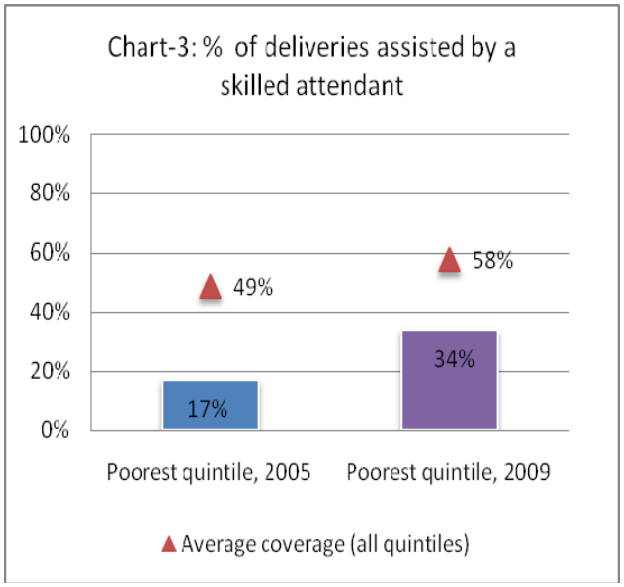
Compared to asset poorest mothers of 2005, in 2009 asset poorest mothers were 2.51 (1.73 < Confidence Interval (CI) < 3.64) times more likely to have been assisted by a skilled delivery attendant. They were 2.34 (1.46 < CI < 3.76) times more likely to receive iron foliate tablets for at least 90 days during pregnancy, 6.58 (4.39 < CI < 9.88) times more likely to receive postpartum Vitamin A supplementation and reported consuming 1.66 (1.17 < CI < 2.35) times more food than usual during last pregnancy.

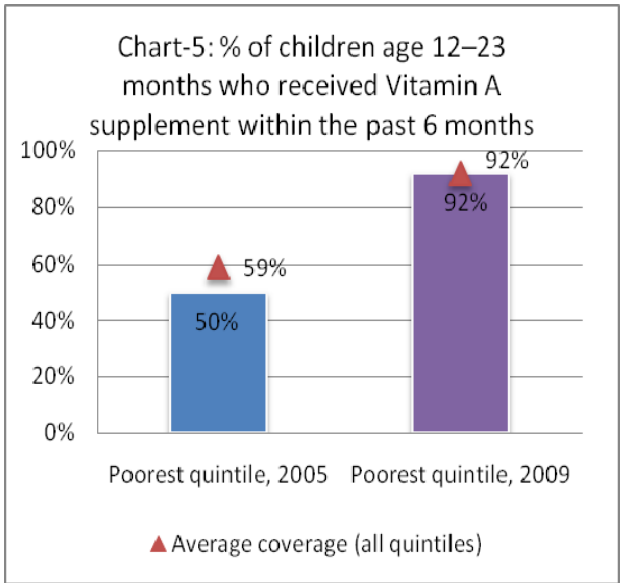
Children aged 12 to 24 months of asset poorest mothers in 2009 were 10.78 times (6.68 < CI < 17.41) more likely to have received vitamin A supplement in past six months prior to the survey.

Children aged 0 to 23 months of asset poorest mothers were provided ORS for recent episode of diarrhea 2.02 (1.06 < OR< 3.83) times in 2009 than 2005.









4. Conclusion

The data demonstrated that after five years of interventions, asset poorest families have considerably improved health practices and coverage compared to wealthiest quintiles. However, before and after interventions in 2005 and 2009, mothers in the highest asset quintile had significantly higher results than the lowest, confirming inequalities in the health system continue to persist.

As a result of Concern's implementation with MHPP and subsequent interventions, the overall equity gap between the poorest quintile and wealthiest has reduced from 30% to 16%. This indicates program has been successful not only improving health outcomes but directly targeting and reaching the poorest of the urban community. This program demonstrates that within the political system if the cabinet members in addition to the community members have the ability to prioritize the needs of the poor and directly target services to this population, health status of the urban poor will improve.

PCA is a powerful and low cost analytical method that sheds light on equity of child survival programs. The information that is used in this analysis for construction of asset index is often collected in any household surveys or can be obtainable by the inclusion of a few simple questions. Greater application of the asset index tool should be used in surveys to make this critical comparison.

References

Filmer, D. and L. Pritchett. 1998. Estimating Wealth Effects Without Expenditure Data or Tears: with an Application to Education Enrolment in States of India. World Bank Policy Research Working Paper No.1994.

Gwatkin, D.R., S. Rutstein, K. Johnson, R.P. Pande and A. Wagstaff. 2000. Socioeconomic Differences in Health, Nutrition and Population in Bangladesh. HNP/Poverty Thematic Group. Washington DC: The World Bank.

National Institute of Population Research and Training (NIPORT), Mitra and Associates, and ORC Macro. 2009. Bangladesh Demographic and Health Survey 2007. Dhaka, Bangladesh and Calverton, MA, USA: NIPORT, Mitra and Associates and ORC Macro.

Ross, S.R.(2009). Final Evaluation of Municipal Health Partnership Programme (MHPP) in Bogra, Dinajpur, Gaibandha, Joypurhat, Kurigram, Nilphameri, Rangpur Municipalities of Rajshahi Division, Bangladesh. Concern Worldwide: Dhaka.

United Nations Children's Fund (UNICEF). 2008. State of the World's Children 2008: Child Survival. . Geneva: UNICEF.

Annex 2: Publications, Presentations & Documents Reviewed

A. Publications & Presentations

Datta, D. Kouletio, M and Rahman,T. *Developing Urban Health Systems in Bangaldesh*. Learning in Action. April 2005 (51)

Equity and Accountability: Is Maternal and Child Health Reaching Urban Poor, Poster Presentation at Countdown 2015

Establishing a Local Leadership Model for Urban Health in Bangladesh. Poster Presentation at the International Conference on Urban Health, 2008

Linking Communities and Local Government to Reduce Mortality Presented by Dr. Shamim Jahan, Program Manager, CW Bangladesh at APHA November 2006

Strengthening Ward Health Committees in Urban Bangladesh Mobilizing Community for Achieving Health Goals. Presented by Dr. Shamim Jahan, Program Manager, CW Bangladesh and Michelle Kouletio, Global Health Advisor, CW US at APHA November 2006

The End of Magical Thinking: Sustainability Evaluation of the Saidpur and Parbatipur Municipal Health Partnership Model in Bangladesh. Presented by Dr. Eric Sarriot, MACRO Intl, at APHA November 2009

Unlocking the Potentials: Ward Health Committees are Making a Difference in Urban Health Systems in Bangladesh Presented by Subir Kumar Saha at the 8th Commonwealth Congress on Diarrhoea and Malnutrition. ICDDR,B, Dhaka, Bangladesh Feb 2006. Co-authors: Izaz Rasul, A. K. Musha, Michelle Kouletio

B. Documents Reviewed

Bangladesh Demographic and Health Survey, 2007

Concern Bangladesh. Training Report

Concern Bangladesh. Final Knowledge , Practice and Coverage Survey Report. March 2009

Concern Bangladesh. Mid-Term Knowledge , Practice and Coverage Survey Report. March 2007

Concern Bangladesh. Training of Facilitation Skills Development and TOT Refreshers Course. Feb 2009

Concern Bangladesh. Facilitation Skills Development Course. Feb 209

Concern Worldwide Strategic Plan 2006-2010. May 2006

Concern Worldwide Policy on Advocacy. April 2003

Rahman, Taifur. Partnership with Local Government: Experience *in working for urban health system development*25 August 2003

Concern Worldwide Policy on Health. March 2002

Islam, A. et al. *Municipal Health Partnerships Program (MHPP): Fourth Annual Report October 1,2007 to September 30, 2008.* Submitted to USAID on October 31, 2008.

Jahan, S. et al. *Municipal Health Partnerships Program (MHPP): Detailed Implementation Plan.* Submitted to USAID on June 30, 2005.

Municipal Health Partnerships Program: First Annual Report October 1,2004 to September 30, 2005.

Municipal Health Partnerships Program: Second Annual Report October 1,2005 to September 30, 2006.

Municipal Health Partnerships Program: Third Annual Report October 1,2006 to September 30, 2007.

LAMB, Review of MCH Services in MCWCs and District Hospitals, 2005

Pathways Consulting Services. The Midterm Knowledge and Practice Coverage Survey report of Municipal Health Partnerships Program and the Learning Center of Concern World Bangladesh, 2007.

Pathways Consulting Services. The Midterm Knowledge and Practice Coverage Survey report of MHPP and the Learning Centers of Concern World Bangladesh, 2009

Pyle,D. and Zannat. F MHPP Mid-Term Evaluation Report.

Sarriot, E. et al. *The End of Magical Thinking: Sustainability Evaluation Three Years after the end of the Saidpur and Parbatipur Urban Health Project*. June 2008.

Shardar,A.M and Hossian, M.S. Training Needs Assessment. July 2005

Uddin. F. Rapid Assessment Survey of MHPP Program November 2006.

Uddin, F. A process documentation on the implementation of the HMIS in MHPP. April 2009

Ward Health Committee Capacity Assessments Under MHPP. April-June 2007.

Ward Health Committee Capacity Assessments Under MHPP. January 2009April-June 2007.

Ward Health Committee Capacity Assessments. Saidpur and Parbatipur. January 2009.

Annex 3: Project Management Evaluation

A. Planning

The project was very inclusive of all the stakeholders at various stages throughout the life of the project. (e.g., capacity assessments, baseline, midterm, final evaluation). This facilitated an exchange of experiences among the municipalities. The involvement of municipal and ward-level participants in the monthly, quarterly and annual planning exercises generated a high level of ownership that benefits MHPP in the short-term and is expected to improve the likelihood of sustainability in the long-term.

After the baseline results were reviewed, several of the project targets were revised to achievable levels. Overall, the work plan was practical and most of the activities were completed on time. The monthly and quarterly activity monitoring pays close attention to what has been achieved and existing barriers. Both the municipalities and WHC are using the HMIS data to develop local solutions.

The development of the RMP training guides for the C-IMCI took longer than expected, delaying the training until the fourth year of the project. However, the guides have been endorsed by the national IMCI working group and will be used throughout the country in C-IMCI training.

One area that could have been strengthened was supervision of the CBA trainers and support for complication management through continued support by LAMB hospital. It is always a challenge for programs that are not specifically working on service delivery improvement to balance how much is effort is required to ensure high quality services for the demand created by their interventions.

Concern Bangladesh tried to respond to the MTE to developed a stronger relationship with the national MOLGRD&C. As previously mentioned there was some staff turn-over that limited this activity. In addition, it has been difficult to identify how to approach the ministry since there is no focal point for health.

B. Supervision System

The Concern supervision system seemed to be comprehensive and very supportive of staff. Each person identifies the support they need in the next month and the supervisor allocates time for each employee. At the end of the month, managers review the support that was given/received and plans for the next month.

As previously mentioned, many of the field staff has been with the project for a long time which facilitated institutional learning. It is clear that the MHPP Team has adopted community empowerment and mobilization as core values and is committed to its unique approach. Concern Bangladesh has developed a phase-over plan that will help the municipalities assume total responsibility for the program. The staff knows that their jobs will end in September and they have been supported in looking for other positions.

The municipal and community level committees were created and strengthened so that local stakeholders could identify and use their own resources to facilitate access to health services. It was clear that the WHC support systems were functional, whether it was the CBA calling a Mayor or Councillor to assist women or the WHC re-negotiating a fee.

Annex 3: Project Management Evaluation (cont'd)

C. Human Resources and Staff Management

Concern Worldwide Bangladesh has a personnel manual that describes all the staff benefits and personnel policy for the agency. All positions have job descriptions that are used as part of the annual Performance Review process. MHPP staff works long and hard, often late into the night and on weekends as well as holidays, indicating a high degree of loyalty, dedication and commitment. The fact that the MHPP partners work six days a week and WHC meetings are conducted during the evenings do not help. These long hours can take their toll and may explain some staff turnover, but overall this has been quite low. One challenge was that the project manager had been ill for some time placing more work on other staff.

MHPP staff had to make the conceptual transition from being implementers to facilitators, which requires different skills. Concern Bangladesh ensured that staff received training and support in these new competences through four key mechanisms**.** ***First****,* staff received training in negotiation, problem solving/ conflict resolution and decision-making, and adult learning. Each project officer has an annual performance review process where they identify training needs to improve their performance. ***Second,*** there are quarterly MHPP meetings that include skill building sessions. This has helped the staff grow and be able to adapt to the evolution of the MHPP model. ***Third*****,** Concern has arranged exchange visits. MHPP staff visited other counties to learn about their programs. In addition, MHPP hosted several other countries to learn about the Bangladesh experience. This has been important not only in terms of staff development, but also in replicating successful approach through Concern Worldwide. ***Fourth,*** MHPP staff have also attended a number of international conferences to present the project and its accomplishments. These are opportunities for staff members to learn and share experiences with experts from other countries and projects. MHPP has been represented at the International Conference on Tracking Progress in Child Survival (London, 2005), APHA and at the International Conference of Urban Health.

Concern Worldwide US continues to actively participate and contribute to **CORE and CSTS+**. Its Health Adviser has been involved in a number of working groups, specifically IMCI, Social Behavior Change, HIV/AIDS and Nutrition and contributed to the development of the Lives Saved Calculator. She served on CORE's Board of Directors until 2006. Moreover, the Health Adviser is d asked regularly to present at CORE and CSTS+ events, including the Mini-University. In a few short years, Concern Worldwide US has gone from a newcomers in Child Survival programming to a respected, valued leader in the community.

D. Financial Management

Concern Worldwide US's and Bangladesh's financial management of the project budget and expenses was very comprehensive. As previously mentioned, the project conducted a concurrent cost-study through the life of the project. This meant that there was regular review,

analysis, and coding of the project expenses, based on the approved budget. Monthly financial reports kept project management aware of project finances and alerted them of potential problems. Staff do not foresee any issues with phasing out the program as planned. MHPP and Concern Worldwide Bangladesh in general, appear to be run in a very cost-conscious and efficient manner.

Annex 3: Project Management Evaluation (cont'd)

MHPP received US$300,000 in the form of field support from the USAID mission in Dhaka. It is quite unusual for a USAID mission to allocate their own resources. The USAID mission has been very supportive of MHPP and sees it as an innovative model. It is hoped that they can play a supportive role in institutionalizing at the national level the urban health strategy that has been found to be effective.

The MHPP cost per beneficiary is $1.37 per year for each of the targeted population (all women of reproductive age and children under the age of five) in the seven municipalities. This does not include the target population in the two Learning Center municipalities.

E. Logistics

MHPP does not provide any equipment, so there is very little procurement. One area that the project did provide was the development of training materials that had to be printed and delivered to the municipalities MHPP established a system whereby procurement needs were discussed at the monthly project meeting, orders placed and deliveries made according to project requirements.

F. Information System

MHPP designed an HMIS system that built on the strengths of the communities, particularly the energetic, young CHVs to establish and maintain the HMIS. With CHVs being responsible for approximately 50 households, it has not been difficult for them to track a limited set of relating to maternal, infant, child health and nutrition indicators. The CHVs, WHCs and MHDs are very happy with the system. The CHVs report the data to the WHC and at their monthly meeting with the MHD. There were several examples of how they were using the data to develop local solutions.

The capacity assessment tools for the WHCs and the MESPCCs have been utilized and demonstrate progress. The process and indicators have been simplified without losing effectiveness which makes it possible for the community members to carry out this valuable exercise on their own, facilitated only by a member of the MHD (in the case of WHCs) and the project manager for the MESPCCs. This greatly increases the ownership and understanding of what makes a local body function effectively while also increasing sustainability in the long-term.

G. Technical and Administrative Support

MHPP has strong and innovative leadership at all levels. At the Dhaka level, several Concern Worldwide Bangladesh officers provide direction while the project staff is responsible for implementation. Concern Bangladesh has recently gone through a restructuring that further strengthening their commitment to urban issues as well as reaching the poor and marginalized groups. The Country Director has been very supportive of the program and was keen to understand how to build on Concern Bangladesh's important ten year investment. The new

Assistant Country Director is very eager to disseminate the MHPP results with the appropriate ministries and donors. The Program Manager who assumed responsibility for MHPP at its inception, and has transitioned into another role, has worked tirelessly to ensure that MHPP moves forward without compromising the community-orientation as well as the need for local adaptation and ownership.

Annex 3: Project Management Evaluation (cont'd)

At Concern Worldwide US, the Health Adviser continues to be an important source of support. More recently a Program Officer (Health) has joined the effort and is taking a greater role. Concern Worldwide has taken advantage of their close relationship with CORE and CSTS+ to keep abreast of the latest technical guidelines and innovations. CSTS introduced the MAMAN framework and field-tested the Rapid Child Health Services Provision tool at the MHPP sites. Technical experts worked with Concern Bangladesh to develop and refine the RMP guidelines for the national IMCI working group. In addition, BASICS III provided advice on the RMP monitoring and evaluation plan. Concern Bangladesh and MHPP continue to lead the effort to institutionalize C-IMCI.

H. Strengthening the Grantee Organization

It is clear that MHPP, and it predecessor grant in Saidpur and Parbatipur, have made an enormous impact on Concern Bangladesh and Concern Worldwide approaches. There are seven key ways that MHPP has influenced survival and urban health programming as well as successful strategies to reach the extreme poor.

First, the fact that post-project data collection and analysis of both municipal and ward level capacities and health outcomes in the Learning Centers provides lessons and solid evidence of what it takes to sustain efforts, which is rarely captured.

Second, maintaining a relationship with the Learning Centers, allowed MHPP to demonstrate the model's success and more quickly implement this approach in the new municipalities. It also allowed MHPP to continue the learning process.

Third, it is clear that Concern was and continues to be searching for a different replication model – rather than working in more municipalities or in more technical interventions areas. Thus, the model was significantly changed between the two grants and it was allowed to be adapted as it was implemented. Projects change their focus, but many don't realize that this requires dramatic shift in staff competence to successfully implement the new approach. Often times this is the main limitation of the project. Concern Bangladesh recognized this and ensured that staff was trained and supported in these new skills.

Fourth, MHPP has a robust monitoring and evaluation system that provides solid data on key issues, such as cost, that demonstrates the model's success. One of the key elements of the model was reaching the poor. While many programs say that this is their aim, they often do not have data to support this desire. MHPP clearly demonstrated a successful model of reaching the poor that the communities can now use with other development partners .

Fifth, the development of the Operations Manual will provide a guide to foster replication in other municipalities in Bangladesh and potentially in other settings.

Sixth *,* through the cross-visits and Concern Worldwide US's Health Advisor, many of the MHPP lessons learned have been incorporated in other child survival programs (Rwanda).

Seventh, Concern Bangladesh and Concern Worldwide have presented the MHPP results within Bangladesh and at international forum with other organizations interested in urban health (e.g., USAID, Clinton Foundation, Pop Council, Gates Foundation). This potentially could influence how other organizations think about urban health programming and reaching the poor.

Annex 4: Work Plan Table

Please refer to the attached document

Annex 4. Work Plan Table

Major Activity	Objective Met	Activity Status
Objective 1: Sustained municipal health systems for maternal and child health in 7 municipalities		
Ward Level		
Formation, of WHC (15-20 Member per Ward, Formation 40+20+15)	Yes	73 out of total 75 WHC formed.88% of those were formed in 1st year.
Orientation package for WHC members	Yes	Orientation package developed, WHC members oriented. 81% of WHCs completed 2-days orientation by 2nd yr.
Monthly meetings of WHC (80% Meeting Conduction Targeted)	Yes	71% of WHC Monthly meetings held with 76% members attendance
WHC Annual plan development	Yes	WHC annual plans developed, reviewed and incorporated in Municipal Annual Health Plan
WHC capacity assessment & capacity assessment review	Yes	WHC capacity assessments done in 2007 and 2008. Capacity assessments of these bodies demonstrate significant gains in their ability to manage and coordinate health activities
WHC support mechanism development for Least Advantaged Groups (LAGs)	Yes	All WHCs developed support mechanism for LAGs
CHV Annual progress sharing meeting at municipal level	Yes	
Health Day Observation (World Health Day, World Breast Feeding week, Safe Motherhood Day, World AIDS Day)	Yes	Health Days observed
Leadership Development Training for WHC Leader	Yes	125 WHC members from 36 wards received training on Leadership development and participatory planning.
Training on Participatory Planning for WHC Leader	Yes	This training was merged with the Leadership development training
Cross visit for WHC Members	Yes	Organized intra-municipality exchange visits among 35 WHCs.
WHC Refreshers Training	Yes	Organized refresher training for 47 WHCs that reached 740 members on topics identified in the WHC assessments
Municipality Level		
Program Orientation at Municipality level	Yes	Completed
TOT for MHS for CHV training	Yes	Completed
MESPCC reactivation & effective collaboration of MESPCC	Yes	All 7 MESPCCs re-activated
MESPCC Quarterly Progress Sharing Meeting	Yes	All 7 MESPCCs held scheduled meetings
Orientation of Project Team and Municipal Health Staff on HMIS	Yes	Completed
Municipal Annual Health Plan Development	Yes	All 7 municipalities developed annual plans each year
WHC Annual progress sharing at Municipality level during	Yes	Done annually

Annex 4. Work Plan Table

Major Activity	Objective Met	Activity Status
Municipal Annual Plan		
Implement HMIS at new municipalities level	Yes	HMIS was introduced in all 7 municipalities.
Training for MHS on HMIS data entry	Yes	Completed
Facilitation Skill building for MHD on conducting WHC self- assessment	Yes	Completed
HICAP for new sites/ selected municipalities	Yes	All 7 municipalities
HICAP Review	Yes	Review conducted in 2006 and 2009
KPC Survey using LQAS methodology for mid term & final evaluation	Yes	Completed. Survey reports available
Conduction of Mid Term evaluation	Yes	MTR shared with USAID in 2007
Conduction of Final evaluation	Yes	Final evaluation findings shared with USAID in 2009
Research findings sharing with stakeholders	Yes	KPS survey, Doer-Non Doer analysis, IAP results etc
Training on Supportive Supervision for MHS Supervisors.	Yes	27 supervisors received training
Management Training of Cabinet Members		This activity was possibly taken out of the list.
Coordination meeting with LAMB, NSDP and others NGOs	Yes	Periodic, need based meetings held
Municipality Inter dept. Coordination meeting	Yes	
Partnership review meeting with Municipality & NGOs (NSDP)	Yes	
Analyze Staff Requirements and current availability at Municipal Health Department, MCWC & and other GoB Hospital, and share the findings in MESPCC meeting (Rec-12)	Yes	Information collected and shared at MESPCC meetings
Arrange meeting with UPHCP-2 at Municipality level (Bogra) to identify areas of coordination and collaboration	Yes	Review meeting held with UPHCP-II at Bogra municipality
Workshop with partners to develop MHPP phase-over plan (Rec-17)	Yes	Phase-over plan developed and shared at MESPCC meetings
Learning Center		
Efforts for increasing health sector budget allocation	Yes	
Progress sharing meeting with CHV, CBA, Imam & Teacher	Yes	
WHC Progress sharing meeting	Yes	
Lesson learned sharing with stakeholders	Yes	
MESPCC progress sharing meeting	Yes	
Host exposure visit	Yes	
Continuous implementation of HMIS	Yes	
Documentation of LC experiences	Yes	Currently incorporating experiences into Lessons Learned document and Operations Manual
Review and update of HMIS	No	
Follow up of on-going health activities at Municipality & WHC (capacity assessment) and prepared periodical report	Yes	

Annex 4. Work Plan Table

Major Activity	Objective Met	Activity Status
Sharing the lesson learned with Project team	Yes	
Post intervention assessment for Learning Center	Yes	Done in 2007 and 2009
KPC Survey using LQAS methodology for post intervention	Yes	Done in 2007 and 2009
Sharing research findings with stakeholders	Yes	
Host IMBCT Team Training & Follow up	Yes	
Regional Office Level		
Monthly Progress Sharing Meeting with Project Officers	Yes	
Quarterly Project Review & Planning Meeting for MHPP Team members	Yes	
Annual Retreat to review the Year's achievements	Yes	
Planning Meeting for MHPP Team members	yes	
Video document on MHPP activities	Yes	Editing and finalization of video underway-anticipating a final copy early 2010
Workshop on phase-over plan and its process (preparatory meeting) (Rec-17)	Yes	
Staff Development in Research and Learning		
Advance Training on Participatory Research Methodology for Research Team	Yes	
Clean-up capacity measurement indicators	Yes	
Development Management Course for SPMs & Pos	Yes	
Basic Training on Research Methodologies for MHPP Team	Yes	
Local level advocacy & Demand mediation	Yes	
Advance training on materials development for Training Team	Yes	
Orientation on BCC strategy for MHPP Team	Yes	
National Level/Advocacy		
Formation of Project Advisory Committee arrange semi-annual meeting	Yes	
International Urban health workshop	No	Activity removed due to the political climate
Develop Operational Manual	Yes	Finalizing document-expected in January/February 2010
Exposure visit to Urban Health –either multiple site in India (including Counterpart program), Uganda, or Kenya	Yes	CARE Nepal C-IMCI project visit
Inter ministerial coordinating committee reactivation (Rec-10 & 12)	No	
National Liaison Officer recruitment (Rec-11)	Yes	JD developed, position advertised, interviews conducted, un-availability of appropriate candidate
Meeting with UPHCP-2 at national level (Rec-14)	Yes	
Central level meeting with NSDP's Sr.Mgt (Rec-18)	Yes	Meeting held
Objective 2: Improved household prevention and care practices for sick children		

Annex 4. Work Plan Table

Major Activity	Objective Met	Activity Status
Ward Level		
Selection and training of community health volunteers-CHV(50 House hold per Volunteer)	Yes	3734 CHVs selected and trained
CHV Annual progress sharing meeting (70% meeting conduction targeted)	Yes	In some municipalities
CHV Refresher Training	Yes	Refresher training is included in CHV Bi-monthly meetings
Selection and Training of PP Moderators (4-5 MBBS doctors per Municipality)	Yes	PP moderators selected
Selection and training of PPs (RMP-3+ Homeopaths-2 total-5 per Ward)	Yes	277 PP (RMP) selected and trained
PP Follow up Meeting	Yes	Quarterly follow-up meetings held
Basic Training of PP Facilitators (4-5 MBBS doctors per Municipality)	Yes	13 PP facilitators trained in IMCI
ToT for PP Facilitators (MTE-Re: 3)	Yes	
Training of PPs (Homeopaths in Nilphamari)	Yes	23 Homeopaths trained
Selection and training of School teachers	Yes	33 School Teachers
Refresher training of School teacher		
Selection and training of Religious leaders (6 Imam per Ward)	Yes	350 Imams trained, 28 Purohit (Hindu religious leaders) trained
Refresher training of Imam	Yes	
Develop Follow Up Mechanism for PPs (MTE-Re: 3)	Yes	PP follow-up by District MOH Staff
Need Assessment for New Imam Training (MTE-Re: 13)	yes	A trainers pool developed
Selection and training of Religious leaders (As per need) (MTE-Re: 13)	Yes	
Develop Follow up Mechanism for Imam (MTE-Re: 13)	Yes	
Municipality Level		
Launching C-IMCI at municipality level	Yes	
Formation of municipal IMBCT team	Yes	
IMBCT Semi Annual Meeting	Yes	
Develop *Purohit* (Hindu religious leaders) tr. Module	Yes	Module developed
Develop Homeopath Module	Yes	Module developed
CHV, Imam Training Module Endorsement from IMCI section		Modules sent to IMCI Section of DGHS
Job-aid collection from different concerned Department	Yes	
Setting appropriate Indicators on ORT (MTE-Re: 4)	Yes	
Research		
Impact on PP Negotiation sessions (Case management, Timely referrals)	Yes	
Established effective service delivery system for Iron and Zinc Supplementation for Children (With UNICEF & ICDDR,B collaboration)	No	This was removed from the list of OR
Comparing roll- out of C-IMCI in rural and municipal settings	Yes	
Learning Center		
Facilitate BCC activities as per BCC strategy	Yes	
Establishing referral tracking of PP with CBA	No	

Annex 4. Work Plan Table

Major Activity	Objective Met	Activity Status
Follow up HMIS activities	Yes	In some wards
Continue PP negotiation session (80% Meeting Targeted)	Yes	
Research at Learning Center		
Impact on PP Negotiation sessions (Case management, Timely referrals)	Yes	
Effectiveness of IAP interventions	Yes	
Roll- out of C-IMCI in rural and municipal settings	Yes	C-IMCI was tried in MHPP municipalities and Dhamrai upazlai
Health Facility Level		
F-IMCI training for GOB/NGO service providers (11Days)	Yes	7 GOB Doctors from MCWC and DH trained in IMCI
Training of MHS on C-IMCI *(3-4 Days)	Yes	6 MHS trained
National (IMCI Linkage)		
Launching of C-IMCI (Regional)	Yes	Locally at municipal level
Launching of C-IMCI (National)	Yes	Included in National IMCI plan
Participation at IMCI NWT meetings	Yes	PM-MHPP, TM-IMCI attended regularly
Development of PP training guide on IMCI	Yes	Product developed
Field testing of PP training guide	Yes	done
IMCI basic Training 11 Days for IMCI Manager	Yes	PM-MHPP and TM-IMCI got trained
IMCI facilitation Training 5 days	Yes	PM-MHPP and TM-IMCI
IMCI Follow-up after training 5 Days	Yes	PM-MHPP and TM-IMCI
Dissemination of Lessons learned	Yes	periodically
Participation in National training pool for C-IMCI	Yes	PM-MHPP and TM-IMCI participated as national trainer for IMCI
Learning Visits to Dhamrai/Kahalu For community IMCI exchange	Yes	PM-MHPP
C-IMCI Learning Visit, Nepal	Yes	
Established Linkage among CHVs , District health Facilities and MCWC (MTE-Re: 6)	Yes	Municipal cabinets held discussion with health facilities
Update CHVs data on regular basis (Quarterly) (MTE-Re: 15)	Yes	As part of phase-over plan
Develop CHVs Retaining Mechanism tools	Yes	CHV database developed
ToT on HMIS of WHC Representative Teachers (MTE-Re: 16)	Yes	Six Teachers selected by WHC received TOT on HMIS
Arrange Training Centrally for all FWVs on IMCI (MTE-Re: 20)	No	Could not be arranged due to management gap/tension between Health & FP departments at national level.
Objective 3: Improved maternal and newborn care practices in 7 municipalities		
Ward Level		
Selection of CBAs based on GOB CBA selection guideline	Yes	257 CBAs selected and trained at MCWC
Refresher Training of CBA (Continued up to completion of program)	Yes	Quarterly refreshers held at MCWC

Annex 4. Work Plan Table

Major Activity	Objective Met	Activity Status
Health Facility Level / Center of Excellence		
Select 'Center of Excellence' & Finalize MoU/letter of support with relevant authorities	Yes	7 MCWCs were selected
Update CBA curriculum with life saving skills and Essential Newborn Care	Yes	By LAMB in consultation with DGFP
Training of CBA Trainers under Center of Excellence Health Facilities	Yes	GOB FWBs got trained by LAMB
Training of CBAs based on revised CBA training guideline	Yes	GOB FWVs trained CBAs
Refresher Training of Trained CBAs by CBA Trainer.	Yes	At quarterly meetings at MCWCs
Quarterly CBA Meeting at the Health Facility	Yes	Facilitated by FWVs
Establish system of tracking CBA Referral to health Facility	Yes	Referral slips developed and referral tracking at HF established
Orientation on MNC for MESPCC members	Yes	PM-MHPP and TM-IMCI
Quality Assurance Orientation and self assessment for MESPCC members	Yes	PM-MHPP and TM-MNC
Workshop on 'Continuous Quality Improvement' at the Health Facilities	Yes	Piloted at Rangpur and Kurigram MCWCs
Municipality diagnosis(Service, QoC, Referral & community function)	No	Removed from the activity list
Update Emergency Obstetric Care-EmOC and Perinatal Audit training	Yes	LAMB hospital
Conduct EmOC and Perinatal Audit training	Yes	MCWC physicians and FWVs trained
Orientation on referral slip for CBAs and MCWC staffs	Yes	
Implementation of referral slip and referral tracking	Yes	At MCWC and DH
Workshop on Continuous Quality Improvement at the Health Facilities	Yes	In 2 MCWCs
Recommendation # 21 *(Make QoC Standards Available at the Helath Facilities)* and Recommendation # 22 *(Establishment of Accreditation Mechanism for QoC)*	Some initial work done	# 22- This was beyond the scope of the project
Orientation the design to the implementation level personnel	Yes	
Workshop at the facility level	Yes	
Municipality Diagnosis (Service, QoC, Referral and Community Functions)	No	This was removed from the list of activities
Developing / Identify the tools needed municipal diagnosis	No	Per above
Finalizing and Orientation of tools for the diagnosis team members	No	Per above
Implementation of Municipal Diagnosis	No	Per above
Study on WHC Social and Financial Support Mechanism and Its Impact on Maternal and newborn emergencies	Yes	

Annex 4. Work Plan Table

Major Activity	Objective Met	Activity Status
Collection of all information for Social and Financial support from WHC	Yes	
FGD with beneficiaries	Yes	
Interview with WHC, MHS, and Health Facility Staffs	Yes	Multiple interview conducted and documented 2008 & 2009
Analyze the information and data	Yes	Ongoing
Learning visit to Maternal and Newborn Health Project	Yes	
Dissemination project findings/ learning's at National and International Level	Yes	In 2009, following the Final Evaluation and Sustainability Assessment debriefings were held at nation and international levels. ICUH-2009 in Nairobi, our Program Manager presented on MHPP
Additional Works		
Refresher Training for FWVs on CBA Curriculum	Yes	
CBA Training (New Batches in Different Municipal Areas as per Requirement)	Yes	
Study on the MCWCs patient load for ANC services	Yes	
Discussion with the National and Local Authorities to ensure the need for ANC services	Yes	
Orientation of District Hospital on MHPP	Yes	Ongoing in 2008 & 2009
Research		
Doer/ Non-doer analysis on Iron folate supplementation, food intake during pregnancy, Delivery at Health Facilities	No	Determined not appropriate during the MTE
Operation research on Impact of WHC social and financial support in maternal and newborn emergencies	Yes	
Learning Center Level		
Lessons learnt documentation on CBAs roles in safe motherhood.	Yes	
National Level		
National platform to review and endorse revised CBA curriculum	Yes	
Participation in maternal and newborn health forums (from Concern and or Municipality) and sharing with team	Yes	
Sharing of Health Facility Assessment report	Yes	

Annex 5: Rapid CATCH Table

Rapid CATCH Table

This table displays the Rapid CATCH baseline, mid-term and final estimates for all 7 municipalities.

Indicator	Baseline Estimate			MTE Estimate			Final Estimate (*)		
	Num	Den	%	Num	Den	%	Num	Den	%
Percentage of children age 12-23 months who are underweight (-2 SD from the median weight-for-age, according to the WHO/NCHS reference population)	537	1423	58%	528	1469	36%	501	1462	34%
Percentage of children age 0-23 months who were born at least 24 months after the previous surviving child	1577	1749	90%	1491	1621	92%	1392	1521	92%
Percentage of children age 0-11 months whose births were attended by skilled health personnel	731	1499	49%	813	1507	54%	876	1513	58%
Percentage of mothers of children age 0-11 months who received at least two tetanus toxoid injections before the birth of their youngest child	960	1499	64%	717	1507	48%	1009	1513	67%
Percentage of infants age 0-5 months who were exclusively breastfed in the last 24 hours	517	797	65%	540	824	66%	558	780	72%
Percentage of infants age 6-9 months receiving breast milk and complementary foods	443	458	97%	-	-	-	468	487	96%
Percentage of children age 12-23 months who are fully vaccinated (against the five vaccine-preventable diseases) before the first birthday	1237	1496	83%	1357	1513	90%	1379	1520	91%
Percentage of children age 12-23 months who received a measles vaccine	1272	1463	87%	1360	1513	90%	1384	1520	91%
Percentage of children age 0-23 months who slept under an insecticide-treated bednet the previous night (in malaria-risk areas only)	-	-	n/a	-	-	n/a	-	-	n/a
Percentage of mothers of children age 12-23 months who know at least two signs of childhood illness that indicate the need for treatment	1391	1496	93%	1223	1513	81%	1464	1520	96%
Percentage of sick children age 0-23 months who received increased fluids and continued feeding during an illness (Diarrhoea) in the past two weeks	119	329	36%	52	203	26%	68	242	28%
Percentage of mothers of children age 12-23 months who cite at least two known ways of reducing the risk of HIV infection	863	1496	58%	918	1513	61%	1038	1520	68%
Percentage of mothers of children age 12-23 months who wash their hands with soap and water before five key activities (i.e. before food preparation, before feeding children, after defecation, after attending to a child who has defecated and before eating	243	1496	16%	303	1513	20%	251	1520	17%

***Indicates with an asterisk those final estimates that are significantly different from the corresponding baseline estimates.**

Annex 6: Final KPC Report

Please refer to the attached documents

Annex 7: Training Matrix

Please refer to the attached document

Annex 7. Training Matrix

Sl. No.	Name of Training	Key Content	Participants	# of Batch	# of Participants	Total Participants	Duration Days	Status/Readiness of Tr. Package
1	Launching Ceremony of MHPP at Municipality level	Presentation of Child Survival & Health Program through Ceremonial Events	Stakeholders + Community	7	100	700	1	New
2	Launching Ceremony - regional level	Presentation of Child Survival & Health Program through Ceremonial Events	MOHFW , MOLGRD, NSDP Division Level	1	150	150	1	New
3	Launching Ceremony - national level	Presentation of Child Survival & Health Program through Ceremonial Events	PAC, Media	1	150	150	1	New
4	Training on C-IMCI	• Understanding C-IMCI • Asses and Classify the Sick Children • Council the Mother's • 17 Family Practices and Referral • Four Elements of C-IMCI • Opportunities and actions	MHS	9	20	180	4	Government Curriculum and protocol to be followed
5	Field testing of PP training Guide	Negotiation session practice by National facilitators on National Module of PP	RMPs and Homeopaths	1	20	20	1	PP module
6	IMBCT team semi-annual meeting	• Behavior change thinking • Social change theory • BEHAVE Framework • Doer/non-doer analysis • Message development and field-testing • Monitoring effectiveness	Commissioners, MHS, ESPCC members	8	30	240	1	BCC strategy Behave Frame
7	Selection & Training of PP moderators	Key practice by PP Referral practice	MBBS Doctors	7	5	35	1	PP module draft exists
8	CHV basic training	• Art of volunteerism • Analyzing Community problems • Child Survival Program • Interpersonal communications • Pneumonia, Diarrhea , and nutrition • Maternal and newborn care • Family Planning and hygiene • Roles and Responsibilities of CHV • Participatory Planning	CHVs	154	20	3080	3	Concern developed from orig. program
9	Training on Basic Health Messages for Religious Leader/Imam	• Understanding Municipal Health Program • Municipal Service Delivery System • Role of Religions Leaders • HIV/AIDS prevention and support • Men in maternity • Health Services in light of Islam • Participatory Planning	Listed RL	18	25	450	2	Concern developed from orig. program

Annex 7. Training Matrix

10	Refresher training on Basic Health Messages for Religious Leader/Imam	• Understanding Municipal Health Program • Municipal Service Delivery System • Role of Religions Leaders • HIV/AIDS prevention and support • Men in maternity • Health Services in light of Islam Participatory Planning	Trained RL	• 18	25	450	1	Concern developed from orig. program
11	Negotiation Session for Private Practitioner (PP)	• Understanding Municipal Health Program • Concept of Community IMCI • Sixteen Family Practices • HIV/AIDS prevention and support • Role of PPs in CSHP and Referral • Participatory Planning	Selected RMPs and Homeopaths	15	25	375	1	Concern developed from orig. program
12	PP followup meeting (quarterly)	• Practice by PP • Referral knowledge	Trained RMPs and Homeopaths	92	25	2300	1	PP module
13	CHV refresher training	• Art of volunteerism • Analyzing Community problems • Child Survival Program • Interpersonal communications • Pneumonia, Diarrhea, and nutrition • Maternal and newborn care • Family Planning and hygiene • Roles and Responsibilities of CHV • Participatory Planning	CHVs	180	20	3600	1	Concern developed from orig. program
14	CHV monthly meeting	• Update the health and BCC issue	CHVs	180	20	3600	1	CHV module
15	Training on Basic Health Messages -Primary Teachers:	• Understanding Child Survival Program • Child Rights Principles • Health and Population Sector and ESP • School Health Program • Immunization • HIV/AIDS prevention and support • Health Education, social change and IPC • Follow-up	Selected PTs	7	20	140	2	Concern developed from orig. program
16	Refresher Training for Primary Teachers:	• Understanding Child Survival Program • Child Rights Principles • Health and Population Sector and ESP • School Health Program • Immunization • HIV/AIDS prevention and support • Health Education, social change and IPC	Selected PTs	7	20	140	1	Concern developed from orig. program

Annex 7. Training Matrix

		• Follow-up						
17	Basic IMCI Course	• Case Management-Pneumonia, Malnutrition, Diarrhea • Identify, Assess & Classify Diseases • Counsel the mothers • Treat the sick Child	SPM (IMCI/MNC), POs	1	3	3	11	IMCI secretariat DG Health Dhaka
18	IMCI Facilitation Skill	• Facilitation • Need assessment • Counselling	SPM(IMCI, MNC),POs	1	5	5	5	ICMH, Matuail, Dhaka
19	Learning visit In-country (project staff)	IMCI, MNC best practices and international standards	SPM, PO, FT, STO, TO, Municipal counterpart	2	10	20	3	TRMs
20	Learning visit in Nepal (CIMCI)	IMCI	Concern+MOLGRD+ MOHFW	1	6	6	6	Concern, MOHFW, MOLGRD
21	IMCI Follow up Training	Follow up case management and facility service system	SPM(IMCI, MNC),POs	1	5	5	5	ICMH, Matuail, Dhaka
22	Dissemination on lesson learn on C-IMCI : National Level	Key learning of CIMCI	Concern,DGHS,DGFP,UNICEF,WHO & other stakeholders	1	40	40	1	
20	Learning visit in Nepal (CMCI)	IMCI	Concern+MOLGRD+ MOHFW	1	6	6	6	Concern, MOHFW , MOLGRD
21	IMCI Follow up Training	Follow up case management and facility service system	SPM(IMCI, MNC),POs	1	5	5	5	ICMH, Matuail, Dhaka
22	Dissemination on lesson learn on C-IMCI : National Level	Key learning of CIMCI	Concern,DGHS,DGFP,UNICEF,WHO & other stakeholders	1	40	40	1	
23	Practical Orientation in Learning Center	• CSHP Goal, Purpose, Strategies, Interventions and Outputs • Statutory duties of municipality • Roles and Responsibilities of the Cabinet, ESPCC, Health Department and WHCs • Introduction to CIMCI • Concept of maternal and newborn care	Representatives of Cabinet, ESPCC, health department and key leaders	7	80	560	2	Training modules exist for many aspects including Project concept, R&R, WHC formation – but will need to be consolidated

Annex 7. Training Matrix

		• Partnership building • Formation of WHC • Mobilizing and supporting CHVs • Mobilizing and supporting TBAs • Lessons learned in building partnerships						
24	Program Orientation	• CSHP Goal, Purpose, Strategy, Interventions and Output • Roles and Responsibilities of the Cabinet, ESPCC, Health Department and WHCs • Urban Health Issues • Formation of WHC • Action plan	Full Cabinet, ESPCC and Health Department and NGOs	7	70	490	1	Orientation package exists
25	MESPCC reactivation & collaboration meeting	MOLGRD Circular Role & Responsibility of MESPCC	MESPCC members	126	25	3150	1	Module on MESPCC
26	Municipal Annual Plan Development workshop at municipality level (7+2)	• Identify key task • Identify local Resources • Develop Action plan	Cabinet, MHS	32	50	1600	2	Guideline available
27	Supportive Supervision Techniques	• Concept of Health and health promotion. • Understanding human behavior • Community Participation and Communication • Supervision and Monitoring • Supervision techniques/coaching	MHS and Supervisors	2	30	60	6	Concern developed from orig. program
28	TOT on CHV Basic Training for MHS	• Understanding participatory training • Learning Principals • Approaches to Training • Training need assessment • Training Methods • Roles and responsibilities of CHVs • Key household messages for child health • Key household messages for maternal and newborn health • Steps of lesson plan And follow up Questioning skills	MHS	2	25	50	5	Concern developed from orig. program
29	Training on Participatory Management for Municipal Cabinet	Key component of Participatory management Participatory planning	Chairman & Commissioners	7	25	175	2	
30	Research findings sharing session with stakeholders at municipality level	Key finding	MESPCC, cabinet, MHD, stakeholders	21	50	1050	1	

Annex 7. Training Matrix

31	Community gathering for WHC formation	WHC formation need	Community people	75	50	3750	1	
32	Monthly meeting of WHC (new municipality)		WHC members	1800	25	45000	1	
33	CHV annual gathering at Municipality level	CHV annual progress Next year plan of works	CHV	28	300	8400	1	
34	WHC annual planning meeting	WHC annual plan	WHC member	300	25	7500	1	
35	Orientation Package for WHC's member on Community Faciliatation	• Community Development • Health Scenario of Bangladesh • Child Survival & Health Program • Eight core capacity areas of WHCs • Roles and Responsibility of Community Leaders, CHVs, TBAs, and PPs • Supportive supervision • Mapping and community surveys • Maternal and child health concepts and messages • Interpersonal communication skills • Health planning and promotion	WHC member	75	12	900		Concern developed from orig. program
36	Training for WHC's member on Leadership Development	• Community Development • Health Scenario of Bangladesh • Child Survival & Health Program • Eight core capacity areas of WHCs • Roles and Responsibility of Community Leaders, CHVs, TBAs, and PPs • Supportive supervision • Mapping and community surveys • Maternal and child health concepts and messages • Interpersonal communication skills • Health planning and promotion	WHC member	75	12	900		Concern developed from orig. program
37	Team Building and Program Start-Up	Program Approach, goal, activities	All PO/ managers	1	30	30	5	
38	Quarterly project review and planning workshop (all staff)	• Review progress against plans and targets of the quarter • Share success, issues and constraints, and how those were overcome	All MHPP staff of Concern	14	30	420	2	

Annex 7. Training Matrix

		• Develop detailed action plan for next quarter • Field visit at host municipality (rotating)						
39	Annual Re-treat to review the year's achievement	Review of annual plan	All MHPP staff of Concern including headquarter staff and Partners' representatives	4	35	140	2	
40	Municipal Annual Planning Workshop	Municipal annual plan	MESPCC	7	35	245	1	
41	WHC Cross visit (inter-municipality)	• Exchange views • Exchange lesson learnt	WHC members	75	10	750	2	Guideline available
42	Monthly progress sharing meeting with project officers	Monthly progress Coaching on program issue	POs & Senior management-MHPP	54	20	1080	1	
43	PAC meeting/ workshop	• Identify capacity areas Progress Review	PAC members	10	7	70	1	
44	International Conference on Urban Health & Reaching the Poor	• Urban Health - Understanding • Urban Health Status of Bangladesh • Cross Cutting Issues • Experience from around the world • Lessons learned and promising practices	National and International Issues	2	2	4	1	Concern to organize (potentially with EHP)
45	Orientation on Maternal and Newborn Care	• Year One: Child Spacing, Birth Preparedness, and Antenatal Care • Year Two: Clean and Safe Deliveries in the Municipality • Year Three: Postnatal and Newborn Care	MESPCC members, +MHD	14	25	350	1	LAMB will adapt from existing modules
46	Continuous Quality of Care	• General concept • 9 Gaps in Quality of Care in Bangladesh • Four Principles of QA (client perspective, systems and processes, data-base decision and teamwork) • Appreciative Inquiry • Defining Quality • Measuring Quality • Improving Quality • Self-assessment tools	MESPCC, MHS	7	35	245	3	Standard Curriculum and module to be followed
47	Center of Excellence: Training on Management of Obstetric Emergencies Care and Trauma and	• Management of major obstetric complication for clinical staff: loss consciousness, pre-eclampsia and eclampsia, uterine inversion, Obstructive labor, puerperal sepsis, Ectopic pregnancy.	Health facility staff	4	10	40	5	Under discussion with PAC and MOHFW -FP wing about whether to use this or Skilled Birth Attendant Training for

Annex 7. Training Matrix

	Peri-natal Audits	• Violence against women • Classification of deaths • Patient Anonymity, Non-blame • Coding medical cause and social factors of death						MHS
48	Training of TBA Trainers	• Setting aims: function and definition • Setting objectives, Curriculum Planning • Needs assessment, Task analysis • Facilitate learning • HIV prevention	FWVs and MHS	3	10	30	6	LAMB - based on established TOT Course + updated TBA curriculum
49	Workshop on continuous quality improvement	• Concept of QA and importance • Methodology • Planning	Health facility staff	21	35	735	2	Need to be developed
50	National platform to review and endorse TBA curriculum	Key contents of the curriculum Proposed revision	National level stakeholders	1	30	30	1	
51	Basic Training TBA	• TBA's Brief and Working Practices • Science and Symptoms • Maternal nutrition • Personal Hygiene • Life saving skills • Post natal care and new born care • Vaccinations • Breastfeeding • Contraception and birth spacing	Practicing TBAs	28	14	392	21	Govt. Curriculum exists but needs to be updated. LAMB has proposed revision but needs review and endorsement from MOHFW .
52	Monthly TBA Refresher training	• TBA's Brief and Working Practices • Science and Symptoms • Maternal nutrition • Personal Hygiene • Life saving skills • Post natal care and new born care • Vaccinations • Breastfeeding • Contraception and birth spacing	TTBA	672	14	9408	1	Govt. Curriculum exists but needs to be updated. LAMB has proposed revision but needs review and endorsement from MOHFW .
53	Annual TBA Practicum at Health facilities	Annual progress sharing	TTBA	84	14	1176	1	
54	Basic training on Research methodology(Operation Research Focus)	• Research and development • Information and Data collection • Measures of dispersion • Variables, Indicators	All Concern-MHPP staff	1	30	30	5	Institute of Maternal and Child Health will provide the training

Annex 7. Training Matrix

55	Orientation on BCC	• Basic Elements • Behave frame • Doer-Nondoer analysis	SPMs, PO, STO, TO, FT	1	30	30	3	Package ready
56	Training on internal control and activity base budget monitoring(Context of Financial Management)	▪ Internal control, budget, budget monitoring, audit, etc.	PA	1	1	1	5	Out sourcing. Training from other resource organization.
57	Training on material development	▪ Types of materials (training, IEC, BCC activities) ▪ Designing techniques & methods, etc.) ▪ Applying techniques of materials., etc.	STO,TO	1	2	2	5	Out sourcing. Training from other resource organization.

Annex 8: Evaluation Team Member and Their Titles

Evaluation Team

The evaluation team was led by an international health expert, Susan Rae Ross, and a national consultant Dr. Akhter Hamid. Twelve stakeholders from the municipalities were selected to participate on the evaluation team to promote learning among the municipalities. The Team consisted of

- Three Councillors: Afroza Bulbul (Nilphamari); Nilufa Johur (Joypurhat); Abdur Rahim (Bogra).
- Three Ward Health Committee (WHCs) members: Alam Mia(Gaibandha); Amirul Islam (Rangpur); Ms. Shamsed Begum (Kurigram)
- Two representatives from the Municipal Health Department (MHD): Mafruja Begum (Dinajpur); Tazul Islam (Nilphamari)
- Two Community Health Volunteers (CHVs): S.I. Shahid (Kurigram); Sumon Chandra (Gaibandha)
- Two Community Birth Assistants (CBAs): Ms. Rehana Akhter (Bogra); Ms. Rahela (Joypurhat)

Concern Bangladesh staff also participated in the evaluation including: Dr. Amirul Islam, MHPP Program Manager, Dr. Shamim Jahan, Health Expert, Izaz Raul, Urban Program, Head as well as the technical backstop, Michelle Kouletio, Health Advisor from Concern Worldwide, US in New York.

Annex 9: Evaluation Assessment Methodology

A. Terms of Reference

The Final Evaluation team leader will objectively guide a group of professionals in the review of project documents and direct information collection for synthesis of findings, conclusions and lessons learned from the municipal health model. He or she serves as the lead author and editor of the evaluation report.

SPECIFIC TASKS OF THE TEAM LEADER
The Team leader will be responsible for the following tasks:

Prior to the field evaluation

- Review existing key project documents as well as to become oriented to the urban primary health care environment in Bangladesh
- Refine the evaluation objectives and key questions based on the CSHGP guidelines (attachment I) and key stakeholder essential information requirements
- Advise Concern on the composition of the final evaluation team
- Collaborate with the Concern US CSHGP-backstop and MHPP Coordinator to develop the field evaluation schedule and assessment tools
- Liaise with the Principle Investigator of the Post-Intervention Sustainability Assessment regarding tools and reviewing comparative data across all nine municipalities regarding health outcomes, community and municipality capacity
- Oversee the finalization of the qualitative data collection instruments and field work plan for the final evaluation team

During the field evaluation

- Orient the evaluation team members to the purpose and process of the evaluation
- Lead the team review of the results of the project's KPC, HICAP and WHC assessments
- Lead the team to complete the collection, analysis and synthesis of supplemental information regarding the program performance
- Facilitate the interpretation of both quantitative and qualitative results and the drawing of conclusions, lessons learned and recommendations regarding MHPP and its readiness for national scale-up
- Present preliminary conclusions and recommendations to Concern Bangladesh senior management and national stakeholders

Post field evaluation

- Serve as lead writer and editor of the evaluation report in lines with the CSHGP guidelines
- Consider comments and feedback from Concern as part of finalization of the report

OUTPUTS
The main output will be the final evaluation report that documents the program's overall achievements and specific recommendations to Concern Worldwide and to the stakeholders. The report should include CD with electronic copy of the report in MS Word 2000.

LINE OF COMMUNICATION
In country, the Consultants will report to Kieron Crawley the Concern Worldwide Bangladesh Country Director. The MHPP Coordinator will provide support and will be the focal person for day to day administrative, logistic and program's issues.

Communications regarding program orientation including document review and methodology will be in conjunction with Michelle Kouletio, the CSHGP backstop based in New York.

There will be an introductory briefing from the Country Director, Assistant Country Director Program, and the Head of Urban Poor Program to discuss and clarify the Term of Reference and evaluation plan. A final debrief will be held with the Country Director and a formal presentation of evaluation key findings with CSP stakeholders at the end.

TIME FRAME
The final evaluation is planned for April-May 2009 and will entail a minimum of three-weeks in-country.

B. Methodology

The final evaluation involved a number of different components including: 1) reviewing documents; 2) soliciting feedback from national and local stakeholders prior to field visits, 3) conducting field visits to all project municipalities, and 4) sharing findings, recommendation and lessons learned with national and local stakeholders.

The Team Leader contacted the USAID Child Survival Team to solicit their input prior to her arrival in Bangladesh. Second, the consultants reviewed MHPP documents and key documents about the status of urban health in Bangladesh (**Annex 2-** List of References). MHPP conducted the following studies:

1. Knowledge, Practice and Coverage (KPC) surveys in 2005, 2007 and 2009
2. Health Institution Capacity Assessment Process (HICAP) in 2006 and 2008
3. Ward Health Committee (WHC) Capacity Assessments in 2007 and 2008
4. Maternal, newborn, child health (MNCH) review of Maternal and Child Welfare Centers (MCWC) and District hospitals in 2005
5. Preliminary cost study data October 2004 – September 2008

There was an extensive process to solicit feedback from stakeholders in Bangladesh prior to the field visits. On April 26^{th,} the Team Leader and Concern staff met with USAID Bangladesh to discuss the methodology. On April 27, 2009, there was a meeting with 23 national stakeholders in Dhaka to share the methodology and solicit input. On April 28, 2009, the same process was conducted with 54 municipal stakeholders in Rangpur.

The Team was divided into two, one led by Ms. Susan Rae Ross (Bogra, Rangpur, Kurigram) and the other by Dr. Akhter Hamid (Dinajpur, Joypurhat, Gaibandha). Key informant interviews, as outlined in Table 3, were the primary source of data collection to substantiate project results, identify lessons learned and make recommendations for the remainder of the project period.

(**Annex 10-** List of Questions and Summary of Field Visits). The Team reviewed and analyzed the findings and agreed on lessons learned and recommendations.

On May 6, 2009, a post-evaluation meeting was held with 51 municipal officials in Rangpur where the findings and recommendations were shared and discussed. A similar meeting was held with 38 national level stakeholders in Dhaka on May 10, 2009. The Team leader, accompanied by the Concern Worldwide US's Health Advisor, Michelle Kouletio, to present project findings, lessons learned and recommendations to USAID/Washington on May 28,2009.

Annex 10: Persons Interviewed, Questions Solicited During Final Evaluation, and Summary of Field Visits

A) Persons Interviewed & Questions Solicited

Questions for Mayors and Cabinet Members

- What has been the greatest benefit to the Municipality of engaging with MHPP?
- How often do you meet?
- Do you think health is an important responsibility for the Municipality/Ward? Why? How?
- Do you support WHC? Why? How?
- How would you describe the participation of female councillors? (observation)
- How do Mayors/Cabinet link with MESPCC?
- Has MHPP helped the Municipality/ward improve health? How?
- How will you continue these activities after MHPP ends? What will be easy and what will be more challenging? (Sustainability Plan)
- What lessons or advice would the cabinet offer to municipalities thinking about replicating MHPP?

Questions for Ward Health Committee

- When and how was the WHC formed? (Selection criteria, male & female representation; breadth of social groups, decision making)
- Is there anything that you would have done differently in forming the WHC?
- Who Chairs the WHC? What do you do when Chair not available for the meeting?
- What have you learned from MHPP? How has it changed what you do?
- How do you plan and carry out activities?
- What is the most serious health problem in the ward? What are you doing to address it?
- How is the HMIS data collected and used?
- How do you support people with a health crisis?
- How do you identify poor people? How do they support them? How many have you supported in the past 3 months?
- What do they do if there is a death?
- What is the greatest achievement of the WHC?
- Does the WHC deal with any issues other than health?
- What do you see as the major challenges in sustaining WHC activities?
- What would be required for you to continue the WHC activities after MHPP ends? What will be easy to continue and what will be more challenging?
- What lessons or advice would the WHC offer to municipalities thinking about replicating MHPP?

Questions for Ward Health Committee About CHV

- How many CHVs have been trained (total)? How many CHVs have dropped out to date? How have they been replaced?
- What is the profile, or the characteristics of the best performing CHVs?
- What is the most important function of the CHVs?
- How often does the CHV update the HMIS?

Annex 10: Persons Interviewed, Questions Solicited During Final Evaluation, and Summary of Field Visits (Cont'd)

Questions for MESPCC Members

- When and how did this MESPCC group get started?
- Who participates in the MESPCC,
- What were the dates of the last two meetings?
- What kinds of examples of problem solving exist, what mechanisms are used to collectively solve problems?
- How strong is linkage among the MESPCC, the Civil Surgeon, Deputy Director of Family Planning and Ministry of Local Government?
- What will it take for the MESPCC to continue to after MHPP ends? Sustainability(link it with capacity, fund generation, manpower)

Questions for Municipal Health Department

- Do they have any workplan? Do you get support from the MHD?
- What did you learn from the MHPP training? How has this changed your work?
- What types of problems they are facing during MHPP?
- What do you discussion at the MHD meetings? How issues get raised to the cabinet?
- What is their relationship with Civil Surgeon or other MOHFW staff? Has it changed since MHPP?
- What is your role regarding WHCs, CHVs, and CBAs.
- How will you train replacement CHVs when MHPP ends? What will be easy and what will be more challenging?

Questions for MCWC

- What is the staffing level ? Vacant Positions
- What is the MCWC's ability to provide ANC, IMCI, CEMoC Services?
- How have you been able to meet increasing demand for services?
- How many CBAs attend monthly meetings?
- How much have the CBA learned from the training?
- CBA Referrals?
- Where do you referral complications to where?

Questions for CHVs

- Selection criteria? How long have they been CHV?
- How many Households do you cover? How often do you visit? How much time do you spend in a week for these activities?
- What do you discuss at their bimonthly meetings?
- How do you identify least advantaged groups and extremely poor people?
- What motivates you to do this work?
- Did you change any practices after training?
- What challenges do the younger CHVs face in advising families about health?

Annex 10: Persons Interviewed, Questions Solicited During Final Evaluation, and Summary of Field Visits (Cont'd)

Questions with CBAs

- How long have they been a CBA? What do you think about your role?
- When were they trained with MHPP? What were the best and worst aspects of the training?
- What did you learn in the training? How has this changed your practices?
- Give some examples of how you've helped pregnant women in your wards?
- Why do some women choose not to deliver in a health facility?
- What danger signs do you discuss with women? What are the most common pregnancy related complications that you seen?
- What is done to promote birth preparedness? What is challenging?
- What motivates them to do this work?
- Do they attend the meetings at MCWC? What do they discuss? Are they beneficial?

Questions for Families in Crisis

- Describe the people that have been supported? What types of crises did they face?
- Who helped them (e.g. CBA,CHV,WHC) and what assistance did they provide?
- Where did they receive services? What did they think about the services they received?
- What did they know about the WHC prior to that encounter?

Questions for RMP/Homepaths

- What did you learn in the negotiation sessions you receive from MHPP?
- What did you like/dislike about the training?
- How did it change your practices?
- Where do you refer sick children/people?
- Give an example of someone you referred and how you supported them.

Annex 10: Persons Interviewed, Questions Solicited During Final Evaluation, and Summary of Field Visits (Cont'd)

B) Summary of Field Visits

Meeting with mayor and Cabinet Members: Three Municipalities were visited. The Teams met with a total of 26 municipal leaders. There were four female Councillors but no female councillors were involved in the meetings in Dinajpur or Kurigram.

Learning Participants: The meeting was organized in 3 Municipalities and the total number of participants was 17 (average participant is 5.7 person per meeting). Total female participants were 5 (29%).

Municipal Health Department: The meeting was organized only in 1 Municipality (Bogra) and the total number of participants was 8. Total female participants were 3 (37.5%).

MESPCC: The Team met with two MESPCCs in 2 Municipalities. There was a total of 29 people ; 5 were women.

WHC: The team met with 37 of the 75 WHCs in 4 Municipalities. A total of 128 people participated; female participants were 24 (41%).

MCWC: The Team visited 2 MCWCs and spoke with 10 women**.**

CBAs: The Team spoke with 27 CBAs out 258 CBAs

CHVs : The Team visited with CHVs in four Municipalities. There was a total of 104 CHVs, 70% were females.

Imam: The Team spoke with 6 Imams in 2 Municipalities

RMP/Homeopath; The Team met with a total of 13 homeopaths and RMPs; two were females.

Families Supported: The Team met with a total of 27 mothers were interviewed to discuss how the WHC helped support them in accessing services.

Annex 11: Summary of Results by Municipality

11.1: Bogra Municipal Results

CBA: Trained 36 Dropout: 1
Imams Trained 65 Moved 5

CHV: Trained 775 Dropout 94
RMP: Trained 23

Team Findings: The Mayor was supportive of MHPP. He has arranged some office space and financial support of WHCs. We met with three people who were part of the 16 person team that visited Parbatipur. They said that they were initially skeptical that this could work but they were very convinced once they saw it in action. After their visit they were very motivated to implement the approaches in their wards. They tried to convince the other (6) Councillors to adopt this approach but they were not very successful. So they started their own WHC and invited their peers to see them in action and then they were convinced. Table 1 outlines Bogra capacity achievements based on the Health Intuitional Capacity Assessment Process (HICAP). All areas improved; planning and implementation greatly improved but is still low.

Table 1: Bogra HICAP Results

HICAP Categories	All Municipalities	Bogra
Human Resources	1.9→3.7 (+1.7)	2.6 → 4.0 (+1.4)
Municipal Authority Leadership	2.8→3.8 (+1.0)	3.8 → 4.0 (+0.2)
Planning and Implementation	2.3→3.4 (+1.1)	1.0 → 3.0 (+2)
External Coordination/Local Resource Mobilization	2.8→3.4 (+0.6)	3.7 → 4.0 (+.3)
Monitoring/Evaluation	1.9→3.5 (+1.6)	3.3 → 4.0 (+0.7)
Overall Scores	2.35→3.55 (+1.1)	3.0 → 3.8 (+0.8)

We met with the Municipal Health Department (MHD) which has 28 positions and 7 vacancies. Each WHC was assigned one MHD staff (e.g., EPI supervisors, health assistant). They seem very engaged in the WHC. They said that they meet monthly with the CHVs to collect and review the HMIS and provide refresher training. They indicated that they would be able to continue the training for the CHVs. The WHC would identify who needed to be trained and they could organize. They liked the HMIS because they could see all the information at a glance. Before they had to rely on the census or conduct their own surveys that were expensive. Now they have the information and can follow-up on cases that have dropped out. They gave the example that they noticed there were three children in different wards with measles. As a result, they followed-up and ensured that all the children were immunized against measles.

Several of the KPC indicators (see below) have declined or remained unchanged. When we tried to understand the reasons for the decline, the MHD staff said they did not believe us that the data had really decreased. More discussion is needed about these indicators.

Table 2 outlines the overall services provided by the MCWC for several months in 2008-09. Antenatal care (ANC) visits and deliveries remained about the same. While the MCWC does some C-Sections, they only managed one delivery complications. CBA referrals are very low. There is a Smiling Sun clinic in the municipality. In 2008, they saw 3,396 women for antenatal care visits, 1,414 women for postnatal checkups and treated 4,860 sick children.

11.1: Bogra Municipal Results (cont'd)

Table 2: Bogra MCWC Data

	Antenatal Care	Deliveries	Complications	C-Sections	CBA Referrals
January 2008	553	98	1	29	0
June 2008	637	106	0	36	2
January 2009	556	100	1	36	4

We met with several CHVs from Ward 12 and the MHD staff to review the HMIS. The CHVs were very clear on the process of data collection and how to present the data to the WHC and MHD. The CBAs keep a list of the pregnant women but they work with them to support the women. In the beginning it was hard for them to collect the data. Some mothers did not want to share this information with them, but now it is easy. They update the information every 2 months, but if they hear of something they will add the information then. They like the HMIS because they can see all the information at once and it helps them with their work so they know who to follow more closely.

We met with several CHVs from Ward 3. They were energetic and seemed motivated. They seemed to have learned a lot during the training. It appeared that they have a good relationship with the community and the CBAs. They said that they meet monthly with the MHD staff to review the HMIS and receive refresher training. It was difficult for them to clearly explain how they prioritize their work and they never mentioned having a list of EPP.

We met the WHC from Ward 3. There was a V-Chair, CBA, CHV, NGO representative and Imam. There seemed to be good collaboration among the team. They work with the Urban Health Project 2 of the ABD. They said that the CHVs work for both MHPP and UPHCP II since they were already in place. The Imam was very strong and he said that they would have no problem continuing the WHC. Table 3 outlines the improvements in WHC capacity. All areas improved but resource mobilization, coordination and monitoring and evaluation are still quite low.

Table 3: Bogra Ward Health Committee Capacity Assessment

Categories	All Municipalities		Bogra	
	2007	2008	2007	2008
Participatory Planning	3.6	3.9	3.7	3.9
Leadership/Governance	3.5	4.0	3.4	3.0
Resource Mobilization/Management	2.3	2.8	2.3	2.9
Collaboration/Coordination	2.7	3.4	2.3	2.9
Monitoring and Evaluation	2.5	3.3	2.4	2.9
Total	2.9	3.5	2.8	3.3

Findings from the Knowledge, Practices, and Coverage Survey

There has been a substantial increase in women (postpartum) and children receiving Vitamin A. Knowledge levels about danger signs for newborns and sick children, particularly signs of pneumonia and diarrhea have dramatically increased. Deliveries with skilled birth attendants rose slightly while the deliveries with CBAs increased dramatically.

Areas that did not seem much improvement included: 1) mothers taking children with pneumonia to be treated by trained providers; 2) women initiating breastfeeding within the first hour after delivery; 3) wrapping the baby with a clean/dry cloth; 4) planning for the birth; 5) giving more food liquid during diarrhea; and 6) Handwashing.

11.2: Dinajpur Municipal Results

CBA: Trained 36 Dropout: 0
Imams Trained 77 Moved 10

CHV: Trained 636 Dropout 63
RMP: Trained 49

The Mayor is positive and recognizes the achievement in reducing the maternal and child mortality through the MHPP program. Although there is a strong coordination between the Mayor and different stakeholders, it seems that the relationship between the Councillors and WHCs could be strengthened. The MESPCC play a vital role in supporting health related activities. Through the initiation of MESPCC, every WHC is now provided 500 packets of ORS from the Civil Surgeon's office to be distributed by the CHVs, as needed.

Table 1 outlines Bogra capacity achievements based on the Health Intuitional Capacity Assessment Process (HICAP). All areas improved; planning and implementation greatly improved but is still low.

Table 1: Dinajpur HICAP Results

HICAP Categories	All Municipalities	Dinajpur
Human Resources	1.9→3.7 (+1.7)	1.2 → 4.0 (+2.8)
Municipal Authority Leadership	2.8→3.8 (+1.0)	2.8 → 3.8 (+1.0)
Planning and Implementation	2.3→3.4 (+1.1)	2.0 → 3.3 (+1.3)
External Coordination/Local Resource Mobilization	2.8→3.4 (+0.6)	2.7 → 3.0 (+0.3)
Monitoring/Evaluation	1.9→3.5 (+1.6)	2.2 → 4.0 (+1.8)
Overall Scores	2.35→3.55 (+1.1)	2.2 → 368 (+1.4)

The WHC is represented by different stakeholders. Although the WHCs had a fixed date, it was difficult for them to maintain the desired schedule. The WHC has bank account but the mobilization and collection of fund is poor. WHCs have been able to use existing spaces for meetings.

Table 2: Dinajpur Ward Health Committee Capacity Assessment

	All 7 Municipalities		Dinajpur	
Categories	2007	2008	2007	2008
Participatory Planning	3.6	3.9	3.4	4.3
Leadership/Governance	3.5	4.0	3.3	4.4
Resource Mobilization/Management	2.3	2.8	1.9	2.5
Collaboration/Coordination	2.7	3.4	3.3	4.3
Monitoring and Evaluation	2.5	3.3	2.8	3.8
Total	2.9	3.5	3.0	3.9

The RMPs were trained and are referring very sick children to the hospitals. Some of the RMPs are member of the WHC and playing a very important role. The follow up mechanism with the RMPs is yet not institutionalized, although they have one meeting with the CS in this year.

The management of pregnant women in the MCWC has been increased due to the positive outlook of the MO-Clinic. The FWVs provided training to the CBAs and they have good communication with them.

11.2: Dinajpur Municipal Results (Cont'd)

Table 2: Dinjapur MCWC Data

	Antenatal Care	Deliveries	Complications	C-Sections	CBA Referrals
January 2008	580	49	0	8	1
June 2008	637	45	0	10	2
January 2009	607	42	0	10	4

Findings from the Knowledge, Practices and Coverage Survey
There has been a substantial increase in women (postpartum) and children receiving Vitamin A. Knowledge levels about danger signs for newborns and sick children, particularly signs of pneumonia and diarrhea have dramatically increased. Deliveries with both SBA and CBAs increased.

Areas that did not seem much improvement included: 1) women initiating breastfeeding within the first hour after delivery; 2) wrapping the baby with a clean/dry cloth; 3) planning for the birth; 4) complementary feeding; 5) giving more food liquid during diarrhea; and 6) Handwashing.

11.3: Gaibandha Municipal Results

CBA: Trained 36 Dropout: 1
Imams Trained 33 Moved 5

CHV: Trained 363 Dropout 63
RMP: Trained 23

Team Findings: The Mayor supports MHPP but due to his other commitments he can not play a proactive role. The Councillors get support from the Mayor in implementing health activities. The MESPCC had a diverse membership and has a strong relationship with the CS's office, even though there was a high turnover rate.

Table 1: Gaibandha HICAP Results

HICAP Categories	All Municipalities	Gaibandha
Human Resources	1.9→3.7 (+1.7)	1.6 → 3.0 (+1.4)
Municipal Authority Leadership	2.8→3.8 (+1.0)	1.8 → 3.0 (+1.2)
Planning and Implementation	2.3→3.4 (+1.1)	1.0 → 3.0 (+2.0)
External Coordination/Local Resource Mobilization	2.8→3.4 (+0.6)	2.3 → 3.0 (+0.7)
Monitoring/Evaluation	1.9→3.5 (+1.6)	1.6 → 3.0 (+1.4)
Overall Scores	2.35→3.55 (+1.1)	1.7 → 3.0 (+1.3)

The Councillors extended their support to support their colleagues to form WHC and still attend each other's WHC meetings to share their experiences. Gaibandha is a poor municipality so it is difficult for them to raises funds. Support is provided based on the initiation of the Councillors.

Table 2: Gaibandha Ward Health Committee Capacity Assessment

	All 7 Municipalities		Gaibandha	
Categories	2007	2008	2007	2008
Participatory Planning	3.6	3.9	3.4	4.3
Leadership/Governance	3.5	4.0	3.3	4.4
Resource Mobilization/Management	2.3	2.8	1.9	2.5
Collaboration/Coordination	2.7	3.4	3.3	4.3
Monitoring and Evaluation	2.5	3.3	2.8	3.8
Total	2.9	3.5	3.0	3.9

11.3: Gaibandha Municipal Results (cont'd)

Existing CHVs are young, energetic and motivated. They visit the houses regularly and distributed ORS and Vitamin A to poor households. The CHV replacement mechanism is working well. They allowed interested boys/girls to attend the monthly CHVs meeting and received endorsement of the WHC members. After getting the consent from the parents, the person received the CHV training. The WHCs use the CHVs to work on other community issues.

Table 3: Gaibandha MCWC Data

	Antenatal Care	Deliveries	Complications	C-Sections	CBA Referrals
January 2008	509	286	65	22	23
June 2008	626	195	46	24	32
January 2009	473	234	63	19	73

Findings from the Knowledge, Practices and Coverage Survey

There has been a substantial increase in women (postpartum) and children receiving Vitamin A. Knowledge levels about danger signs for newborns and sick children, particularly signs of pneumonia and diarrhea have dramatically increased. There was also and increase in knowledge of maternal danger signs. Deliveries with SBA rose slightly but deliveries with CBAs dramatically increased.

Areas that did not seem much improvement included: 1) women initiating breastfeeding within the first hour after delivery; 2) wrapping the baby with a clean/dry cloth; 3) planning for the birth; 4) complementary feeding; 5) giving more food liquid during diarrhea; and 6) Handwashing.

11.4: Joypurhat Municipal Results

CBA: Trained 36 Dropout: 1
Imams Trained 56
CHV: Trained 263 Dropout 79
RMP: Trained 28

Team Findings: The Mayor of Joypurhat Municipality is very supportive for the MHPP. He has good support from his councillors specially his women councillors are very active in implementing the activities related to MHPP. They established the Vice Chairman position in the WHC who is outside from the Municipality. All the secretary position of WHC possesses from municipal staff.

The CBAs are very active and try to help the EPP although they do not have good linkage with CHVs/WHC but have good communication with the Mayor. For that reason they can obtain support directly from the Mayor. The Imams are playing very active role in disseminating the message related to maternal and child health, providing training to other Imams and advising the sick children and mothers to take hospital treatment.

The WHC are very active with diversified group of people and established the fund raising capacity. The coordination between the Civil Surgeon and the MESPCC is very good. The counselors are playing active role in supporting their colleagues through attending the monthly WHC meeting of others. Through their coordinated efforts they could establish all WHC within 2 months after returning from the learning centre.

Table 1: Joypurhat HICAP Results

HICAP Categories	All Municipalities	Joypurhat
Human Resources	1.9→3.7 (+1.7)	3.2 → 4.2 (+1.0)
Municipal Authority Leadership	2.8→3.8 (+1.0)	3.5 → 4.8 (+1.3)
Planning and Implementation	2.3→3.4 (+1.1)	3.7 → 4.0 (+0.3)
External Coordination/Local Resource Mobilization	2.8→3.4 (+0.6)	3.3 → 3.7 (+0.4)
Monitoring/Evaluation	1.9→3.5 (+1.6)	3.0 → 4,4 (+1.4)
Overall Scores	2.35→3.55 (+1.1)	3.3 → 4.2 (+0.9)

Table 2: Joypurhat Ward Health Committee Capacity Assessment

	All 7 Municipalities		Joypurhat	
Categories	2007	2008	2007	2008
Participatory Planning	3.6	3.9	3.9	4.1
Leadership/Governance	3.5	4.0	3.6	4.1
Resource Mobilization/Management	2.3	2.8	2.7	3.5
Collaboration/Coordination	2.7	3.4	2.9	3.5
Monitoring and Evaluation	2.5	3.3	2.9	3.6
Total	2.9	3.5	3.0	4.0

11.4: Joypurhat Municipal Results (cont'd)

Table 2: Joypurhat MCWC Data

	Antenatal Care	Deliveries	Complications	C-Sections	CBA Referrals
January 2008	420	73	0	25	38
June 2008	553	71	0	20	32
January 2009	364	51	0	14	49

Findings from the Knowledge, Practices and Coverage Survey

There has been a substantial increase in women (postpartum) and children receiving Vitamin A. Knowledge levels about danger signs for newborns and sick children, particularly signs of pneumonia and diarrhea have dramatically increased. Deliveries with both SBA and CBAs rose dramatically. There was some increase in birth planning.

Areas that did not seem much improvement included: 1) women initiating breastfeeding within the first hour after delivery; 2) wrapping the baby with a clean/dry cloth; 3) complementary feeding; 4) giving more food liquid during diarrhea; and 5) Handwashing.

11.5: Kurigram Municipal Results

CBA: Trained 30 Dropout: 1
Imams Trained 21

CHV: Trained 251 Dropout 38
RMP: Trained 21

Team Findings: The Mayor and Councilors are very involved and supportive of health. Unfortunately, none of the female Councillors were involved in any of the meetings which would have provided a useful perspective. The Councilors are very active in the WHCs. Table 1 outlines Kurigram's capacity achievements based on the Health Intuitional Capacity Assessment Process (HICAP). All areas improved; planning and implementation saw the least improvement (0.3+)

Table 1: Kurigram HICAP Results

HICAP Categories	All Municipalities	Kurigram
Human Resources	1.9→3.7 (+1.7)	2.2 → 3.2 (+1.0)
Municipal Authority Leadership	2.8→3.8 (+1.0)	2.0 → 2.8 (+0.8)
Planning and Implementation	2.3→3.4 (+1.1)	1.7 → 2.0 (+0.3)
External Coordination/Local Resource Mobilization	2.8→3.4 (+0.6)	2.3 → 3.3 (+1.0)
Monitoring/Evaluation	1.9→3.5 (+1.6)	1.4 → 2.8 (+1.4)
Overall Scores	2.35→3.55 (+1.1)	1.9 →2.8 (+0.9)

The MCWC Nurses and FWVs were very energetic. The staff indicated that they did not use partograph because they are very busy. They usually practice active management of third stage of labor but they have not had any oxtoycin for the last month. The MCWC is not able to provide blood transfusions. In addition, they do not have any magnesium sulfate or valium so they can only treat eclampsia with anti-hypertensives and refer to the hospital.

The four FWVs that received the CBA training of trainers have retired or been transferred. Concern conducted a special orientation for the rest of the staff and they indicated that they felt confident about the conducting the CBA training. Sometimes it is hard for them to manage providing services and training the CBAs because they are understaffed. So far they have trained one batch of CBAs. The MCWC staff seem to have a good relationship with the CBAs. They stated that more women are coming for ANC and delivery services because of the CBAs.

Table 2 outlines the overall services provided by the MCWC for several months in 2008-09. Both antenatal care (ANC) visits and deliveries have actually declined. While the MCWC performs some C-Sections they do not manage other complications. CBA referrals have remained about the same.

Table 2: Kurigram MCWC Data

	Antenatal Care	Deliveries	Complications	C-Sections	CBA Referrals
January 2008	355	67	0	10	36
June 2008	318	56	0	5	38
January 2009	273	52	0	9	31

Some key concerns with the MCWC are that they only provide ANC services two days a week and they were not able to provide emergency obstetric care (EmOC) services. In addition, the mothers in crises told us that they were treated very badly by both the MCWC and the District Hospital staff because they were poor. There is a Smiling Sun clinic in the municipality but the team was unable to collect any information from them.

11.5: Kurigram Municipal Results (cont'd)

The CBAs have been doing deliveries for 10 to 15 years and received training about 2 years ago. They provide about 1-5 deliveries/month and 3-7 referrals/month, mostly for ANC. The CBA were very motivated, had better skills after the training and said they were willing to change their practices. They said that they are comfortable referring women because now they know the MCWC staff. They stated that they do fewer deliveries after their training, in part because FP has been so successful and because they refer more. As a result they have less income and wanted more income generating opportunities. They said that they became CBAs because they wanted to help women. The training and ID card has increased their recognition and the community is more accepting of them.

All the male Councillors and MHD staff participated in the meetings with the Mayor. None of the female Councillors attended any of the meetings. The WHC are very active and were formed in a participatory manner. The Councillors have a good understanding of the situation in their ward, particularly the EPP. There seems to be good coordination among the Councillors and the MHD. Table 3 outlines the improvements in WHC capacity. All areas were enhanced, but resource mobilization and monitoring and evaluation are still quite low.

Table 3: Kurigram Ward Health Committee Capacity Assessment

	All 7 Municipalities		Kurigram	
Categories	2007	2008	2007	2008
Participatory Planning	3.6	3.9	3.3	3.7
Leadership/Governance	3.5	4.0	3.6	4.3
Resource Mobilization/Management	2.3	2.8	2.2	2.9
Collaboration/Coordination	2.7	3.4	2.4	3.1
Monitoring and Evaluation	2.5	3.3	1.9	2.6
Total	2.9	3.5	3.0	3.0

Findings from the Knowledge, Practices, and Coverage Survey

There has been a substantial increase in women (postpartum) and children receiving Vitamin A. Knowledge levels about danger signs for newborns and sick children, particularly signs of pneumonia and diarrhea have dramatically increased. There was also an increase in the treatment of sick children. Deliveries with both skilled birth attendants and CBAs increased as well as postpartum check-ups.

Areas that did not seem much improvement included: 1) women initiated breastfeeding within the first hour after delivery; 2) women eating more food during pregnancy; 3) planning for the birth; 4) giving more food and/or liquid during diarrhea; and 5) handwashing.

11.6: Nilphamari Municipal Results

CBA: Trained 30 Dropout: 0
Imams Trained 28
Homeopaths Trained 23

CHV: Trained 291 Dropout 55
RMP: Trained 28

Team Findings: The Mayor is very enthusiastic with the MHPP and recognized the support he is providing to the urban dwellers especially the poor people which the municipality could not provide in last 15 years. It is to be noted here that the Mayor was elected for 4 terms and holding this chair for last 20 years.

Although they have shortage of municipal staff but that was overcome by the active CHVs and CBAs. The CHVs and CBAs are very much clear about their responsibilities and also have very good coordination in helping the EPP. The WHC, CHVs and CBAs are the workforce of the cabinet members.

The municipal authority and the WHC have very good linkage with the local health authority (CS and DD-FP). The coordination was developed with frequent contact with the CS and the Councillors for ensuring hospital service for the EPP. The WHC are very active and use the HMIS data in implementing the planned activities and also to provide more attention to the EPP. The activities of the WHC could be strengthened by including more female members in the WHC. The fund collection by the WHC is hindered due to poverty and less population.

Table 1: Nilphamari HICAP Results

HICAP Categories	All Municipalities	Nilphamari
Human Resources	1.9→3.7 (+1.7)	2.0 → 3.0 (+0.7)
Municipal Authority Leadership	2.8→3.8 (+1.0)	2.0 → 4.3 (+2.3)
Planning and Implementation	2.3→3.4 (+1.1)	2.0 → 4.0 (+2.0)
External Coordination/Local Resource Mobilization	2.8→3.4 (+0.6)	1.7 → 3.3 (+1.3)
Monitoring/Evaluation	1.9→3.5 (+1.6)	1.2 → 4.0 (+2.8)
Overall Scores	2.35→3.55 (+1.1)	1.6 →3.4 (+1.8)

Table 2: Nilphamari Ward Health Committee Capacity Assessment

	All Municipalities		Nilphamari	
Categories	2007	2008	2007	2008
Participatory Planning	3.6	3.9	3.5	3.9
Leadership/Governance	3.5	4.0	3.5	4.0
Resource Mobilization/Management	2.3	2.8	2.3	2.7
Collaboration/Coordination	2.7	3.4	2.7	3.4
Monitoring and Evaluation	2.5	3.3	2.7	3.6
Total	2.9	3.5	2.9	3.5

11.6: Nilphamari Municipal Results (cont'd)

Table 3: **Nilphamari** MCWC Data

	Antenatal Care	Deliveries	Complications	C-Sections	CBA Referrals
January 2008	448	67	1200	0	108
June 2008	584	56	144	7	81
January 2009	356	52	74	8	96

Findings from the Knowledge, Practices, and Coverage Survey

There has been a substantial increase in women (postpartum) and children receiving Vitamin A. Knowledge levels about danger signs for newborns and sick children, particularly signs of pneumonia and diarrhea have dramatically increased. There was also an increase in the treatment of sick children. There was an increase in handwashing which was not seen in any of the other municipalities. Deliveries with both skilled birth attendants and CBAs increased as well as postpartum check-ups.

Areas that did not seem much improvement included: 1) women initiated breastfeeding within the first hour after delivery; 2) women eating more food during pregnancy; 3) planning for the birth; and 4) giving more food and/or liquid during diarrhea.

11.7: Rangpur Municipal Results

CBA: Trained 54 Dropout: 0
Imams: Trained 96 Moved 12
CHV: Trained 1030 Drop Out 157
RMP: Trained 64 Drop Out 0

Team Findings: The Mayor and Councillors seemed very busy. They seemed supportive of addressing health but the Team was unsure how much time they had to devote to health. The Medical Advisor of the Municipality the Mayor was very knowledgeable about the municipality and Councillors seemed to defer to his judgment. The female councilor was very shy and did not speak. None of the male councilors encouraged her to speak. Table 1 outlines Rangpur's capacity achievements based on the Health Intuitional Capacity Assessment Process (HICAP).

Table 1: Rangpur HICAP Results

HICAP Categories	All Municipalities	Rangpur
Human Resources	1.9→3.7 (+1.7)	3.0 → 3.8 (+0.8)
Municipal Authority Leadership	2.8→3.8 (+1.0)	4.0 → 4.0 (+0.2)
Planning and Implementation	2.3→3.4 (+1.1)	2.0 → 4.0 (+0.3)
External Coordination/Local Resource Mobilization	2.8→3.4 (+0.6)	4.0 → 4.0 (+0.3)
Monitoring/Evaluation	1.9→3.5 (+1.6)	2.2 → 4.0 (+0.7)
Overall Scores	2.35→3.55 (+1.1)	2.8 →4.0 (+0.8)

The MCWC Nurses and FWVs seemed to have good relationships with the CBAs. Four out of the five FWV who were trained as CBA trainers are still working at the MCWC. They felt confident about being able to continue the CBA training. They stated that as a result of the CBAs more women were coming to the MCWC for ANC and delivery, particularly women with complications were not coming so late. The MCWC had also put in place a process to separate normal and hi-risk women in order to reduce waiting time. It is unclear if these actions have reduced the client's waiting time. The MCWC does not have the capacity to manage postpartum hemorrhage requiring blood or eclampsia with treatment of magnesium sulfate or valium.

Table 2 outlines the overall services provided by the MCWC for several months between 2008-09. Both antenatal care (ANC) visits and deliveries slightly increased. While the MCWC does some C-Sections they do not manage other complications. CBA referrals have remained about the same.

Table 2: Rangpur MCWC Data

	Antenatal Care	Deliveries	Complications	C-Sections	CBA Referrals
January 2008	362	42	0	22	12
June 2008	468	42	0	17	9
January 2009	419	58	0	26	13

Some key concerns with the MCWC were that they only provided ANC services two days a week and they were not able to provide emergency obstetric care (EmOC) services. Interviews with mothers indicated that some complications (e.g., eclampsia, severe bleeding) are not treated at the MCWC and sometimes the MO is not available.

There is a Smiling Sun clinic in the municipality. In 2008, they saw a total of 6,541 women for ANC visits, 324 deliveries, 1,2331women for postnatal visits and 8,727 sick children for treatment.

11.7: Rangpur Municipal Results (cont'd)

The CBAs had been conducting deliveries for about 10 years and had received training about 3 years ago. There are 54 CBAs in 15 wards with no drop-outs. They provide about 3-5 deliveries/month and 5-7 referrals to the MCWC. Most of the referrals are for ANC visits. The MCWC staff had trained 3 CBA batches and were thinking of training another. The Team thought that the CBA were very motivated, had better skills after their training and said they were willing to change their practices. They said that they had a referral system with the MCWC and other health service providers, in this case Smiling Sun. The CBAs were able to effectively mobilize resources to help women. They stated that they do fewer deliveries after their training, in part because FP has been so successful and because they make referrals for complications. As a result, they have less income and wanted more opportunities to generate income. They said that they became CBAs because they wanted to help women. The training and ID card has increased their recognition and the community is more accepting of them.

The Ward Health Committees (WHCs) were very active and were formed in a participatory manner. They have created a Vice-Chair to serve as the leader if the Chair cannot attend the meeting. Teamwork among the WHC seems to be very strong. The WHCs have a good understanding about which households are poor and how they can be helped by the WHC. Table 3 outlines the improvements in WHC capacity. All areas were enhanced, but resource mobilization and coordination are still quite low.

Table 3: Rangpur Ward Health Committee Capacity Assessment

Capacity Category	All 7 Municipalities		Rangpur	
	2007	2008	2007	2008
Participatory Planning	3.6	3.9	3.6	3.8
Leadership/Governance	3.5	4.0	3.2	3.5
Resource Mobilization/Management	2.3	2.8	2.3	2.5
Collaboration/Coordination	2.7	3.4	2.5	2.6
Monitoring and Evaluation	2.5	3.3	2.1	3.0
Total	2.9	3.5	2.8	3.1

Findings from the Knowledge, Practices, and Coverage Survey

There has been a substantial increase in women (postpartum) and children receiving Vitamin A. Knowledge levels about danger signs for newborns and sick children, particularly signs of pneumonia and diarrhea have dramatically increased. Deliveries with skilled birth attendants went up while the deliveries with CBAs remained about the same.

Areas that did not seem much improvement included: 1) women initiating breastfeeding within the first hour after delivery; 2) wrapping the baby with a clean/dry cloth; 3) planning for the birth; 4) giving more food liquid during diarrhea; and 5) handwashing.

Annex 12: Monitoring and Evaluation Table

Monitoring and Evaluation Plan

Strategic Objective/Intermediate Result	#	Indicator	Method	Frequency	Baseline Value	EOP target	Intervention
SO: Reduced maternal and child mortality in 7 municipalities in Rajshahi Division, Bangladesh,	Combination of IR1, IR2 and IR3 indicators						
IR: 1 Sustained improvement in quality of maternal and child health planning and systems within the municipalities.	1	At least 75% of Municipal Authorities demonstrate measurable (increase 1 step or more) (see anne B-4).	HICAP using A.I.	Bi-Annual	Not yet done	Inc. 1 step or more from baseline	Capacity development support to improve the quality of municipal MCH systems
	2	Ward Health Committees have demonstrated improvement in all 8 areas (See Annex B-5)	WHC capacity self assessment tool	Bi-Annual	Not yet done		Capacity development support to strengthen the system of community MCH services
	3	Percentage of ESPCC members attending 4 meetings annually in 7 municipalities	ESPCC meeting minutes	Annually	Not yet done	85% of ESPCC members	Capacity development support to strengthen the Coordination of MCH services within the municipality
IR: 2 Improved household prevention and care-seeking practices for sick children under 5 years of age in all targeted municipalities	1	Percentage of children under 2, by sex, with symptoms of fast/difficult breasting or chest in drawing who received care from a trained providers increased	HH Survey using LQAS	Bi-Annual (years 1,3 and 5)	45%	60%	ARI (IMCI)
	2	Percentage of sick children, by sex, with diarrhea who received increased fluid and continued feeding during recent illness	HH Survey using LQAS	Bi-Annual (years 1,3 and 5)	36%	50%	CDD (IMCI)
	3	Percentage of sick children, by sex, diarrhea who received ORT	HH Survey using LQAS	Bi-Annual (years 1,3 and 5)	71%	80%	CDD (IMCI)
	4	Percentage of infants 6-11 months receiving at least 3 complementary	Household Survey using	Bi-Annual (years 1,3 and 5)	25%	45%	Breast feeding, Nutrition (IMCI)

Strategic Objective/Intermediate Result	#	Indicator	Method	Frequency	Baseline Value	EOP target	Intervention
		food feedings and breast milk in past 24 hours, by sex	LQAS				
	5	Percentage of parents with children age 0-23 months who report to wash their hands with soap and water at the five critical moments	Household Survey using LQAS	Bi-Annual (years 1,3 and 5)	16%	30%	CDD, ARI (IMCI)
	6	Percentage of children under five (9-59 months) who received Vitamin A supplement in past six months	Household Survey using LQAS	Bi-Annual (years 1,3 and 5)	59%	85%	MNC
IR: 3 Improved household prevention and care-seeking practices for sick children under 5 years of age in all targeted municipalities	1	Percentage of ddeliveries assisted by a skilled attendant (Doctor, Nurse, FWV/HW)	Household Survey using LQAS	Bi-Annual (years 1,3 and 5)	49%	60%	MNC
	2	Percentage of ddeliveries assisted by a skilled or trained attendant (Doctor, Nurse, FWV/HW **and TTBA**)	Household Survey using LQAS	Bi-Annual (years 1,3 and 5)	59%	80%	MNC
	3	Percentage of mothers of infants who took at least 90 iron folate supplements during most recent pregnancy	Hold Survey using LQAS	Bi-Annual (years 1,3 and 5)	43%	60%	MNC
	4	Percentage of infants immediately breastfed within one hour of birth	Hold Survey using LQAS	Bi-Annual (years 1,3 and 5)	40%	60%	MNC
	5	Percentage of mothers of infants who received postpartum Vitamin A within 42 days	HHold Survey using LQAS	Bi-Annual (years 1,3 and 5)	25%	50%	MNC
	6	Percentage of mothers who prepared birth plan for last delivery	HHold Survey using LQAS	Bi-Annual (years 1,3 and 5)	18%	30%	MNC
	7	Percentage of women taking more food than usual during last pregnancy	HHold Survey using LQAS	Bi-Annual (years 1,3 and 5)	32%	45%	MNC

Annex 13: Project Data Form

Please refer to the attached document

Annex 14: Special Reports
14.1: Operational Research on Reduction of Indoor Air Pollutants
14.2: HICAP Facilitators Guide and Reports 2007 & 2009
14.3: WHC Capacity Assessment Facility Guide and numeric reports 2007 & 2008
14.4: Summary of Cost and Effectiveness Study and Preliminary Findings

14.1 Operational Research on Reduction of Indoor Air Pollutants

A Pilot study with Winrock

In order to assess fuel use, technology access, cooking practices, exposure to indoor air pollution, health perceptions, and the impact of cooking smoke on health, a baseline survey was conducted in some pre-selected wards of Saidpur and Parbatipur municipalities under Rajshahi division. The study was based on information collected from 625 primary cooks (or in absence, the secondary cook). In addition, anthropometric information was collected on about 444 under five year old children and 263 children were medically examined for possible respiratory problems.

The average household size in Saidpur (5.6) is slightly higher than that of Parbatipur (4.8). More than eight in every ten households were with a roof made of corrugated iron sheet. A marked difference exists in access to electricity between Saidpur (72%) and Parbatipur (44%). About half of the respondents were of age 15-19 with a mean age of 28 years. About two-thirds of Saidpur respondents usually speak Urdu, while 97% of Saidpur respondents speak Bangla. More than half had no formal education.

People in Saidpur and Parbatipur communities predominantly cook outdoors, both in the dry and rainy seasons. The majority use biomass one mouth portable open stoves for cooking, followed by biomass one-mouth fixed open stove. Most of the indoor kitchens had no window and were mostly with one door. Women rarely cook for sale (3%).

For domestic cooking, the most frequently used fuels are wood (47%), Golden (18%), dung cakes (13%) and bamboo (11%). Electricity and kerosene are mostly used for lighting. Water heating is not common. Kerosene is the most frequently used fuel to ignite/start the fire.

Nearly all the women believe that smoke from cooking affects the health of the cook and their children. Kitchen smoke was considered to be harmful for eyes, to cause headaches, shortness of breath, cough and other illness.

The prevalence of cough among the cook in the morning, day and night and production of phlegm are quite extensive. About 21% women suffered continuously from any of the above symptoms for 10-12 days in the last one-year. However, only a small proportion experienced one or more respiratory illness in the last two weeks preceding the survey. More than two-thirds of the children suffered from one or more illness during the same period; and about a quarter experienced symptoms of pneumonia.

Results indicate that a cook who uses fuel that produces more smoke is more likely to suffer from asthma, cough and phlegm. About 69% of children coming from such households also suffer from at least one respiratory illness.

Anthropometric analysis reveals that 47% of under five children are stunted (<-2 SD) with 17% severely stunted (<-3 SD). Stunting increases with age, and varies by sex, area of residence and the extent of exposure to kitchen smoke. About 18% of children are wasted with 3% severely wasted; and 57% children are underweight and 15% are severely underweight.

Household energy practices, indoor air pollution, and health impact is a relatively new area of investigation. The project area households primarily use biomass as cooking fuel which usually produces more smoke. However, about half of households cook outdoors and that diminishes, to some extent, the adverse effects of cooking smoke. Since the prevalence of respiratory illness among the women (cooks) and children is high, and there is an indication of a relationship between exposure to kitchen smoke and such illness, something needs to be done to reduce the dependency on biomass fuel, and limit exposure to smoke emitted from cooking.

14.2 HICAP Facilitators Guide and Reports 2007 & 2009

Please refer to the attached document

14.3 WHC Capacity Assessment Facility Guide and numeric reports 2007 & 2008

Please refer to the attached document

14.4 Summary of Cost and Effectiveness Study and Preliminary Findings

ANNEX 14.4: SUMMARY OF COST AND EFFECTIVENESS STUDY

Introduction

Concern-Bangladesh's Municipal Health Partnership Programme (MHPP) 2004 to 2009 was a USAID funded initiative which aimed to reduce maternal and child mortality through capacity building of Government and Civil Society officials and select community inputs. The MHPP reflects a continuation and expansion of activities successfully initiated through Concern's Child Survival Programme (CSP) from 1998 to 2004 in 2 municipalities in the north of Bangladesh. Under the MHPP, CSP activities are continued in Saidpur and Parbatipur and further expanded to seven additional municipalities in Rajshahi Division.

The success of the CSP programme prompted the final evaluation report submitted at the end of 2004 to recommend a 'study of the costs associated with launching ward and municipal health committees and networks as well as strengthening the municipal health staff' with the aim of informing donors and the Government of the costs of scaling up the approach in all 280 municipalities in the country.

The costing analysis objectives include the following:

1) Determine the total program cost of the MHPP from both the donor and government perspective;
2) Consider program costs within the context of intermediate outcome measures;
3) Generate estimates of sustaining MHPPs for the remaining four years;
4) Generate estimates of replicating MHPP to other districts.

While the study encompassed both the MHPP area of Bogra, Dinajpur, Gaibandha, Joypurhat, Kurigram, Nilphamari, and Rangpur it should be noted that comparative data was also collected for the original model sites of Saidpur and Parbatipur municipalities.

Methodology

The MHPP costing analysis was an "incremental analysis" in the sense that it aims only to capture the additional cost of adding MHPP onto the existing infrastructure. Two approaches to conducting the MHPP costing analysis were used: (a) Expenditure; and (b) Ingredients. In the former, financial data was amassed and assigned to specific MHPP program activities. In the latter, all inputs – including staff time, donated goods, etc. (needed to deliver MHPP activities was identified and assigned specific costs. Reliance on these two approaches for conducting the costing analysis ensured that all MHPP inputs were identified and all possible costs included and attributed to specific project activities.

Direct costs or those costs which can be directly attributed to the provision of a specific service, were collected from both the donor and government perspectives. From the donor perspective, direct costs are anticipated to encompass Concern inputs in the MHPP program. In particular, capital and recurrent costs associated with building space, vehicles and travel, staff time, etc. was included.

Since the analysis was incremental, other costs associated with the existing health infrastructure – buildings, etc. – were not be included. Inputs and costs were stratified into "recurrent" and "capital" costs.

Calculating Financial vs. Economic Costs

Financial Costs

- Purchase price of Car = $10,000 USD
- Year Purchased 2006
- Standardized life expectancy = 10 years
- **Annual financial cost = $10,000/10 years = $1,000**

Economic Costs

- Purchase price of car = $10,000 USD
- Replacement cost of car = $12,000 USD
- Year Purchased 2006
- Standardized life expectancy = 10 years
- WHO-CHOICE Discount rate = 3%
- Annualisation Factor = 8.530 (from standardized table)
- **Annualized Economic cost: $12,000/ 8.530 = $1,406.79**

Data collection activities concentrated on two distinct activities: (a) costing data collection; and (b) time allocation data collection. Costing data was collected both on basis of inputs and geographic level of the MHPP program, including national, regional, and district. Expenses incurred by each stakeholder at each level of the health system was tracked prospectively and routinely entered into excel models. For each stakeholder, start-up and implementation phase models was created to facilitate the stratification of costs into these distinct phases. Costing data from all nine municipalities was collected retrospectively from Oct 2004 and prospectively through October 2008 from Concern's perspective. Once collected, costs for each of the nine-municipalities were stratified into five main sub-categories, including:

- Advocacy: Introducing the concept of urban health and building momentum for municipal leaders
- Ward Health Committee formation and capacity building
- Developing Networks of Community Change Agents
- Municipal health department strengthening
- One off Development and Research activities

These are detailed in the Appendix 1.

All costs were categorized as follows:

- Personnel Cost
- Head Office Salary & other cost
- Services
- Operational Cost
- Transport
- Admin HO cost
- International Staff cost

In addition to amassing costing data, we used time allocation data collection to yield quantitative estimates of how staff allocate their time across activities. Forms were developed to facilitate the prospective monitoring of time devoted to MHPP activities.

Analysis

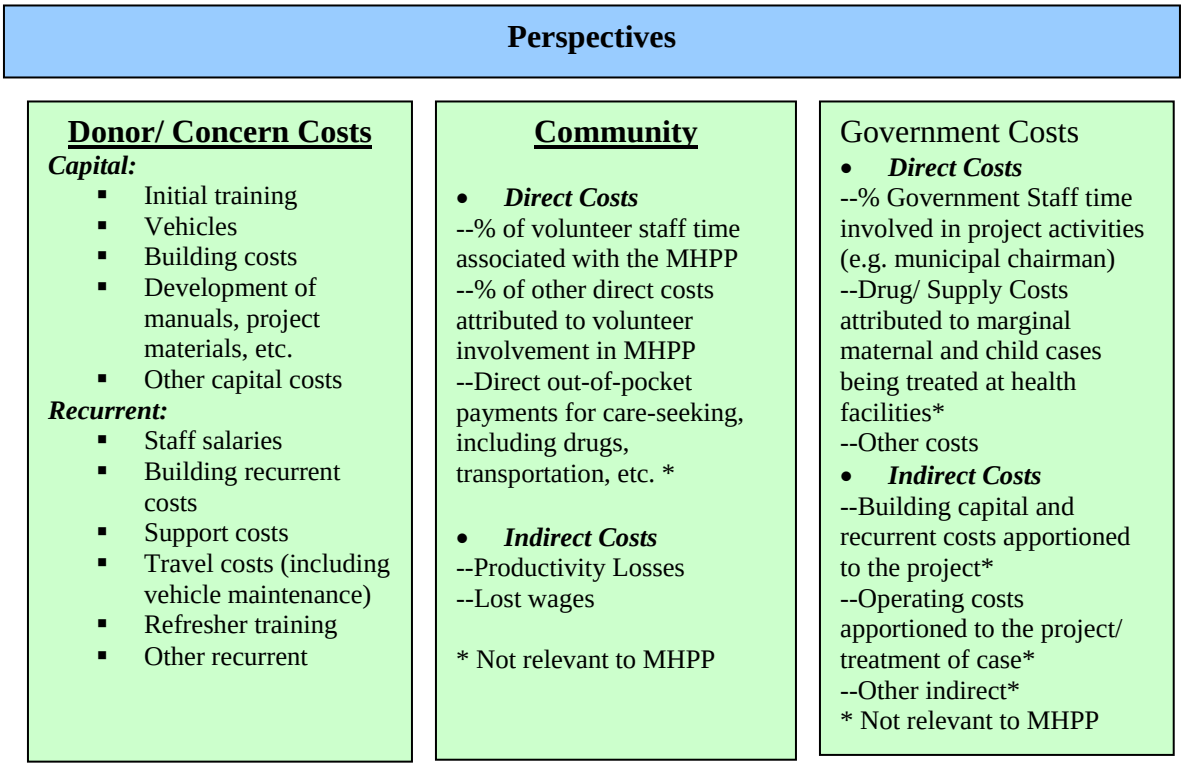
In analyzing costing data, all economic costs were valued in US dollars, adjusted to 2006 base year dollars (using the Consumer Price Index), and an annualization factor[1] applied. As mentioned in 2.3.1, in deriving economic costs, replacement costs were used in the event that financial costs (or purchase price) do not reflect current market value prices for capital items. Recommended costing and accounting techniques were followed for the allocation of indirect costs [15]. In addition, data from time-allocation interviews was used to further assist in attributing indirect costs to the interventions' outcomes, based on Activity-Based Costing techniques [15, 16].

The Lives' Saved Tool (LiST) served as the primary source for effectiveness data and thus corresponds to an outcome of "cost per life saved". Health outcomes were measured through child survival standard knowledge, practice and coverage household surveys that allowed estimates of key maternal and child health interventions for each municipality.

Limitations

While inclusion of government and wider societal costs would have been the gold standard, the resources required for that type of a study were not available. In addition to capturing costs associated with Government and Concern staff time, discussions were held on the benefits and feasibility of determining costs associated with donated volunteer staff time at the community level. While community inputs are a crucial component of the MHPP, the scale of the community involvement (over one thousand community volunteers in the new municipalities) coupled with the resources required to carry out such a study would suggest that it's more realistic to emphasize more crucial components of the project and re-address the benefits and costs of further quantification of community inputs at a later date.

[1] Recall that an annualization factor is determined using a standardized table along with estimates of standardized life expectancy and a discount rate of 3%.

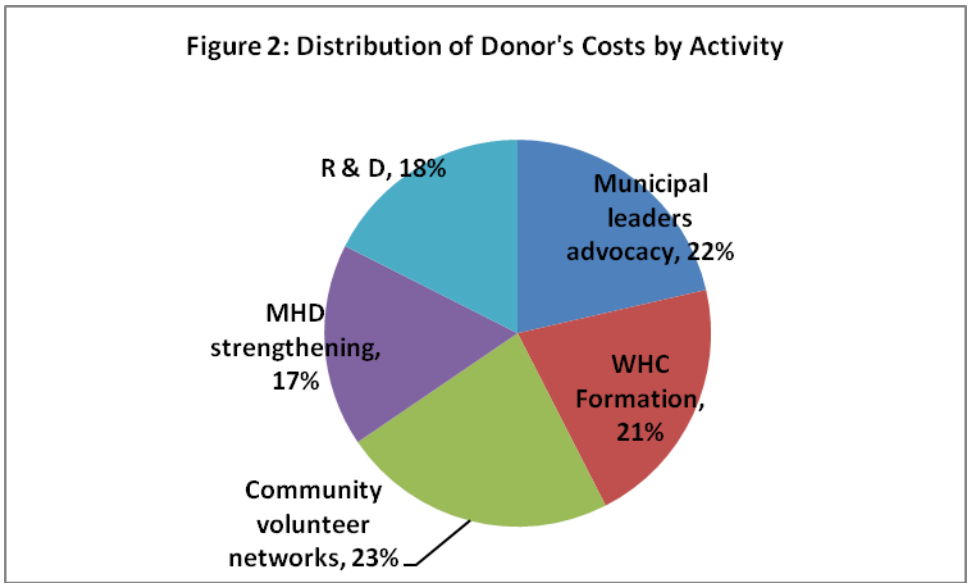


FINDINGS

Costs per activity area

All costs were allocated over the life of the study across five defined activity areas: municipal leaders advocacy, Ward Health Committee (WHC) formation, establishing community volunteer networks, strengthening the municipal health departments (MHDs) and one of research and development activities.

As shown in figure 2 below, the bulk of costs were spent on advocacy, forming WHCs and setting and supporting community volunteer networks.



However, at the municipal level, there was much more variation in cost allocations:

- Much more effort than the average was placed on advocacy in Gaibandha and Joypurhat to gain the support of the Municipal authorities.
- Much more was spent on WHC formation in Joypurhat, Gaibandha and Dinajpur as the project faced more challenges with gaining the support of the Councillors to start-up committees
- More effort was placed on community network formation in Kurigram than the other areas (1/3) as they struggled with volunteerism among the youth.
- More efforts were spent on R&D in Rangpur and Bogra due in part to having the largest population, making survey costs rise as well as the targeted quality of care study.

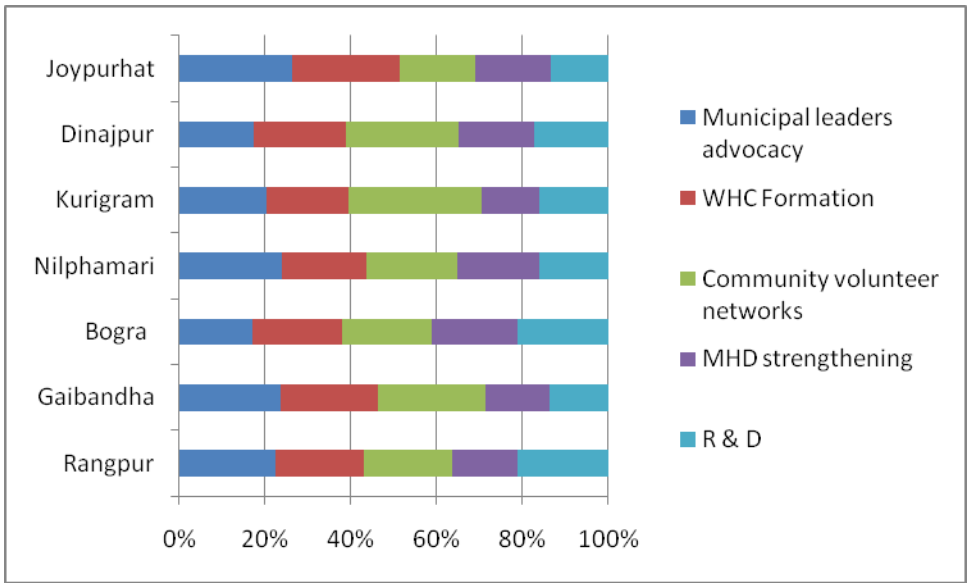


Figure 3: Distribution of costs by activity area by municipality

Costs per beneficiary

Total annual cost per beneficiary, defined as all women of reproductive age and children under-five permanently residing in the seven municipalities, ranged from $0.64 to $2.53 with an average of $1.23.

The actual cost per activity area over the life of the intervention was fairly uniform, ranging from $1.06 for Municipal Health Department strengthening to $1.44 for the establishment of community networks (table 1).

Table 1: Cost per activity by Municipality

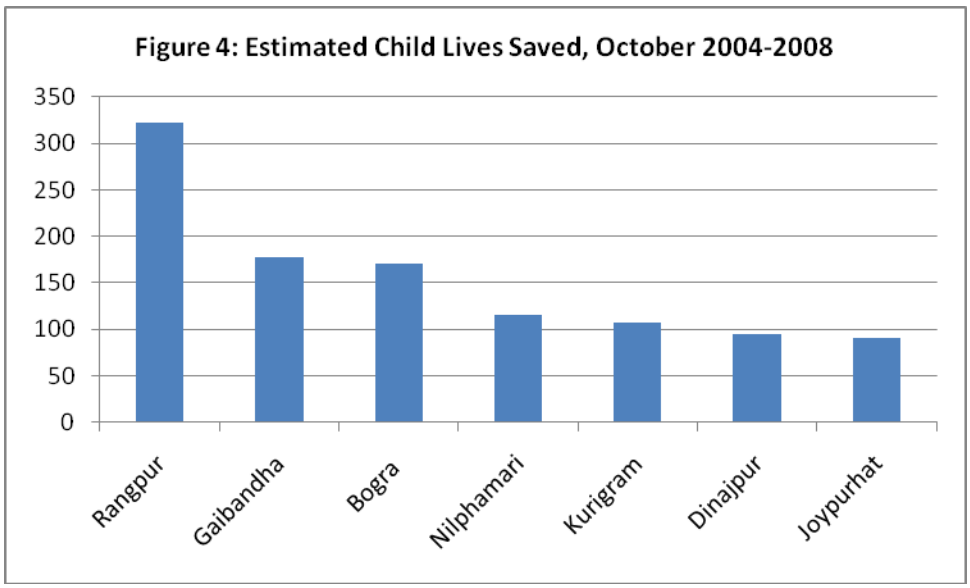
Municipality	Activity 1 Municipal Leaders	Activity 2 WHC Formation	Activity 3 Networks	Activity 4 MHD Strengthening	Activity 5 One Off Costs
Rangpur	$ 0.73	$0.67	$ 0.67	$0.50	$0.69
Gaibandha	$ 1.95	$1.84	$ 2.06	$1.22	$1.13
Bogra	$ 0.84	$1.03	$ 1.05	$0.99	$1.04
Nilphamari	$ 3.17	$2.62	$ 2.80	$2.54	$2.14
Kurigram	$ 1.93	$1.78	$ 2.92	$1.28	$1.50
Dinajpur	$ 0.94	$1.16	$ 1.41	$0.96	$0.93
Joypurhat	$ 3.31	$3.16	$ 2.24	$2.22	$1.67
Total	**$ 1.34**	**$1.32**	**$ 1.44**	**$1.06**	**$1.10**

Cost per life year saved

Based on changes in coverage of basic maternal, newborn and child health interventions, and using the LiST model, an estimated 1077 child lives were saved during the intervention. Using

January 2005 and January 2009 health coverage estimates by municipality, we calculated the number of lives saved for each of the municipalities.

As shown in figure 4, Rangpur experienced the greatest impact with the greatest coverage gains and population density.



We then compared lives saved to the total expenditure by municipality and found the average cost per life saved to be $1,836. While somewhat higher that the UNICEF Accelerated Child Survival and Development initiative costs in Sub-Saharan Africa, given the lower child mortality rate most recently estimated at 88 per 1,000, these costs were certainly reasonable. Further, municipalities with the highest coverage gains and higher populations had the lowest cost per life saved as shown in table

Table 2: Comparative data on costs and lives saved estimates for October 2004-2008

Municipality	**Estimated Number of Child Lives Saved**	**Total Costs (in USD) Oct 2004 - 08**	**Cost per Life Saved (USD)**
Rangpur	**322**	**337,710**	$ 1,049
Gaibandha	**177**	**217,634**	$ 1,230
Bogra	**171**	**333,614**	$ 1,951
Nilphamari	**116**	**207,883**	$ 1,792
Kurigram	**107**	**212,895**	$ 1,990
Dinajpur	**94**	**346,864**	$ 3,690
Joypurhat	**90**	**214,797**	$ 2,387
Total	**1077**	**1,871,397**	**$ 1,836**

Annex 1: MHPP Cost Effectiveness Study
Activity Analysis:

A) Introducing the concept of urban health and building momentum for municipal leaders

- To advocate for urban health with Local and National level stakeholders.
- To inform and orient the municipal leaders on their roles and responsibility in leading the Health Programme for the Municipality.
- To orient the Municipal leaders in the Urban Health Model, that had been tested in Saidpur and Parbatipur with an effective measurable result.
- Organize the learning visit for the Municipal leaders to conceptualize tested Urban Health Model at Saidpur and Parbatipur.
- To make sure that the Municipal leaders are taking initiatives to translate their learning from CSP model into action plan.

B) Ward Health Committee formation and capacity building

- Criteria and process for selecting members: As per GoB outline and experiences from CSP
- Capacity Assessment and identifying needs of WHC
- Orientation and training package for WHC members
- Developing local priorities and annual plans for WHC
- Capacity building and self assessment monitoring for WHC

C) Developing Networks of Community Change Agents

- Selecting the TBA, CHVs, Imam, School Teachers
- Organizing and Conducting Training for them
- Follow up meetings to share information and planning
- Monthly/Quarterly documentation and monitoring by the project team
- Implementation of health education tools eg. TBA training module

D) Municipal Health Department

- Identifying the core function of Municipal Health Department and requirement of staff as per the municipality act.
- Identifying the essential services provided by the MHD
- Support health budgeting process so appropriate resource is available. Identification of the technical support needed and analyzing the context
- Capacity assessments and action planning:
- Ongoing Monitoring /Documentation

E) One off Development and Research activities. For example:

- CHMIS**:** Introducing and Implementation of Community Health Management Information System at Municipal level
- Developing of Health education tools to be used by the Community change agents. Eg. Developing the TBA module (not implementing!)
- Cost Analysis study
- Operation manual preparation
- BCC strategy