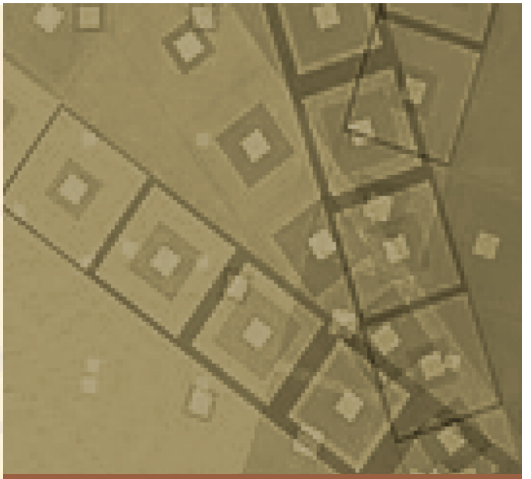

Narsingdi Model in Bangladesh

Saving lives of mothers and children through partnership and capacity development

World Health Organization
Regional Office for South-East Asia

"Narsingdi Model" in Bangladesh

Saving lives of mothers and children through partnership and capacity development

Safe Motherhood Promotion Project

Published by
Japan International Cooperation Agency (JICA) Bangladesh
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Printed by : Dynamic Printers
Tel : 7192771, 01715303217

Contents

MESSAGE

Bangladesh has made significant progress in maternal and child health during the last decades. Maternal mortality and under-5 mortality declined remarkably in recent years and Bangladesh is on track to achieve the Millennium Development Goal (MDG) 4 & 5 during the stipulated time. Development partners', especially the Japan International Cooperation Agency (JICA)'s contributions in this regard are praise worthy.

JICA has been playing a significant role in the Health, Population and Nutrition Sector Development Program (HPNSDP) of Bangladesh. I expect that the Government of Japan and JICA will continue their support to the health sector as well as overall development of the country.

The Government of Bangladesh is committed to achieve MDGs. To achieve the goals and go beyond, we need continuous support from the development partners as well as innovative activities to address maternal and child health issues in more efficient and effective way.

In order to reduce maternal and neonatal mortality, good quality essential services must be integrated with effective social and community mobilization and support, Safe Motherhood Promotion Project (SMPP), supported by JICA, is a mixture of these two components. Another innovation of SMPP is its introduction of private Community Skilled Birth Attendants (CSBA) in the remote areas. The Government has already incorporated community involvement strategy in the current sector program as Community Support Group to revitalize the Community Clinics.

I am pleased that JICA, in collaboration with the World Health Organization (WHO), has documented and published the SMPP experience and lessons learned. I hope the information contained in this documentation will be useful for policy makers, planners, researchers, development partners and NGOs in formulating their programs and strategies for attaining the MDG 4 and 5 in Bangladesh and other developing countries. I would like to express my sincere thanks to JICA and WHO for bringing out this documentation.

Dr. A.F.M. Ruhal Haque, MP
Minister
Ministry of Health and Family Welfare
Government of the People's Republic of Bangladesh

MESSAGE

Putting children and mothers first for saving precious life

At the time Bangladesh and Japan cerebrated the establishment of the diplomatic relations in 1972, infant mortality in Bangladesh was around 150 per 1000 live births. In 2011, it was 43 per 1000. Credits for improvements like this belong to many individuals and organizations in Bangladesh. JICA is also proud to be a partner of Bangladesh for last 40 years.

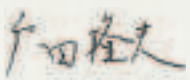
What we need to achieve Millennium Development Goal (MDG) 4 & 5 is to ensure the quality of health services. Ensuring the quality of health services is certainly a big challenge in Bangladesh. Health service without appropriate quality loses people's trust to the health authorities. It also does not satisfy the service providers themselves. If the government puts more effort to develop system to improve quality, and if health service providers place people at the center of everything, combined efforts can bring the visible change.

To support Government's efforts for improving health status of mothers and children as well as quality of health services, JICA is working with Ministry of Health and Family Welfare (MoHFW) to implement Safe Motherhood Promotion Project (SMPP) (Phase 1: 2006-2011, Phase 2: 2011-2016). SMPP's achievements have been reputed as 'Narsingdi Model', a good model with the potentials for improving Maternal, Neonatal, Child Health (MNCH) status by empowering community people, enhancing hospital management to ensure the quality of health services with limited resources and trying to "link" people and health facilities by involving local government.

Based on the success of the community empowerment activities of 'Narsingdi Model', MoHFW has developed the National Guideline on the community group management and has been disseminating it for sustainable community clinic management under the Health, Population and Nutrition Sector Development Program (HPNSDP). In 2012, JICA has embarked on the first yen loan project in the health sector, to support activities related to increase healthier mothers and babies through MoHFW in its implementation of HPNSDP.

The purpose of this documentation is to share the unique experiences of SMPP with others with a focus on what they have done, how they have tackled some challenges, how they have achieved their targets, how they could motivate community people to put children and mothers first. I believe that this document can serve as a useful reference material for advocacy, policy making and program implementation on MNCH for saving precious lives in Bangladesh or other developing countries.

I take this opportunity to thank the Government of Bangladesh for being supportive to this project and this documentation. I would also like to compliment the member of the documentation team for their effort to produce this useful document.



Dr. Takao Toda
Chief Representative
JICA Bangladesh

FOREWORD

The Millennium Development Goals (MDGs) set by the global community provided a unique drive and stimulus to each country for development – reducing unacceptably high maternal and newborn mortality and improving their health and survival in particular. The progress so far is encouraging but much still needs to be done.

Bangladesh's achievements in reducing maternal and child deaths and improving the health and survival of mothers and children are significant and globally recognized. Bangladesh is one of the countries of the WHO South-East Asia Region on track to achieve MDGs 4 and 5.

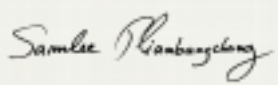
The Japan International Cooperation Agency (JICA) and the WHO South-East Asia Regional Office share their gratitude for the successful completion of the JICA-supported Safe Motherhood Promotion Project in Narsingdi District in Bangladesh conducted between July 2006 and June 2011, and for the documentation of the experiences and outputs of this project co-funded by the Regional Office.

The project was aimed at establishing an effective safe motherhood service delivery system to improve the availability and utilization of quality services for women during pregnancy and childbirth. To achieve the objectives and outputs, the project had both facility and community-level interventions. In carrying out this project many important lessons were learnt.

Projects are being implemented and lessons are learnt but, too often, lessons learnt and useful examples of good practices generated from many successful projects are not sufficiently documented, or not documented at all, preventing them being shared with and benefitting others. With this in mind, the purpose of this documentation is to share the important experiences of the JICA-supported project with others, and I believe that this document can serve as a useful reference material for advocacy, policy planning, and programme implementation as well as being an important historical record and assuring "institutional memory."

WHO and JICA as partners in global health and development will continue to work with Member States in our shared quest to accelerate further improvements in maternal and newborn health, and achieve MDGs 4 and 5. Improvement made in Narsingdi District and important lessons learnt, good practices generated, particularly in linking families and communities with facilities, will make a difference in other districts of Bangladesh and beyond.

I take this opportunity to thank the Government of Bangladesh and officials of Narsingdi District for supporting this project and this documentation. I look forward to working with JICA and Member States in their collaborative efforts in future.



Dr SamleePlianbangchang,

Regional Director, WHO South-East Asia Region

Acronyms

AMTSL	active management of third stage of labour
ANC	antenatal care
C-EmOC	comprehensive emergency obstetric care
CmSS	community support system
DDFP	Deputy Director Family Planning
DGFP	Directorate General of Family Planning
DGHS	Directorate General of Health Services
DP	development partner
DPIC	District Project Implementation Committee
DSI	Dinajpur Safe Mother Initiative
EmOC	emergency obstetric care
ENC	essential newborn care
ESD	essential service delivery
FP	family planning
FPI	family planning inspector
FWA	family welfare assistant
FWC	family welfare centre
FWV	family welfare visitor
GoB	Government of Bangladesh
H&FWC	health & family welfare centre
HA	health assistant
HNPSP	Health, Nutrition and Population Sector Program 2003–2011
HPN	health, population and nutrition
IMR	infant mortality rate

JCC	Joint Coordination Committee
JICA	Japan International Cooperation Agency
JOCV	Japan Overseas Cooperation Volunteer
MCHS	maternal and child health service
MCWC	maternal and child welfare centre
MDG	Millennium Development Goals
MCH	maternal and child health
MMR	maternal mortality ratio
MNCH	maternal, neonatal and child health
MNH	maternal and neonatal health
MoHFW	Ministry of Health and Family Welfare
NGO	nongovernmental organization
OGSB	Obstetrical and Gynaecological Society of Bangladesh
PDM	project design matrix
P-CSBA	private-community based skilled birth attendant
PDCA	plan–do–check–act
PNC	postnatal care
RD	record of discussion
SACMO	sub-assistant community medical officer
SBA	skilled birth attendant
SDT	safe delivery team
SEARO	South-East Asia Regional office
SMPP	Safe Motherhood Promotion Project
TBA	traditional birth attendant
UDCC	Union Development Coordination Committee
UDCCM	Union Development Coordination Committee meeting
UFPO	upazila family planning officer
UHC	upazila health complex
UHFPO	upazila health and family planning officer
UH&FWC	upazila health and family welfare centre
UP	union parishad
UPIC	Upazila Project Implementation Committee
UNO	Upazila Nirbahi Office
WHO	World Health Organization

EXECUTIVE SUMMERY

The Japan International Cooperation Agency (JICA) has been supporting the targets and strategies of the Government of Bangladesh (GoB) in achieving the Millennium Development Goals (MDGs). With a view to reducing maternal and neonatal mortality, JICA provided technical assistance to the GoB to implement the Safe Motherhood Promotion Project (SMPP) in Narsingdi district from July 2006 to June 2011. The goal of the project was to establish an effective maternal and neonatal health service delivery system to improve the availability and utilization of quality services. Recognizing the achievements of the project, SMPP was named "Narsingdi Model" and presented in various occasions as a good example of maternal and neonatal health project. The Narsingdi Model is characterized with the two complementary interventions, hospital improvement and community mobilization, which are bridged by local government collaboration.

The key activities of the project were four components:

Hospital improvement is focused on the plan-do-check-act (PDCA) cycle to strengthen the quality of services at the district and upazila level. Along with provision of skill development training for hospital staff, this activity challenged to create enabling working environments in the hospitals and bring positive mind-set to hospital staff.

Community based interventions such as Community Support System (CmSS), Model Union, and private community based skilled birth attendants (P-CSBAs) aimed at building a capacity of community to ensure all pregnant and postpartum women and neonates receive essential and necessary health care. Establishment of community support system has demonstrated as a community empowerment process to save lives of mothers and children and been highly appreciated and incorporated into the national policy for scaling-up. One of the pioneer activities of SMPP was the introduction of P-CSBAs in the remote area of Narsingdi, which addressed the needs of vulnerable populations.

Collaboration with local government reflects uniqueness of the SMPP that local government had a strong commitment and willingness to improve the status of mothers and children in their communities. In fact, local government bodies took an important role of connecting communities and health services by organizing Union Development Coordination Committee meeting and other social awareness and mobilization activities.

Advocacy and coordination at national level demonstrated JICA's strength as being both a development partner with an access to policy level dialogue and development and a technical agency having own project sites to gain the experiences and learning directly from the field. The SMPP utilized these opportunities to inform the realities of the field to the policy makers and worked to reflect good practices and lessons learnt of the field in the national policy and strategies.

The main purpose of this documentation is to share the unique experiences of the SMPP with other interested parties, either to serve as a reference for advocacy, policy planning, and monitoring, or as a process documentation of good practices created by the SMPP. A three member documentation team was formed, consisting of two senior staffs of the SMPP and an external consultant hired by WHO-SEARO. The consultant collected secondary and primary data through conducting interviews and focus group discussions with different stakeholders of the project including hospital staffs, community members and direct project beneficiaries in the field.

Some challenges of the project interventions were identified such as shortage of government budget and staff in key positions in health facilities to provide emergency obstetric care services.

Overall, the SMPP has demonstrated that the dual interventions of hospital improvement and community mobilization can improve the utilization of maternal and child health services and key maternal health indicators in rural Bangladesh. The achievements and experiences of the SMPP have influenced the policies of MoHFW and other MNCH initiatives. The mission of the SMPP still continues to be to find the most viable way to improve the health of mothers and children in Bangladesh.

1. INTRODUCTION

1.1. The situation of maternal and neonatal health in Bangladesh

Over the past three decades, Bangladesh has made immense strides in maternal and child health. Bangladesh is one of the few developing countries in the world on track to meet Millennium Development Goal 4: a two thirds reduction in child mortality by 2015. Between 1994 and 2011, neonatal deaths declined from 52 to 32 deaths per 1000 live births[1]. Childhood deaths reduced dramatically, but the reduction of neonatal mortality has been moderate. Thus, more than half of all under-five deaths now occur during the neonatal period, that is, within 28 days after birth[2].

Recently published data from the Bangladesh Maternal Mortality and Health Care Survey (BMMS) 2010 show that the maternal mortality ratio (MMR) has decreased from 322 deaths per 100 000 live births in 2001 to 194 deaths per 100 000 live births in 2010. It is thought that this 40% decrease in maternal mortality in nine years is on account of a number of factors, including improved access to care; fertility reduction; education levels among women; awareness and care-seeking behaviour; and improved economic circumstances.[2]

While the results of the BMMS 2010 are encouraging, they also highlight that continued efforts are needed if reductions in maternal mortality are to be sustained and if improvements in newborn health are to be made. Although the proportion of mothers receiving a postpartum visit in the two days after giving birth increased from 10.6% in 2001 to 22.5% in 2010, there is room for considerable improvement.[2] Similarly, the percentage of mothers receiving four antenatal care visits increased from 11.6% to 23.4% between 2001 and 2010, which illustrates that coverage is still low.

More remains to be done to further improve the health status of mothers and children in Bangladesh. Cognizant of the urgent need to ensure better maternal and child health, the Health, Nutrition and Population Sector Program 2003–2011 (HNPSP) gives high priority to the reductions of MMR and infant mortality rate (IMR), among other issues, in light of the Millennium Development Goals (MDGs).

[1] Bangladesh Demographic Health Survey (BDHS) 2011

[2] Streatfield PK, Arifeen SE, ICDDRB, Ahmed A, Measure Evaluation, Jamil K, USAID, Bangladesh. 2011. *Bangladesh Maternal Mortality and Health Care Survey 2010: Summary of Key Findings and Implications.* Dhaka: ICDDR.

While frequent pregnancies, inadequate health and medical care services have been considered to keep the MMR high, the greatest challenge lies in the low utilization rate of antenatal care and the absence of skilled birth attendants at deliveries. Given that approximately 85% of all deliveries in Bangladesh take place at home, BMMS 2010 identifies the following as priority goals: (i) providing minimum necessary delivery assistance through skilled birth attendants, and (ii) raising the utilization rate of emergency obstetric care and related services.

1.2. The Safe Motherhood Promotion Project in Narsingdi district

The Japan International Cooperation Agency (JICA), an executing agency of Japan's Official Development Assistance, has been supporting the targets and strategies of the Government of Bangladesh in achieving the MDGs. The Government of Bangladesh has implemented the Safe Motherhood Promotion Project (SMPP) in Narsingdi district from July 2006 to June 2011 with JICA's technical cooperation with a view to reducing maternal and neonatal mortality. The project was aimed at establishing an effective safe motherhood service delivery system to improve the availability and utilization of quality services for women during pregnancy and child birth. To achieve the objectives and outputs, the project had both facility and community-level interventions.

2. DOCUMENTATION

2.1. Objective

The objective of the document is to describe the project process, analyse what works (and what does not), gather evidence and disseminate the good practices and lessons learnt from the SMPP. The documentation explains the project formulation and implementation, demonstrates outcomes and evidence, and shares experiences. It is expected that this document can play a catalytic role in informing the Government of Bangladesh and the stakeholders as an example of a maternal and neonatal health project. The document may also be used as a reference to take informed decisions to plan, implement and evaluate any future maternal and child health projects in Bangladesh or other developing countries.

2.2. The documentation team

A documentation team of three members was formed with two senior officials from the SMPP team and one external consultant hired by the WHO South-East Asia Regional Office (SEARO). The members had meetings and discussions among themselves to finalize the objective and design of the documentation. They shared their opinions about the documentation process and made plans for field work. The team members identified the profile of respondents to be interviewed to collect primary data from the field. The consultant conducted interviews and focus group discussions with different stakeholders of the project in Narsingdi including the community members and direct project beneficiaries at the field. The document was reviewed by the relevant staff members of SMPP team.

2.3. Methodology and data collection

This document is intended to be an informative practical and readable description of the process of the project, with real stories and narratives of different categories of informants that illustrate their experiences and achievements. The information was collected by open-ended key informant interviews, case studies and focus group discussions from project staff, community leaders and project beneficiaries. The consultant visited different field sites in Narsingdi to collect data. The sampling framework was purposive. Secondary data including project design document and all relevant reports of internal and external studies, evaluations, quarterly progress reports, workshops proceedings and newsletters were extensively reviewed. Data were triangulated through a combination of data sources, multiple interviews, observation and focus group discussions.

3. PROJECT BRIEF

3.1. Project planning

The Government of Japan has been supporting the targets and strategies of the Government of Bangladesh (GoB) in achieving the MDGs. To this effect, JICA gives priority to strengthening the social sector, in particular, the areas of health, medical care and primary education. As for the health sector, JICA stresses the importance of improvement of the basic health conditions through focusing its efforts on maternal and child health and infectious diseases. JICA provides technical cooperation to these two health sector priorities, taking advantage of its own experiences and achievements in the world.

The Ministry of Health and Family Welfare (MoHFW) of Bangladesh had implemented the HNPSP 2003–2011, and JICA supported its implementation in collaboration with the United Nations agencies and other development partners. In response to the GoB's request of technical cooperation to improve maternal, neonatal and child health, JICA dispatched a preliminary study mission in August 2005. After a series of discussions, a Record of Discussion (RD) was signed by both governments in April 2006 to jointly implement the SMPP in Narsingdi district from July 2006 to June 2010, which was later extended to June 2011. This project was designed to reduce MMR in the target district. The project outline is shown in column 1 and more details of the project design are available in Annex 1: Project design matrix (PDM).

Column 1

SMPP outline

Overall goal:

Approaches of reproductive health services extracted from the Project are standardized and applied to other districts.

Project purpose:

Health status of pregnant and postpartum women and neonates improves in the target district.

Outputs:

1. Necessary decisions are made at the central level through sharing good practices and lessons learned of the Project.

2. Safe delivery service system is strengthened.

3.Women and neonates are supported to utilize obstetric and neonatal care.

3.2 Project strategies and prioritized activities

In line with JICA's policies and strategies, the SMPP emphasized capacity development of counterparts. The core strategies of the SMPP are:

- **Strengthening health system and capacity development**

  The SMPP supports the ongoing process of enhancing the problem-solving abilities of the MoHFW and the community at the individual, organizational, and societal levels.

- **Enhancing partnership among stakeholders**

  The SMPP strengthens collaborative partnership building of MoHFW with other stakeholders including local government and other ministries, NGOs, the private sector and community.

- **Community empowerment**

  The SMPP promotes community-led initiatives by raising awareness and forming groups in the community.

In order to achieve the three expected outputs of the SMPP, the project implemented activities which are categorized in the following six areas:

- **Improving the quality of services**

  The SMPP introduced a quality improvement cycle in the hospitals similar to the plan–do–check–act (PDCA) cycle. The project provided necessary support to hospitals such as: establishment of a functional emergency obstetric care (EmOC) team; action plan development and implementation; provision of equipment and minor renovation of the facility; data management and analysis; supportive supervision and monitoring; and the promotion of rights of clients and service providers.

- **Developing a community support system (CmSS)**

  The community support system (CmSS) is a mechanism for establishing a system at the community level, through the collective efforts of the people, which aims to provide support to pregnant women during any obstetric emergency. The CmSS is expected to prevent three delays causing maternal death in the community (see the diagram of the three delays on page 34). The CmSS was first introduced by CARE Bangladesh in Dinajpur SafeMother Initiative (DSI) in 1998 [3].

- **Ensuring safe delivery through the Model Union Approach**

  The Model Union (sub-sub district or minimum unit of local administration) Approach is intended to demonstrate a simple, effective and attractive model to reduce maternal and neonatal deaths through introduction of a comprehensive intervention package in the union level. The safe delivery team (SDT) is a key to ensuring safe delivery at the Model Unions.

- **Addressing the needs of the *char* area**

  Private community-based skilled birth attendants (P-CSBA) are trained and served to ensure access to essential MNH services in the *char* (hard-to-reach area surrounded by water) area.

- **Collaborating with local government**

  Local government plays a proactive and important role in the SMPP as a bridge between health facilities and communities. The local government bodies contribute to fill up the gaps of health facilities and communities in terms of resource shortage, support community groups to implement their activities, and work for improvement of accountability of public service providers.

- **Advocacy and documentation**

  Experiences and lessons learnt are documented as a practical manual and guideline and distributed for further expansion and policy reflection.

These six areas of activities are described in Section 4.2, Project interventions.

[3] Hossain, J., & Ross, S. R. (2006).The effect of addressing demand for as well as supply of emergency obstetric care in Dinajpur, Bangladesh. *International Journal of Gynecology & Obstetrics, 92*(3), 320-328.

3.3 Project implementation structure and management

The SMPP was implemented by the MoHFW. In particular, the Director of Primary Health Care of the Directorate-General of Health Services (DGHS) and the Director of Maternal and Child Health Services (MCHS) of the Directorate-General of Family Planning (DGFP) are responsible for the project operation. The project implementation structure had three layers of committees: the Joint Coordination Committee (JCC), the District Project Implementation Committee (DPIC), and the *upazila* (subdistrict) Project Implementation Committee (UPIC). At the central level, the project had the JCC chaired by Joint Chief, Planning of the MoHFW. Its members were from the DGHS, DGFP, ministries and JICA. The Committee endorsed the annual activities/work plans and worked to give policy support and monitored the overall activities of the project. At the district level, there was the DPIC headed by the Deputy Commissioner. The members of this Committee included civil surgeons, Deputy Director of Family Planning, *Upazila* Nirbahi (Executive) Officers (UNOs), *upazila* health and family planning officers (UHFPOs), and *upazila* family planning officers (UFPOs). There were representatives from local NGOs and journalists. The main activity of the DPIC was to review the implementation of the project as well as to give administrative and other support to facilitate the implementation of the project. The UPIC was organized at the *upazila* level headed by the UNO. The UPIC was considered as a core of project development taking charge of planning, implementation, monitoring and evaluation of the activities. The UPIC was also a decision-making body for the SMPP's field-level activities. Besides these committees, district planning and review workshops were organized with the participation of health and family planning managers to develop a district level action plan, assess the progress of its implementation and discuss the problems encountered.

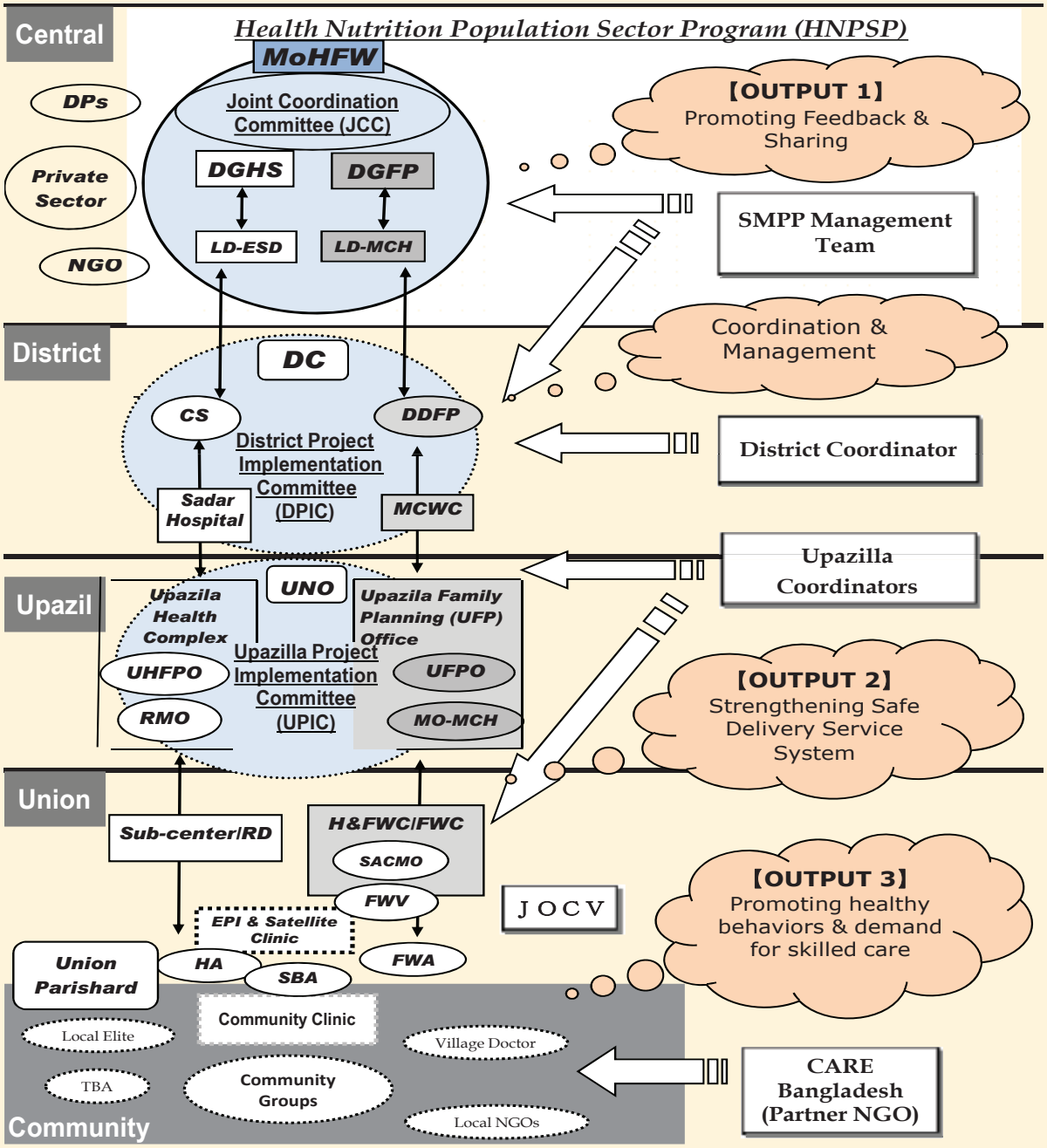
The JICA–SMPP team comprised three long-term Japanese experts (Chief Adviser, Project Coordinator, and Community Health Expert) and 11 local project staff (technical adviser, district coordinator, six *upazila* coordinators, technical officer–midwifery, and two administration and finance officers). The JICA project team was led by the Chief Adviser who played the key role of providing leadership to ensure overall management of the project and coordinate with the GoB counterparts, the JICA country office and headquarters, and other stakeholders. The Chief Adviser was supported by the technical adviser and other local project staff to provide of technical support such as development of project documents, training plan and manuals, and research activities. The project coordinator and administration and finance officers were responsible for management of financial and administrative issues of the project. A Japanese midwife who was an expert on community health, joined the project from January 2008 to February 2010. She assisted in improving technical skills of skilled birth attendants in the project site.

The JICA–SMPP team had a district level project office at Narsingdi. The district coordinator was assigned for overall implementation and coordination of the SMPP implementation at district level. He was supported by a finance and administration officer at the district level. Six *upazila* coordinators posted at the upazila level, were responsible for implementing, coordinating and monitoring the activities of the project in the field. The project employed one technical officer (midwifery) in the field to support safe delivery related activities.

The JICA–SMPP team had a partnership with CARE Bangladesh to facilitate community mobilization activities including CmSS. A district manager, documentation officer, two *upazila* managers and eight field trainers were stationed in Narsingdi district under the guidance and supervision of Program Director- Health of CARE Bangladesh.

Due to two different organizations working together as one team, respecting organizational identity and working norms and nurturing the team spirit within the team was critical to ensure smooth project operation. An annual retreat was held with the participation of both JICA and CARE project teams to jointly review the project activities and openly discuss project-related issues.

Conceptual Model of Safe Motherhood Promotion Project



3.4 Monitoring and evaluation of the project

Monitoring and evaluation of the SMPP activities were carried out by utilizing the project implementation structure. The three committees regularly discussed the progress of project activities. Apart from the DPIC, the monthly coordination meetings on health and family planning (FP) at the district level provided opportunities to review the performance of the previous month and share and discuss project-related issues among the members. In addition, monthly monitoring data were collected from the field by the SMPP team to assess the trend and track the changes that occurred in both health facilities and communities. Important issues and activities were separately studied to evaluate impact; for instance, the impact of the Model Union Approach and the CmSS using quantitative and qualitative methods by contracting out to external consultants.

Midterm and terminal evaluations were conducted in August 2008 and February 2010, respectively. During the evaluations, the JICA representatives including high officials from the headquarters worked with MoHFW representatives to collect the information from the field and jointly assess the project achievements. Based on the discussions, important decisions or changes related to project planning and future directions were made.

4. FINDINGS AND LESSONS LEARNT

4.1. Profile of the project site

The intervention area of the SMPP is the Narsingdi district of Bangladesh, which is located about 60 km. north-east of Dhaka, with a population of about 2.26 million (2011) in an area of 1021 km^2. Although the district is moderately developed with prominent garment industries, still agriculture is the main source of income. The health indicators are more or less similar to the national statistics. The district consists of 6 *upazilas* and 71unions, of which 12 are *char* areas. Health indicators in these areas are lower than the district average, probably due to limited access to services and information and poor living conditions.

In total, there are eight public hospitals providing primary and secondary health care services: five *upazila* health complexes (UHCs), a district hospital, a *sadar* (the centre of district) hospital, and a maternal and child welfare centre (MCWC). Of all the hospitals, the district hospital, *sadar* hospital and MCWC are located at the district centreand provide comprehensive emergency obstetric care (C-EmOC) services. Out of five subdistrict level facilities (UHCs), Monohardi UHC had been providing comprehensive EmOC services since 1993, while two others (Palash and Raipura) initiated comprehensive EmOC services since mid-2008 with the assistance of the SMPP. Health and family welfare centres (H&FWCs) are union-level facilities, mainly providing outpatient services. The services provided by these facilities especially to women and children are: antenatal check-ups (ANC), postnatal check-ups (PNC), family planning (FP) services, and treatment of common diseases. These services are provided by the family welfare visitor (FWV) and medical assistant (MA) /sub-assistant community medical officer (SACMO).

These categories of healthcare providers obtained paramedic level education. At the field level, the health assistant (HA) provides mainly immunization services and the family welfare assistant (FWA) is responsible for collecting information on eligible couples and distribution of contraceptives. Community clinics (CCs) were constructed in 2003 as a new initiative to ensure primary health care services. The service coverage was calculated around 6000 population per community clinic, and a community clinic management committee consisting of local representatives was established for each CC to support the daily operation of CC. In addition to these public health facilities, there are 34 (22 provide Caesarian-section services) registered private clinics at the district with few of them at *upazila* levels.

Narsingdi District Profile (of 2011)

- Population: 2,267,997
- Area: 1,021 sq. km
- Population density: 2,221 per sq. km
- Total Upazila (Sub-district): 6
- Total Unions (Sub sub-district): 71
- No. of Public Hospitals: 8
  - Upazila Health Complex (31-50 beds): 5
  - District Hospital (100 beds): 1
  - Sadar Hospital (100 beds): 1
  - Maternal and Child Welfare Centre (20 beds): 1
- No. of Health &Family Welfare Center: 55
- No. of community clinic: 181
- No. of private clinics: 34
- Estimated no. of annual births: 59,195
- Estimated no. of annual pregnancy complications: 8,880

4.2. Project interventions

The two pillars of the SMPP are hospital-based interventions and community-based interventions, and these are bridged by local government bodies. This model of interventions demonstrated by the SMPP is called "Narsingdi Model". The following are a description of the SMPP interventions.

4.2.1. Improvement of Quality of Services

"I was posted in the district hospital, and then I was transferred to the *thana* (Upazila) health complex. We never recorded any statistics of postnatal check-ups in any institute in Bangladesh. Now, we record antenatal and postnatal check-ups and we maintain a record book. After working with the SMPP, we learnt the importance of keeping good records of antenatal and postnatal check-ups. Through the help of the project, we trained our staff, doctors and paramedics on the importance of keeping the progress of antenatal and postnatal check-ups. We now prepare reports every month on the progress of the check-ups."

(Quote from an UHFPO in Narsingdi)

"The project helped us realize the problems and take action to solve them. The problems identified were always neglected by us or we could not see it through our eyes. Now as a health manager, I have learnt how to manage a health facility with limited resources and time. We are now able to provide quality services. The challenge always strikes me of how to sustain all the initiatives that were taken. It is our misfortune if a programme like this does not sustain."

(Quote from a health manager)

A hospital improvement cycle, which is characterized with PDCA cycle, was adopted in the project to continuously improve and maintain the quality of safe delivery/EmOC services at the hospitals. The cycle includes: (a) assessment of a hospital; (b) action plan development based on the assessment; (c) implementation of the action plan by hospital staff; (d) monitoring and evaluation of action plan; and (e) reformulating the action plan. Hospital staff, together with the JICA–SMPP team, conducted the facility assessment (adopting the tool for room by room set up) and identified the gaps. Based on the assessment findings, the hospital staff developed their own action plan in the planning workshop. The action plan consists of two parts: hospital-based and community-based activities. Hospital-based activities are typically categorized into: minor renovation of facility infrastructure; supply and maintenance of necessary equipment; needs-based training to the service providers for upgrading knowledge and skills; and setting up mechanisms for internal monitoring and support. JICA's position was filling up the gaps of government: if the MoHFW can provide the equipment or necessary items to hospitals, then, JICA will not take care of them. During the planning workshop at the hospital, discussion was required with the local health authority on how to ensure a supply of consumable items including emergency drugs at the facilities, since JICA did not support the procurement of such supplies.

The JICA–SMPP team recommended that the supply of consumable items at the facilities should be maintained in a continuous chain, in order to avoid creating a parallel system of supply within a time-bound project. Based on the hospital assessment, the hospital staff and the JICA–SMPP team jointly identified the need for skill training in the areas of active management of third stage of labour (AMTSL); immediate newborn care and emergency resuscitation; and infection-prevention practice. These skill training courses were organized following the training manuals and guidelines of MoHFW. However, some adjustments were made to effectively respond to the needs of the participants. These training courses were directly implemented by the JICA–SMPP staff in collaboration with the trainers of renowned organizations.

The number of nurses who took midwifery refresher training under MoHFW was not enough to provide quality safe delivery services in some hospitals. In response, the JICA supported a one-month safe delivery training organized by the Obstetrical and Gynaecological Society of Bangladesh (OGSB) in Dhaka. Nine selected nurses and FWVs attended midwifery refresher training in Japan.

Along with human resource development, the SMPP addressed the issues relating to the establishment of an enabling environment in the targeted health facilities.

IPP Training changed employees' behaviour

IPP (infection prevention practice) training was conducted in Monohordi UHC in July 2009. The training targeted different categories of hospital staff including medical officers, nurses, cleaners and ward boys. This was the first opportunity for most of the subordinate workers to learn about handwashing, wearing gloves, and waste disposal. Since the training, the cleaners and *ayahs* (aid workers) have been carrying their own hand towels when they work. Earlier, they used to share towels with other staff for wiping their hands, but have changed this practice in accordance with the recommendation of the training. The UHFPO (hospital director) also remarked on the visible changes after the training. He said "I have realized particularly the emergency room staff are more aware of infection prevention and their sterilization practice has improved after the training. Moreover, the SMPP provided partition panels for setting up a separate space for the post-operative patients (mainly caesarean section case) in the female ward. I believe that these multiple efforts have contributed to the reduction of hospital infection risk in this facility."

Based on the facility assessment outcome, JICA provided minor facility renovation and necessary medical equipment to these MNH service centres. The necessary logistics were not only provided by JICA, but also made through the government procurement process, as well as by the local government such as *upazila* or union *parishad* (council). Considering the sustainability, the JICA–SMPP team has always used the existing GoB supply channel and tried to coordinate utilization of the available local resources before availing of the direct supply by JICA. District health and FP officials, in particular, the Civil Surgeon and Deputy Director of Family Planning (DDFP) have some delegated authorities to reallocate the logistics and human resources on the basis of local needs and situation of the district. The decisions of these health officials can make a difference in improving services. The JICA–SMPP team believed that this decision-making process was important and could lead to capacity development of the GoB counterparts and health system.

"Community efficacy is the willingness of community members to look after each other and intervene when a problem arises."

The steps for establishing CmSS

- Conduct participatory community diagnosis
- Share community diagnosis findings with the key stakeholders and select villages for establishing CmSS
- Select and prepare Community Facilitators/Champions
- Organize village meeting led by community facilitators
- Make decisions about parameters and structure for the CmSS
- Implement key functions of CmSS

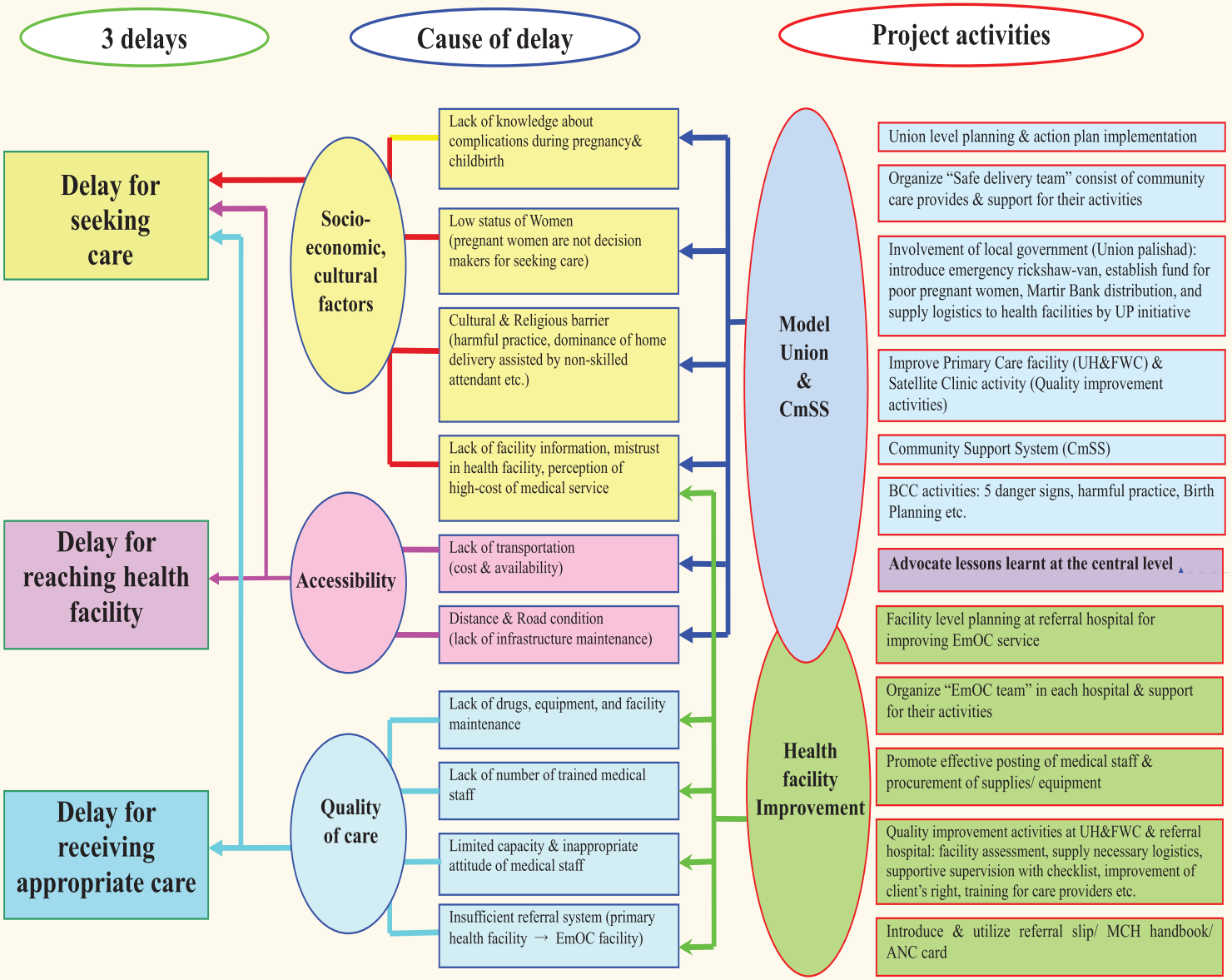
4.2.2.Development of a community support system

The JICA–SMPP team collaborated with CARE Bangladesh (CARE) , an international NGO, for facilitating community mobilization activities, especially development of the CmSS. CARE has taken the activities in Monohardi and Raipura *upazilas* since the early 2007, and added unions in the *char* area of *sadar upazila* to its target area in December 2008.

Under the collaboration, CARE designed community mobilization activities based on the three delays model of maternal death: the first is the delay in deciding to seek care; the second is the delay in reaching care in time; and the third is the delay in receiving adequate care. CARE specifically supported activities to address delays 1 and 2, which occur in the community. The activities facilitated by CARE include the establishment of CmSS in communities, capacity-building of community change agent, awareness-raising of five danger signs and birth planning, and promotion of timely referral. A community support system offers a systematic and structured approach for assuring health and survival of all pregnant women in the community. It uses a community mobilization strategy to increase awareness, capacity, and accountability of community members, local government representatives, and health service providers to support women, especially poor women, in accessing the maternal health services they need.

As of June 2011, 145 community groups under CmSS were established with the assistance of CARE in Raipura, Monohardi and *char* area of Sadar, and 6 community groups were established by the JICA–SMPP team in the remaining Polash, Belabo, Shibpur *upazilas*. According to the report of CARE, 145 CmSS covered 36 750 households, which could be estimated around 184 000 population.

Three delays of Maternal death and Project activities



Main activities of CmSS are, 1) identification and tracking of all pregnant women in a community, 2) Management of community resources to provide support for emergency transport, including emergency transport funds, 3) Assistance with birth planning among pregnant couples and their families, including promotion and support for delivery at a facility with a skilled attendant, 4) Reinforcing the links between community members, their local government representatives, and their local health center providers in being accountable for the prevention of maternal deaths.

Influential persons such as traditional birth attendants (TBAs), religious leaders and school teachers are selected as community change agents who disseminate messages about birth planning and the five danger signs in pregnancy to the people in the community. Government field staffs, such as HAs and FWAs and NGO workers were also involved in this activity.

Birth planning encourages pregnant women and their family members to make necessary preparations prior to delivery. It includes decisions about the place and person attending the delivery, planning and preparation for means and cost of transportation in case of referral, and securing the person who will attend at the health facility when needed.The end-line survey of the SMPP revealed that the proportion of women who practised birth planning had increased significantly compared to the baseline.

CmSS in Narsingdi at a glance
(as of 2010)

- Among 151 CmSS, 53% are categorized A, which are likely to continue their activities without project support.
- CmSS average coverage: 1 365 people (273 households) per group.
- 56% of group members are women.
- 145 groups registered 6056 pregnant women (2010, 122% of estimated pregnant women).
- Compared with non-CmSS areas, CmSS areas show higher rates of:
  - ANC/PNC usage;
  - Practice of BP;
  - knowledge on five danger signs during pregnancy; and
  - Proportion of SBA assisted and institutional delivery.

In addition to direct support for pregnant women described above, community groups also have a role to detect problems about MNH through pregnant women's household visits and monthly meetings. The problems identified were reported in the Union Development Coordination Committee (UDCC) meeting to demand necessary actions by local authorities. The project encouraged the union *parishad* (union council, UP) Chairman to organize the UDCC meeting on a regular basis, where UP members, government staff, NGO representatives, and CmSS members meet and share the departmental information and problems to be discussed. As a result, some community groups have become able to negotiate with the UP about the issues that they cannot solve by themselves, such as maintenance of roads leading to the community level health facility and ensuring emergency transport and care. The project observed an increase in the number of women who received services at the health facility with the support of CmSS. The prime target of CmSS activities was the most vulnerable population. This effect is clearly shown in the following chart-1 that indicates higher percentage of institutional delivery and SBA-attended delivery among the lowest quintile in the CmSS coverage areas compared to non-CmSS areas.

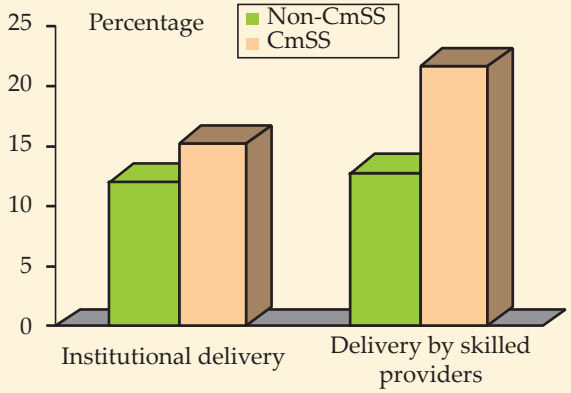
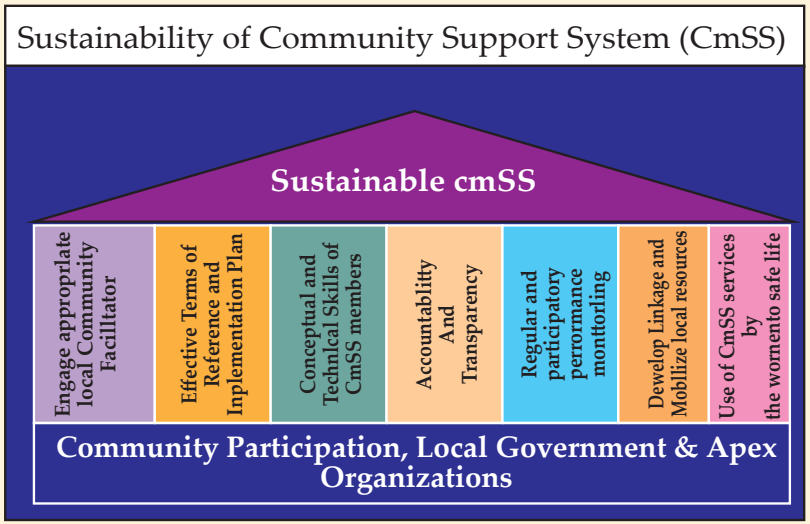


Chart 1: Institutional delivery and delivery by skilled birth attendants



STORY OF A CmSS MEMBER

The force to bring change in the community

In the past, many pregnant women died in our area during delivery. We did not take women to the hospital. In 2007, there was a very poor man who was a rickshaw puller. His wife was pregnant and had bleeding before the delivery. We went to his home; there were pools of blood everywhere in the house and the woman was crawling in blood. There was a huge crowd around her, but no one knew what to do or where to go. I told the Husband to arrange a van to take her to the hospital. The Husband was so panicked that at first he forgot he had a van. We called the visitor *apa* (FWV), but she could not accompany us to the hospital as she was busy with another patient. We had just brought the pregnant woman out of the house to put her on the van, when she died. We could not hold our tears. Then we started to think about how we could stop these deaths of pregnant women. One day, the *didi* (sister, in this case, CARE Staff) came to us on her motor-cycle and explained what she wanted to do in this village. We agreed to do the work and fixed a date to meet with other members of our area. *Didi* came again. We made a group among ourselves including the Chairman of our area and we had a meeting with *didi*.

Now we advise pregnant women about the danger signs of pregnancy. We visit the houses of pregnant women and request them to eat more food. We advise them to save some money. If a pregnant woman has bleeding, we immediately refer her to the hospital. We force a pregnant woman to go for antenatal checkups. We advise pregnant women to take some rest. We also talk with their husbands and mothers-in-law to make them aware.

But it was not so easy for us when we started our work in 2007. Many people of our village rebuked us. The *Imam* of the mosque created obstacles so that the women of our village could not join in the meeting. Men and women could not sit together to discuss our work. Other people of our village made bad comments such as *"we are destroying the women of our village" or " we have bad relations with each other."* After we started providing transport service by van to send women to the hospital during the complications of labour and even paid the transport bill from our own pockets, people started to trust us.

The mothers-in-law also created a lot of obstacles. We advised the pregnant women to eat more, but the in-laws believed that if their daughters-in-law eat lots of food, then they would deliver big babies and face difficulty in delivering at home. We went to the mothers-in-law with pictures and had long discussions with them. They have now changed their behaviours and attitudes towards their daughters-in-law and daughters.

"The Model Union Approach aims to demonstrate an effective means of reducing maternal and neonatal deaths by introducing a package of interventions."

Comprehensive package of a model union

- regular meetings and performance review by the safe delivery team;
- development of a Model Union Action Plan and its implementation;
- union health facility improvement based on the assessment;
- ANC/PNC and midwifery training for FWV and CSBA;
- community mobilization activities (promotion of BP, ANC/PNC campaign, savings bank distribution to pregnant mother , a best performance award, blood grouping, etc.);
- TBA/village doctor orientation (prevention of harmful practices);
- promotion of the Citizen Charter;
- regularization of Union Development Coordination Committee meetings (UDCCM);
- open budget sessions and allocation of UP budget to MNCH activities.

4.2.3. Ensuring safe delivery through the Model Union Approach

The Model Union Approach is a holistic approach to address the maternal and neonatal health issues in a union. As the "three delay model of maternal death" explains, different cultural, socioeconomic, environmental and ecologic factors coexisted, affecting the conditions of mothers and neonates, thus ultimately threatening their lives. The Model Union Approach has intended to capture such critical factors to improve the maternal and neonatal health status. One of its strengths is that it is inclusive: most of the important stakeholders involved have a clear role to play. Monitoring is carried out by using performance indicators such as proportion of complicated cases that utilized EmOC services at the facility and proportion of pregnant women who received at least three antenatal check-ups (ANC) which help the people involved to understand any progress or changes made as a result of their activities.

The SMPP selected nine unions (at least one from each *upazila*) each to establish a model union in January 2008. In the course of time, 20 unions were added as new model unions, thus, there were 29 model unions in Narsingdi district at the end of the project period of June 2011. The purpose of setting up a model union is to demonstrate an effective approach to reduce maternal and neonatal deaths by introducing a package of interventions. The selection of model unions was done by the *Upazila* Project Implementation Committee (UPIC), and preference was given to those unions where FWVs were residential at UH & FWC or actively performed their duties. Activities under the model union were characterized by a comprehensive approach combining community and health facility level activities that aimed to strengthen safe delivery services.

Similar to hospital improvement, the Project introduced an improvement cycle to model unions. The cycle included: (1) facility assessment; (2) action plan development; (3) action plan implementation, and (4) monitoring/evaluation. The Project facilitated organization of action plan development meeting in each union with the attendance of union-level facility staff (FWV and SACMO), field health workers (AHI, HA, FPI, and FWA), UP chairman, UP members, and community elites and representatives. The action plan consisted of two kinds of activities: facility and community-based activities. Based on each action plan, the JICA–SMPP team provided necessary support after negotiation with UP and health & FP managers. According to the project monitoring data, although the project did not focus on the FP activities, the increased motivation of union-level staff, especially FWV and family planning inspector (FPI), contributed to the improvement of FP performance as well. One of the remarkable cases was that FWC and FWV working in Danga union, Polash *upazila*, one of the model unions of the project, were awarded for best FP performance in the Dhaka Division in 2009.

During each planning meeting, the formation of safe delivery team (SDT) was decided and the member composition was determined among the participants. SDT members usually included Union-level facility staff, GO/NGO field health workers, community representatives, and informal care providers (TBA and village doctor).The main purpose of establishing SDT is to build up the communication channel between formal (GoB staff) and informal (TBA and village doctor) care providers in the union. SDT organized monthly or bi-monthly meetings to exchange MNH-related information (union-level facility performance, pregnant women's list, delivery assistance, and referral management of each birth attendant). The team also discussed the progress of the implementation of action plan and its problems and necessary actions.

Taking advantage of the team meeting, SDTs started organizing technical sessions with the leadership of FWV. Some FWVs fixed the ANC service day for a particular day of the week to ensure the quality of ANC. Consequently, all nine model unions started from 2008 have shown the increase in utilization of MNH services at both the health facilities and satellite clinics. This approach also strengthened the linkage between the community and local government by the involvement of the union in the comprehensive action plan. UP chairmen learnt that their contributions to health facilities can make significant differences in health service delivery.

4.2.4. Addressing the needs of *chars*

"We learnt a lot, we were not smart in the past, we could not go out of our home, now everybody knows us, we help them and we enjoy it."

"Everybody now shows respect to us. We also can contribute to our own families and feel empowered. The new profession has brought financial solvency, authority and respect for us."

(Quotes of Private CSBAs in Narsingdi)

The SMPP supported the national skilled birth attendant (SBA) programme of the Government jointly implemented by the UNFPA, WHO, and OGSB. Community-based SBAs provided skilled assistance to rural women during childbirth in addition to other activities, such as ANC, PNC, essential neonatal care and referral of complicated cases to higher facilities. However, our concern was that most vulnerable women, especially those who lived in the remote *chars*, were still out of the reach of SBAs due to mainly insufficient numbers of SBA and difficulties in communication. It was unlikely that the current national SBA programme would be responsive to the needs of women in *chars*. There should be an alternative measure to ensure basic MCH service available to the women living in *chars*. Therefore, the SMPP introduced private community-based skilled birth attendants (P-CSBAs) to the *chars* of Narsingdi district as a pilot initiative. It was the first trial of officially recognized P-CSBAs in Bangladesh. This initiative complements the GoB health service delivery by filling the gap of GoB service providers, thus ultimately ensuring essential MNH services in the *chars* of Narsingdi district.

A P-CSBA is a woman who resides in the community with minimum secondary school level education and is trained for assisting normal delivery at home and providing essential MNH services in the community. She can detect danger signs during pregnancy and delivery and identify emergency cases to be referred to the facility. P-CSBAs are selected by the community and approved by the CSBA Selection Committee based on the criteria set by the MoHFW. A total of 11 women were selected from Raipura char of Narsingdi district and trained for six months at LAMB Hospital, Parbotipur, Dinajpur in 2008, and an additional eight women were trained at the Kumudini Hospital, Mirzapur, Tangail in 2009, to perform the following duties in their respective communities:

- to collect information on pregnant women and report to FWAs or FWVs;
- to provide ANC, PNC and essential newborn care (ENC);
- to conduct normal delivery at home;
- to detect and refer obstetric and neonatal complications to appropriate higher level facilities;
- to provide health education on maternal and neonatal health in the community;
- to maintain relationship with CmSS, local union parishad and other service providers in the public and private sectors;
- to report their performance to the union parishad and the UpazilaHealth and Family Planning Authority.

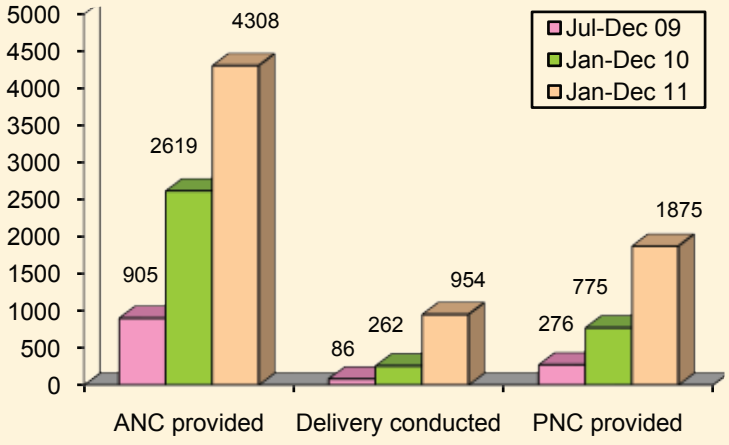


Chart 2: Performance of private community-based skilled birth attendants in Narsingdi: 2009–2011

A P-CSBA conducts 3–10 deliveries per month (five on average) and refers 1–2 complicated deliveries to C-EmOC facilities. The average numbers of ANC and PNC per month are 22 and 9.8 in 2011, respectively. There is variation in performance in terms of number of deliveries that probably depends upon the personal quality of the individual provider, economic situation of the households in their catchment areas and the distribution of households (the distance between service providers' and service recipient's homes).The Project has learned that introduction of P-CSBA has contributed to improve the women's access to essential maternal care in the remote areas and also created an empowerment model of women who are disadvantaged.

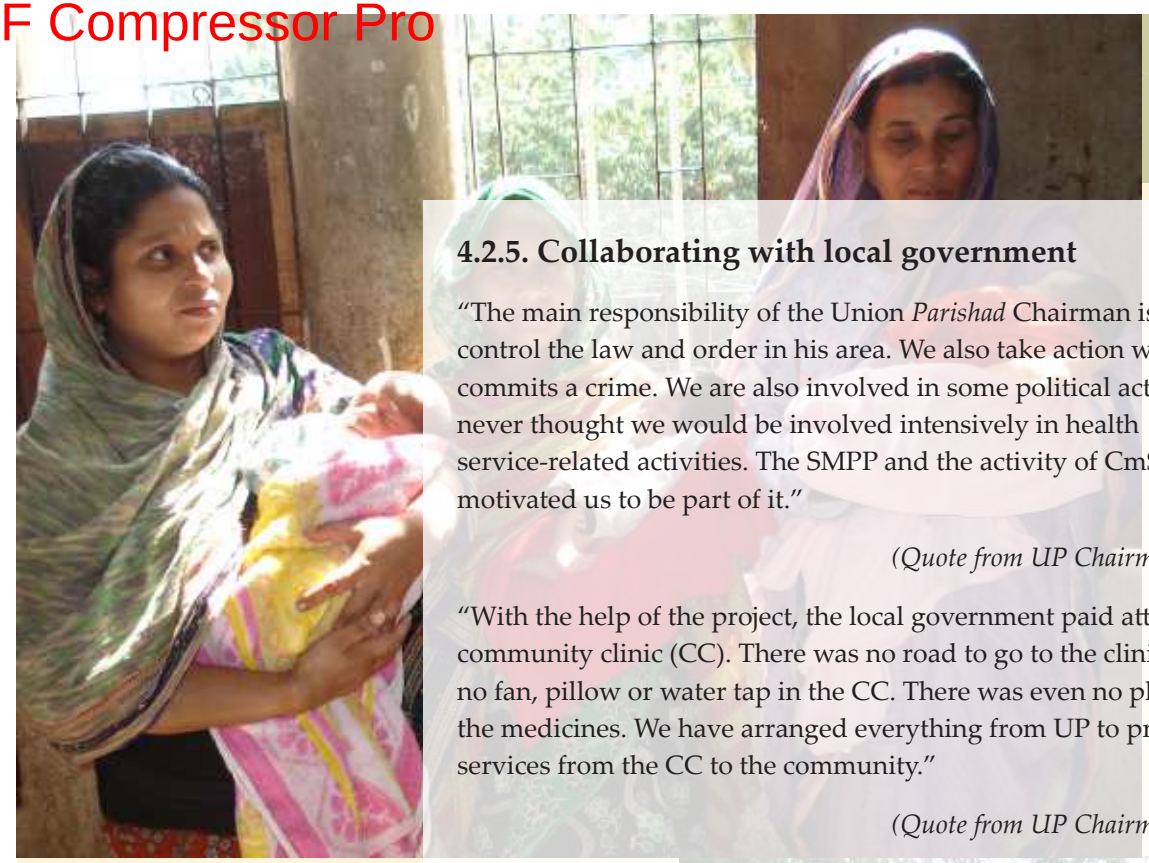
STORY of a client of P-CSBA in Raipura *Char*

I have been married since two years. I got pregnant for the first time after nine months of marriage. I gave birth to a baby boy one year ago. The delivery took place at home. When I was about seven months pregnant, I went to Shilpi *apa* (a P-CSBA) for a check-up and *apa* requested me to call her for delivery. When I saw Shilpi *apa*, she told me that the baby's position was good. She also told me that many women have difficulties in giving birth at home with a *dai* (TBA). She had training and she could do the delivery well. I shared with my mother-in-law that Shilpi *apa* was good and that I would call her for delivery. My mother-in-law agreed with me. My mother-in-law shared with the *dai* that we would call Shilpi *apa* for delivery. But the dai and other elder women of my in-laws' family did not allow me to call her for delivery. They told me that all the women of our village each day were giving birth with the assistance of a *dai*, so I didn't need to call Shilpi *apa* for my delivery.

I got my labour pain on Monday during the time of Magrib prayer. I informed my mother-in-law and she called the *dai*. The *dai* called a village doctor (a pharmacy man). The village doctor gave injections (oxytocin, for inducing contractions) and saline, but the baby was not born. He gave six injections to increase my pain but it didn't increase. The *dai* and the doctor tried to deliver the baby for four long hours. I got tired. Finally, the *dai* said that she could not deliver the baby. They suggested taking me to the hospital. It was in the middle of the night. We live in the *char* and no transport was available. I started thinking, if I needed to go to the hospital, my husband and other people would put me on a mat. They would tie-up the two ends of the mat with bamboo using a rope and they would carry me up to the river. If they got a boat in the river, they could cross the river. I was crying and praying to God to save our lives.

My husband immediately recalled Shilpi *apa* who had training on delivery. He called her and she agreed to come to my house for the delivery. My husband went to her house and she came to our house at 4:00 am. She checked my baby's position and made me walk in the room. She washed her hands with soap and put gloves on her hands. She said to me, "Don't get nervous, the baby's position is good. It will come out soon." I was crying in severe pain. She calmed me and asked me to have courage. Finally, I delivered my baby at 5:00 am in the morning. The baby cried just after birth and took its first breath. Apa brought out the placenta and cut the umbilical cord. She wrapped the baby and gave him to me to breastfeed.



4.2.5. Collaborating with local government

"The main responsibility of the Union *Parishad* Chairman is always to control the law and order in his area. We also take action when anybody commits a crime. We are also involved in some political activities. We never thought we would be involved intensively in health service-related activities. The SMPP and the activity of CmSS really motivated us to be part of it."

(Quote from UP Chairman, Narsingdi)

"With the help of the project, the local government paid attention to the community clinic (CC). There was no road to go to the clinic. There was no fan, pillow or water tap in the CC. There was even no place to keep the medicines. We have arranged everything from UP to provide services from the CC to the community."

(Quote from UP Chairman, Narsingdi)

"The maternal and child mortality is very high in Bangladesh in comparison to other countries. The local government, SMPP and CmSS are working together in our area. None of our mothers died due to complications during pregnancy within the project period. As the three components are working together, now the rate of maternal and child mortality is decreasing steadily."

(Quote from local government stakeholder)

The uniqueness of the SMPP is strong collaboration with local government bodies, especially union *parishad* (UP). In fact, the UP has demonstrated a lot of potential to positively influence the status of MNH in the community through introducing innovative ideas and effective local resource mobilization. Under the SMPP, hospital improvement interventions and community mobilization activities are interlinked by the local government.

The UP is a frontline local government organization closest to the community, whose members consist of representatives elected by the community. The important tasks of the UP are to ensure and coordinate the delivery of public services by extension workers under different ministries and implement development projects for the welfare of people. One of the forums to discuss the public service delivery issues is the Union Development Coordination Committee meeting (UDCCM). The union chairmen coordinate the activities of different line departments through active information exchange and contribute to the improvement of public service delivery by solving problems in the UDCCM. The UPs also provide support to improve maternal and child health status of the localities. The support of UPs can be categorized as follows:

- **awareness raising and social mobilization in the community** by organizing community gathering, health fair, ANC/PNC campaigns, Safe Motherhood Day Observation, distribution of saving banks among pregnant women;
- **ensuring availability and accountability of health care services** by monitoring of field service delivery, visiting health facilities, and checking client satisfaction;
- **local resource mobilization** such as allocation of UP annual budget to maternal and child health related activities and encouraging contributions from local business men and industries;
- **infrastructure and staff support to health facilities** such as maintenance of roads that lead to health facilities, connecting electric and water line to health facilities, and provision of furniture, cleaner and guard;
- **coordination among key stakeholders** that includes relationship building and communication with the members of CmSS, formal and informal health service providers, and other local leaders.

The SMPP recognizes that UPs themselves are social change agents. We have witnessed how good practices implemented by UPs on their own initiatives in the SMPP areas have been making a difference in the lives of people, especially women and children. These good practices contribute to generate increased interests and resources in communities, thereby, expanding the circle of good will and mutual support to greater collective actions.

The emergency referral system of Narsingdi district illustrates effective collaboration among community, community groups, UPs and health facilities. The community calls the members of the CmSS when they find a pregnant woman in danger. The members of the CmSS would then immediately organize a vehicle for emergency transfer, while other members of the CmSS contact the UP chairman to call the UHFPO. The UP chairman informs the UHFPO about the referral of the patient. The CmSS developed a referral slip for the hospital. The pregnant woman goes to the hospital with the referral slip. The hospital takes care of the patient as the patient was referred by the CmSS and the local government.

4.2.6. Advocacy and documentation

The project's activities related to advocacy and documentation demonstrated JICA's strength as being both a development partner with an access to policy level dialogue and development and a technical agency having own project sites to gain the experiences and learning directly from the field. The SMPP utilized this opportunities to inform the realities of the field to the policy makers and worked to reflect good practices and lessons learnt of the field in the national policy and strategies. Field visit of high officials of the MoHFW was found effective for this purpose.

During the visit to Narsingdi district, the Health Minister observed that community group activity could reduce maternal mortality through identifying and following up all the pregnant women in the localities and ensuring emergency referral of women to hospital. Field visits also worked as energizers for government counterparts and community people in the district. Local people proudly communicated with visitors to showcase their activities and achievments. Their voices were so powerful that visitors were convinced of the importance of nurturing community efficacy.

The experiences of the SMPP were shared widely with the officials of MoHFW, development partners, NGOs, and other relevant stakeholders in the form of quarterly reports and newsletter. The meeting of the JCC served as an opportunity to inform the policy-makers directly regarding the project experiences and field realities and discuss measures for solving the problems. Organizing and attending events such as seminars and workshops helped to disseminate the project experiences and sensitized the participants on specific issues.

4.3. Achievement of SMPP

The effectiveness of the SMPP was evaluated by the comparison of baseline and end-line situation using the set indicators listed below. The baseline data was collected in February 2008 through a cluster survey in nine model unions and the targets were set after analysing the baseline information. The end-line survey was conducted in November 2009 to capture the changes that occurred after the project intervention. As shown in the table below, the model unions have improved the met needs of EmOC, ANC, SBA, knowledge on pregnancy danger signs and community support for poor pregnant women. The targets of PNC and ANC were not achieved, which continue to remain a challenge for future interventions.

Indicator of Project Purpose	Baseline data	Data at the time of the terminal evaluation	Target
Indicator 1. Proportion of women with obstetric complication using EmOC services	17.8 % (2007)	55.6% (2009)	35%
Indicator 2. Proportion of deliveries assisted by skilled personnel in Model Union (MU)	No data 18% (Base line survey, 2008)	25.4% (2009)	25%
Indicator 3. Case fatality rate at EmOC facilities	1.2% (2007)	0.1% (2009)	＜1%

Qualitative data and regular project monitoring indicated that besides achieving the set targets, the project interventions resulted in positive changes in the following aspects:

- the utilization of MNH services increased (charts 3 and 4);
- the quality of services provided by health facility improved;
- active involvement of local government and community in MNH activities;
- collaborative relationships among health/FP workers, NGO workers, and informal service providers established;
- regular monitoring of service delivery performance ensured;
- a sense of accountability of service providers towards their served community created;
- improved quality of service at public health facility, reduction in waiting time and improved attitude of staff appreciated by the people in the community.

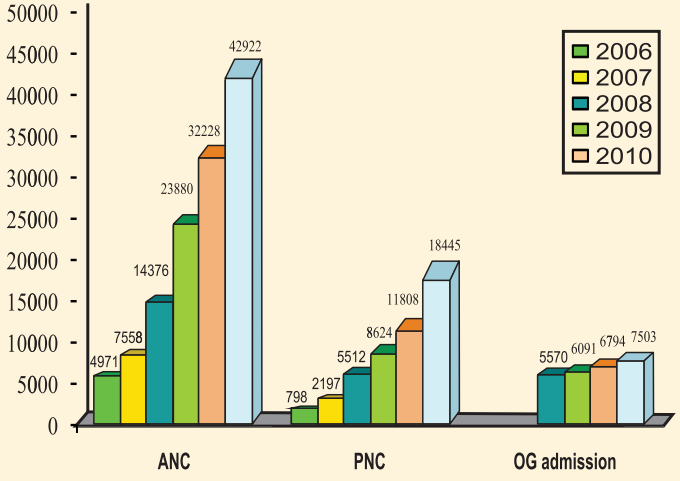


Chart 3: ANC, PNC & OG admissions at public EmOC facilities (all) in Narsingdi district: 2006–2011

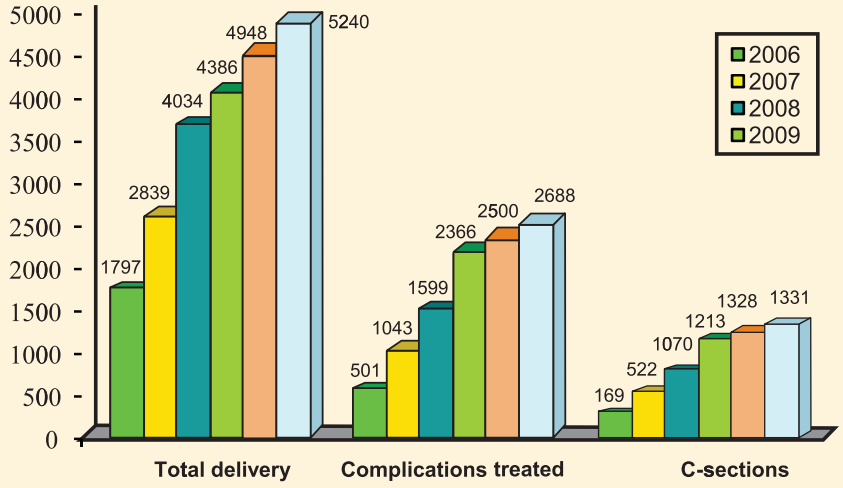


Chart 4: Births, complications treated and C-sections done at Public EmOC facilities (all)in Narsingdidistrict: 2006–2011

The chart 5 was made by using DGHS MIS data. This chart explains that the baseline indicators of Narsingdi were all worse than those of neighbouring 6 districts. However, the end-line data showed significant improvement in Narsingdi compared to the same 6 districts. The improvement in Narsingdi could be attributed to the project interventions.

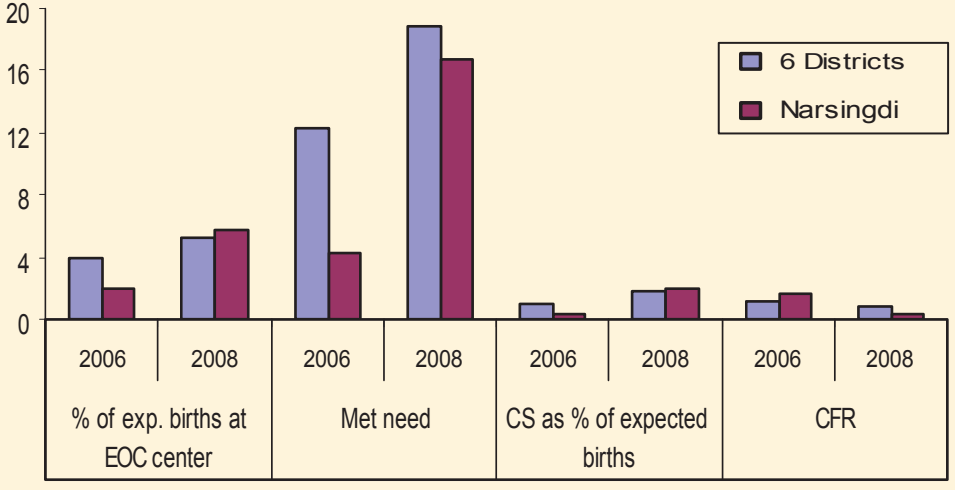


Chart 5: Change in EmOC process indicators in Narsingdi compared to six neighbouring districts

4.4. Lessons learnt

Through the terminal evaluation in 2010, it was concluded that the project had adopted practical and efficient ways to achieve the outputs under resource-limited circumstances. Most of the planned inputs and activities were implemented as scheduled. It was difficult for the MoHFW to provide the necessary/required inputs in terms of human resources due to the frequent transfers and turnovers of the counterpart personnel. Maximum utilization of existing resources contributed to increase the efficiency. For example, various training courses were conducted by the project with the existing training manuals and materials and it saved time and cost for preparation. Most of the training courses and meetings took place at the local facilities such as UHCs and MCWC and with the resources available, so that no cost was incurred for renting space and hiring a facilitator.

Whenever the project provided medical equipment needed for EmOC at the health facility, the maintenance cost was carefully examined. As the health facility is responsible for its maintenance, the project provided only the equipment that could be maintained locally.

One of the contributing factors to achieve the project purpose was selection of appropriate approaches for the Bangladeshi context. Especially, strengthening of health facilities and utilizing the experience of CARE Bangladesh (NGO) in community mobilization activity contributed to attain the achievement of the output in a short period.

Additionally, availability of competent local project staff increased the efficiency of project implementation. It was evident that local project staff facilitated capacity development of the project counterparts by helping to identify problems and finding out the solutions jointly. Japan Overseas Cooperation Volunteer (JOCV) members assigned in the targeted district also contributed to supporting event organization and conduct of survey at the field level. Furthermore, active participation of UP chairmen in the project's activities and their support for union-level facility improvement and the CmSS activity was also an important promoting factor.

As previously mentioned, the biggest obstacles to project implementation were shortage of human resources and frequent transfer of personnel. Insufficient budget allocation for each health facility for maintenance of equipment and procurement of daily items was also a negative factor to ensure service provision as well as implementation of quality improvement activities at the hospitals.

5. NATIONAL LEVEL SCALE-UP OF GOOD PRACTICES

The SMPP was named "Narsingdi Model" by the MoHFW at the Bangladesh Development Forum in 2010 as one of the good examples of MNH interventions in Bangladesh. "Narsingdi Model" was also introduced in the Muskoka Accountability Report of G8 summit in Canada, 2010 as a good practice of MNH. CmSS was widely recognized as a good community engagement activity and incorporated into the national operational guidelines of community clinics: each community clinic catchment area would have three community support groups developed by community representatives. The MoHFW is undergoing replication of community support groups all over Bangladesh.

Based on the recommendations of the terminal evaluation mission in 2010, the SMPP extended its implementation period in Narsingdi for one more year, from the previously agreed June 2010 to June 2011, to adjust with the implementation period of the national HPN sector-wide programme HNPSP (2003–2011). In this extension period, MoHFW and JICA jointly developed the design of the second phase of the SMPP which was planned to start from July 2011. The second phase of the SMPP is aimed at developing a "Bangladesh Model" based on the experiences of "Narsingdi Model" and other recognized models and good practices in Bangladesh and replicate the "Bangladesh Model" within and outside the country.

Narsingdi Model

Safe Motherhood Promotion Project

Central Government
- Extract effective approaches from SMPP for replication
- Provide support and direction to the District for SMPP implementation

Demonstrate effectiveness of model approaches and further expansion

Improve health status of pregnant and post-partum women and neonates

HS/FP Administration
- Manage Facility, Equipment, Personnel
- Monitoring & Supportive Supervision
- Health and Family Planning Coordination Committee

Improve the Quality of EmOC Services
- Promote optimum utilization of skilled manpower, facility renovation, logistic supply and procurement
- Support facility level planning and implementation process
- Capacity development of managers and medical staff, organize need-based training

Hospital

Promote Safe Delivery
- BCC activities: 5 danger signs, harmful practice, Birth Planning, ANC/PNC, etc
- Ensure emergency transportation
- Establish and operate fund for poor pregnant women
- Strengthen linkage with health facility, field health staff & LG

CmSS

Local Government
- Recognize and support community group activities
- Budget allocation to MNH activities
- Monitoring for health service quality improvement
- Union Development Coordination Committee

6. CONCLUSION

Overall, the achievements and experiences of the SMPP have influenced the policies of MoHFW and other MNCH initiatives and have been appreciated by many. The mission of the SMPP still continues to be to find the most viable way to improve the health of mothers and children in Bangladesh.

PROJECT DESIGN MATRIX (PDM)

Version 2.

Project Name: Safe Motherhood Promotion Project
Target Area: Narsingdi District (6 Upazilas)
Target Groups: 1. Community people, particularly pregnant and post-partum women and neonates
2. All level relevant staff under Department of Health and Family Planning at district and upazila
Project Period: July 2006-June 2010

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
Overall Goal			
Approaches of Reproductive Health (RH) services extracted from the Project are standardized and applied to other districts	Number of approaches and experiences of the Project applied to other districts	Documents of MoHFW, SMPP documentation	1 The political, economic, and social situation will not be worse than commencing time of the Project
Project Purpose			
Health status of pregnant and post-partum women and neonates improves in the target district	(1) Proportion of women with obstetric complication using EmOC services => Whole district [17.8%(2006)--> 35%(2010)] (*1) (2) Proportion of deliveries assisted by skilled personnel (C-SBA, SSN/FWV with midwifery training, MBBS doctor) => Model Unions [18%(2008)-->25%(2010)] (*2) (3) Case fatality rate at EmOC facilities => Whole district [1.2%(2006)--><1%(2010)] (*3)	(1) DMIS (2) Project baseline/endline surveys in Medel Unions (3) DMIS	1 The policy in the health sector is not dramatically changed
Outputs			
1. Necessary decisions are made at central level through sharing good practices and lessons learned of the Project	1-1. Decisions made by JCC (e.g. decisions related to human resources allocation, budgeting, DMIS, and community participation)	1-1. JCC meeting minutes	1. Ministry of Health and Family Welfare (MoHFW) continues to implement Health, Nutrition and Population Sector Program (HNPSP)
	1-2. Guidelines/manuals/case studies/research reports (e.g. CmSS, Model Union, Hospital Improvement, Effective use of IEC materials, Essential Neonatal Care, Char Intervention)	1-2. Project documents	
	1-3. Number of project newsletters published => [Quarterly plus 1 special edition = 14th editions]	1-3. Project documents	
	1-4. Number of meetings/seminars/workshops at central level shared experiences by the Project [20 per yr] (*4)	1-4. Note for the record, seminar/workshop reports	
2. Safe delivery service system is strengthened	2-1. Proportion of MoHFW service providers trained on technical and management of MNH services (e.g., safe motherhood training, overseas training, CSBA training, MIS and computer training facilitated/organised by SMPP) => Whole district [0%(2006)-->100%(2010)] (*5)	2-1. Training reports	2. The policy change in the health sector does not greatly affect the concept and approaches of Project that were agreed
	2-2. Number of supervisory visits made by managers (e.g., UHFPO, UFPO, MOMCH) => Model Unions [N/A(2006) -->at least 1 visit /health facility and 1 visit /satellite clinic by any manager per month(2010)]	2-2. Facility level supervision register	
	2-3. Proportion of women received 3 or more ANC during last pregnancy => Model Unions [28%(2008)-->60%(2010)] (*6)	2-3. Project baseline/endline surveys in Model Unions	
	2-4. Proportion of women received PNC (within 42 days of delivery) during last pregnancy => Model Unions [13.5%(2008)-->30%(2010)] (*7)	2-4. Project baseline/endline surveys in Model Unions	
	2-5. Proportion of satellite clinics with EPI sessions =>Whole district [N/A(2006)-->50%(2010)] (*8)	2-5. DMIS	3. Natural disaster such as flood does not greatly affect the implementation of the Project
	2-6. Number of facilities providing Basic/ Comprehensive-EmOC services => Whole district [4 basic & 3 comprehensive(2006)-->2 basic & 6 comprehensive(2010)] (*9)	2-6. Project documents	
3. Women and neonates are supported to utilize obstetric and neonatal care	3-1. Proportion of women practiced or used Birth Planning during last delivery => Model Unions [44%(2008)-->100% for at least one practice(2010)] (*10)	3-1. Project baseline/endline surveys in Model Unions	
	3-2. Proportion of pregnant women and neonates with complications used CmSS to receive MNH services => Model Unions [0%(2006)-->50 %(2010)]	3-2. CARE report, Project baseline/endline surveys in Medel Unions	
	3-3. Decisions related to obstetric and neonatal care taken and implemented by union (e.g. decisions related to IEC, MIS, Fund raising, CmSS, and local logistic supply) => Model Unions	3-3. CARE report Meeting minutes	

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