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BANGLADESH: FINAL COUNTRY REPORT



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DELIVER
No Product? No Program. Logistics for Health

BANGLADESH: FINAL COUNTRY REPORT

DELIVER

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Implemented by John Snow, Inc. (JSI), (contract no. HRN-C-00-00-00010-00) and subcontractors (Manoff Group, Program for Appropriate Technology in Health [PATH], and Crown Agents Consultancy, Inc.), DELIVER strengthens the supply chains of health and family planning programs in developing countries to ensure the availability of critical health products for customers. DELIVER also provides technical management of USAID's central contraceptive management information system.

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Abstract

The Bangladesh family planning program has evolved over the course of 30 years to become recognized as one of the most effective programs in the world, despite extreme poverty, illiteracy, religious resistance, and the low status of women. This report documents the technical assistance provided by DELIVER to the Ministry of Health and Family Welfare (MOHFW) in logistics management, procurement, contraceptive security, institutional strengthening, and local capacity building. DELIVER's technical assistance and capacity building have largely contributed to establishing and sustaining an effective and functional logistics system for family planning. DELIVER has also played a pioneering role in raising awareness about contraceptive security and its importance to the Bangladesh family planning program.

DELIVER's interventions and strategies focused on developing national awareness of and commitment to contraceptive security and institutionalizing and optimizing a logistics system that was developed under predecessor projects. The work toward contraceptive security included national and local advocacy, media advocacy, procurement assistance, donor and stakeholder coordination, and supply chain technical assistance. DELIVER's support has contributed toward significant improvements in logistics management, procurement capacity, and improved contraceptive security. However, continued support is needed for capacity building in public-sector procurement, introduction of modern technologies in automating logistics functions at the subdistrict level, and better and more effective coordination among donors and stakeholders.

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CONTENTS

Acronyms	vii
Acknowledgments	ix
Executive Summary	xi
Contraceptive Security.....	xi
Supply Chain.....	xii
Procurement.....	xiii
Lessons Learned and Future Directions.....	xiii
Program Background	15
Country Context.....	15
Key Players and Roles	16
Key Challenges	17
Goals and Objectives	19
DELIVER Objectives	19
Relationship to USAID and Client Objectives	19
DELIVER’s Role in Relation to Other Organizations.....	20
Summary of Interventions.....	21
Summary of DELIVER Funding and Staffing.....	22
Program Results	23
Element I: Improved Logistics System.....	23
Element II: Improved Human Capacity in Logistics	27
Element III: Improved Resource Mobilization for Contraceptive Security.....	28
Element IV: Improved Adoption of Advances in Logistics	30
Lessons Learned and Future Directions	33
References	35
Appendices	
A. Training on Procurement (2000–2006).....	37
B. Training on Logistics Management (2000–2006).....	39
C. Computer and LMIS Training (2000–2006).....	41
D. Orientation on Logistics Monitoring & Supervision (2000–2006).....	43
E. Overseas Training Sponsored by DELIVER (2000–2006)	45
F. Logistics Monitoring Visits (2001–2006).....	47
Table	
1. Bangladesh M&E Summary Scores (2002, 2004–2006).....	27

ACRONYMS

BCC	behavior change communication
CA	cooperating agency
CIDA	Canadian International Development Agency
CMSD	Central Medical Stores Depot
DGFP	Directorate General of Family Planning
DGHS	Directorate General of Health Services
DP	development partner
FP	family planning
FPLM	Family Planning Logistics Management [project]
FWA	field worker assistant
GOB	Government of Bangladesh
HPSP	Health and Population Sector Program
HNPSF	Health, Nutrition, and Population Sector Program
IDA	International Development Association
IEC	information, education, and communication
IR	Intermediate Result (USAID)
JSI	John Snow, Inc.
KfW	<i>Kreditanstalt für Wiederaufbau</i> (German Development Bank)
LMIS	logistics management information system
LSAT	Logistics System Assessment Tool
LSO	logistics support officer
M&E	monitoring and evaluation
MCH	maternal and child health
MOHFW	Ministry of Health and Family Welfare
MPS	Master of Population Sciences
MSR	medical and surgical requisites
NGO	nongovernmental organization
NIPHP	National Integrated Population and Health Program
NSDP	NGO Service Delivery Program
PATH	Program for Appropriate Technology in Health
PLTM	permanent and long-term method

PPR	public procurement regulation
SDP	service delivery point
SMC	Social Marketing Company
SO	Strategic Objective (USAID)
TA	technical assistance
TFR	total fertility rate
UFPO	<i>upazila</i> family planning officer
UHC	<i>upazila</i> health complex
UNFPA	United Nations Population Fund
USAID	U.S. Agency for International Development
WIMS	Warehouse Inventory Management System

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We acknowledge the field-based staff, mainly in the regional and *upazila* warehouses, who have been actively involved in the design and implementation of the Bangladesh contraceptive delivery logistics system. We would be remiss if we did not mention the contributions of, and express our thanks to, the more than 30,000 grass roots workers who deliver the products to the user at the important last mile of the supply chain.

DELIVER also thanks our partners—the Program for Appropriate Technology in Health (PATH), the Centre for Development Services, the Population Sciences Department of Dhaka University, the Bangladesh Center for Communication Programs—and many other collaborating organizations and individuals for their help in improving contraceptive security in Bangladesh.

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EXECUTIVE SUMMARY

DELIVER has provided assistance to the Ministry of Health and Family Welfare (MOHFW) in logistics management, procurement, contraceptive security, and institutional strengthening and local capacity building. DELIVER's technical assistance and capacity building have largely contributed to establishing and sustaining an effective and functional logistics system for family planning (FP). DELIVER has played a pioneering role in raising awareness about contraceptive security and its importance to the Bangladesh family planning program.

The Bangladesh family planning program has evolved over the course of 30 years to become recognized as one of the most effective programs in the world, despite extreme poverty, illiteracy, religious resistance, and the low status of women. The key players and stakeholders in the Bangladesh FP program include the MOHFW; the Directorates of Family Planning and Health; the World Bank; the United Nations Population Fund; the U.S. Agency for International Development (USAID); development partners; and private-sector organizations such as the Social Marketing Company (SMC), EngenderHealth, and nongovernmental organizations (NGOs). The success of the program, an outcome of the joint efforts and collaboration of the key players and stakeholders, coupled with determined and sustained commitment from the government, has also ushered in issues such as contraceptive security and the right of users to demand the availability of quality contraceptives when they need them.

From 2000 to 2006, the goal of DELIVER has revolved around contraceptive security by ensuring the availability of family planning and reproductive health commodities to users. The activities undertaken by DELIVER directly support an intermediate result of USAID's National Integrated Population and Health Program (NIPHP)—namely, increased contraceptive prevalence and contraceptive security—and other USAID population and reproductive health priorities.

DELIVER's interventions and strategies focused on developing national awareness of and commitment to contraceptive security and institutionalizing and optimizing a logistics system that was developed under predecessor projects. Contraceptive security work included national and local advocacy, media advocacy, procurement assistance, donor and stakeholder coordination, and supply chain technical assistance (TA). This TA consisted of setting optimum inventory management procedures for each tier in the supply chain, reducing distribution tiers and thereby reducing costs, supporting an improved logistics management information system (LMIS) for the public and NGO sectors, and building capacity in procurement through training of MOHFW procurement personnel in international competitive bidding standards.

CONTRACEPTIVE SECURITY

Contraceptive security (CS) is recognized as directly affecting fertility rates and improving family health in Bangladesh. The CS initiative began in Bangladesh with the production of a CS white paper with DELIVER's technical assistance; it was presented at a launch ceremony in June 2002, attended by senior officials of the MOHFW, including from the Directorates of Health and Family Planning, and by donor representatives. The white paper was endorsed at the launch and later published by the MOHFW. At the CS launch a list of 20 key interventions were developed, under three strategic themes; they are required to improve CS in Bangladesh:

1. method mix and reinvigorating permanent and long-term methods (PLTMs)
2. market segmentation and the role of social marketing and the private sector
3. procurement and improvement of the supply chain.

The four key pillars of contraceptive security—forecasting, finance, procurement, and distribution—are integrated into DELIVER’s technical assistance. DELIVER has focused most of its efforts on the third strategic theme, providing ongoing support to the supply chain and providing significant reform and capacity building assistance to improve the MOHFW’s procurement system.

To facilitate and increase the access to PLTMs, DELIVER assisted in producing medical and surgical requisites kits by using the packaging unit located at the central warehouse. DELIVER, in collaboration with the Directorate General of Family Planning (DGFP) and EngenderHealth, pilot tested these kits in selected warehouses and, based on results, will assist DGFP in preparing a rollout plan for the entire country.

Furthermore, to improve market segmentation and assist the MOHFW in focusing its resources on the poorest segment of the market, DELIVER conducted a market segmentation analysis and presented its analysis at a series of workshops that involved the public sector, NGOs, the SMC, and the commercial sector.

Finally, DELIVER has functioned as the lead cooperating agency in helping move contraceptive security onto the national agenda, producing Bangla-language advocacy materials that include brochures, press packets, and videos. DELIVER has also worked with news reporters at the national and local level to brief them on the issues surrounding CS in Bangladesh and to connect them with knowledgeable sources for their reporting.

SUPPLY CHAIN

DELIVER’s supply chain activities supported the operation and maintenance of the national contraceptive and related commodities supply chain, including upgrades as and when needed.

The most important activities included the revision of the *Supply Procedure Manual* to reflect changes in the system that occurred over the last few years; TA to operationalize a Logistics Monitoring and Supervision Cell at DGFP; testing contraceptives by drawing samples from Government of Bangladesh (GOB) stocks, SMC, and commercial distribution and marketing chains; publication of a biannual CS newsletter; and monitoring visits to service delivery sites run by the GOB and by NGOs participating in the NGO Service Delivery Program (NSDP) to ensure product availability. Most notable achievements in supply chain management assistance have been—

- Distribution tiers reduced (from five to four).
- An LMIS institutionalized with the GOB and NSDP.
- Warehouse Inventory Management System (WIMS) institutionalized with the GOB.
- Use of commercial carriers for transportation institutionalized with the GOB.
- Regular logistics monitoring established.
- Capacity building of GOB and NGO logistics staff achieved.
- Two hundred and ten USAID-constructed *upazila* (subdistrict) stores operationalized.
- WIMS installed in regional warehouses.
- System tools developed (*Upazila Logistics Manual*, Supply Plan Register, etc.).
- Production and use of monthly logistics report and pipeline report institutionalized at the Management Information System and Logistics Unit at DGFP.

- An NGO LMIS developed and institutionalized with the NIPHP partners.
- About 12,000 MOHFW and NGO logistics and supervisory personnel trained and retrained in logistics management.

Bangladesh has an established and well-run LMIS that tracks contraceptives and other selected commodities. The LMIS developed by DELIVER has been institutionalized with DGFP and is fully operated by the staff. DELIVER has provided technical assistance for automating logistics functions.

PROCUREMENT

Procurement of commodities became central to achieving contraceptive security in Bangladesh because of increased usage of contraceptives, continued increase of the population, a leveling off of donor support for commodities, and the government's aim of meeting demographic objectives by way of attaining a replacement level of fertility by 2010. DELIVER focused extensive technical assistance on increasing the capacity of the MOHFW and DGFP to procure high-quality, low-cost contraceptives. This effort was driven by the initial inability of the GOB to meet procurement standards for World Bank loans to procure contraceptives, which held up procurements of condoms and pills for nearly three years.

Substantial procurement capacity has been built up in the DGFP in the past few years. However, regular turnover of skilled personnel has resulted in a constant loss of institutional memory, necessitating continuous TA through the regular presence of consultants to assist procurement officials in processing and completing procurement under the GOB's Health, Nutrition, and Population Sector Program. The assistance provided included preparation of procurement plan, writing bidding documents, coordinating with the World Bank for clearance of documents, conducting bid evaluations, contract management, coordinating with the designated bank to facilitate opening letters of credit, tracking procurements, and so on.

As a result of improvements in procurement capacity, international tenders resulted in unit prices for condoms and pills from the winning Indian suppliers that were far lower than typically quoted international prices. The estimated savings was as much as U.S.\$17.2 million. Forecasts of Bangladesh's funding needs for 2010 were reduced downward, from \$60 million (estimated in 2000 prices) to \$40 million for the same volume of commodities at the lower prices. This has considerably improved Bangladesh's contraceptive security.

LESSONS LEARNED AND FUTURE DIRECTIONS

DELIVER's TA support has contributed toward significant improvements in logistics management, procurement capacity, and improved contraceptive security. However, there are areas where further assistance will be required. There is a need for continued support for capacity building in public-sector procurement, introduction of modern technologies in automating logistics functions down to the upazila level, and better and more effective coordination among donors and stakeholders.

Some of the major challenges for DELIVER's successor project include frequent staff turnover and transfers in the DGFP, providing technical assistance to the Central Procurement Technical Unit for further strengthening, and the need to reinforce logistics monitoring and supervision.

PROGRAM BACKGROUND

COUNTRY CONTEXT

Bangladesh is a small country in South Asia with an area of 147,570 square kilometers. The country is divided into six administrative divisions, 64 districts, 467 *upazilas* (subdistricts), and 4,484 unions. To provide health and family planning (FP) services, the unions are organized into 23,500 units. The estimated population is about 140 million, with 834 persons per square kilometer, making Bangladesh one of the most densely populated countries in the world.

The Bangladesh FP program evolved through a series of development phases that took place during the last 50 years or so. The family planning effort in the country began in the early 1950s at the behest of private voluntary organizations. Subsequently, the government-run FP program came into being in 1965 as a strategy for economic development. The Bangladesh national FP program has undergone a number of transitional phases—from voluntary and semi-government efforts between 1953 and 1965 to a field-based government family planning program with a community-based distributor approach between 1965 and 1971. Subsequent phases were marked by intensive door-to-door maternal and child health (MCH) and FP service delivery. Attempts were made to integrate health and family planning vertical programs: first, during 1972–1974; next, during 1980–1985; and finally, under the Health and Population Sector Program (HPSP) during 1998–2003. During the Health, Nutrition, and Population Sector Program (HNPSPP) 2003–2006, the FP program was again segregated and reestablished as a vertical program.

Under the “Prioritized Family Health–Family Planning Services under HNPSPP,” the components are family planning, safe motherhood, child health care, adolescent health care, male involvement, and gender equity. These components are in tune with the United Nations Millennium Development Goals.

Bangladesh is widely considered an international success story in family planning despite a low literacy rate, endemic poverty, religious opposition, and the low status of women. It has experienced an increase in contraceptive prevalence, from 8 percent to 54 percent, and a decline in the total fertility rate, from 6.3 to 3.0, in the three decades since its independence in 1971. Success in meeting these population goals can be largely attributed to the commitment of the Government of Bangladesh (GOB) and the Ministry of Health and Family Welfare (MOHFW), which have effectively coordinated donor organizations to ensure that free or affordable contraceptives are available in both public and private health facilities throughout the country. Factors contributing to the success of the FP program include continuous commitment of the government; GOB and nongovernmental organization (NGO) collaboration; a strong information, education, and communication (IEC) program; a *cafeteria* approach to service delivery; community involvement; effective and efficient service delivery networks; and cooperation and collaboration of development partners.

Although Bangladesh has experienced a great deal of success in meeting its population goals, new challenges to contraceptive security (CS) in the country are emerging. Contrary to the practice of using donors to procure contraceptives as has been done in the past, the government (MOHFW and the Directorate General of Family Planning [DGFP]) has undertaken the responsibility of procurement since 2001, using International Development Association (IDA) credit, which requires strict observance of World Bank guidelines and procedures. However, DGFP procurement desk officials were not familiar with World Bank procurement requirements and, as a result, were unable to process procurements. This situation resulted in a significant delay in the procurement of contraceptives and caused shortages that were addressed only when donors covered the shortfall. Another persistent cause for concern in program implementation is the shift in method mix characterized by a dominance of short-term resupply methods,

principally oral contraceptive pills. The oral pill currently accounts for more than one-half of all modern method users. Permanent and long-term methods contribute only to about 12 percent of modern method use. Dependence on comparatively less-reliable short-term methods, besides not being cost-effective, could delay the HNPSF objective of attaining replacement level fertility by 2010.

Another area that will need attention in the coming years is the further modernization of the supply chain to enable it to cope with the increased volume of supplies required by higher demand. The increased volume is the result of a combination of increased use and continued expansion of the population of women of reproductive age.

The USAID-funded DELIVER project, through its technical assistance, has taken the lead in improving timely procurement of contraceptives as well as promoting the increase of permanent and long-term methods as a means of attaining CS, but full commitment from the government is a prerequisite to move these initiatives forward.

The Bangladesh family planning supply chain has received significant support from DELIVER and from its predecessor projects. However, the road to making it efficient is arduous in view of reluctance within the system to adopt and accept innovation.

These challenges need to be addressed in future assistance programs to make the investments so far made in these areas sustainable.

KEY PLAYERS AND ROLES

The key players and stakeholders in the Bangladesh family planning program are many. They include the Ministry of Health and Family Welfare (MOHFW); the Directorates for Family Planning (DGFP) and Health Services (DGHS); the World Bank; donors; and many agencies such as the Social Marketing Company (SMC), EngenderHealth, and the Bangladesh Center for Communication Programs; and a number of NGOs. The success of the family planning program has been the result of concerted effort by the government and private-sector agencies. The role of DELIVER, since its inception, has been to provide technical assistance in health and family planning logistics to the MOHFW and to NGO Service Delivery Program (NSDP) NGOs. DELIVER's technical assistance contributed to the achievement of these organizations' own objectives in addition to furthering the achievement of CS goals and objectives.

DELIVER's activities and technical assistance enabled MOHFW/DGFP to streamline procurement and provide accurate long- and short-term forecasting of contraceptive requirements. DELIVER was instrumental in ensuring a reliable flow of condoms from GOB-procured supplies to the SMC. It was mainly in procurement that DELIVER left its mark and helped the government successfully avert potential stockouts at various levels of the supply chain by ensuring timely procurements. This is true not only for contraceptives but also for medical and surgical requisites (MSRs) for surgical contraception.

DELIVER has played a key role in coordinating the government and other key stakeholders. It was instrumental in initiating and facilitating the formation of the Logistics Coordination Forum to discuss and make decisions on reviewing forecasts and procurement and on contraceptive supply and distribution. Through the generation of PipeLine reporting, key stakeholders, including the government, were kept informed of the status of contraceptive supplies and stocks.

NGOs have played and continue to play a significant role in the family planning sector. Through DELIVER's activities, regular contraceptive supply to NGOs was maintained, and whenever problems or disruptions occurred, DELIVER technical staff intervened to facilitate and augment supplies.

DELIVER technical assistance extended to all levels of the supply chain, including all storage facilities at the district and upazila level, service delivery points (SDPs), the Central Medical Stores Depot (CMSD)

of DGHS, EngenderHealth (lead cooperating agency [CA] for promoting PLTMs), and all National Integrated Population and Health Program (NIPHP) NGOs working in health and family planning.

KEY CHALLENGES

Since the 1970s, bilateral donors and multilateral agencies have provided almost all of the contraceptives required by the poorest countries. While donor funding remained constant for the 10-year period up to 1999, demand for contraceptives has been growing. In Bangladesh, demographic projections suggested an increase in modern users of 11 million between 2000 and 2015. As donor contributions failed to keep pace with demand, a financing gap for subsidized contraceptives loomed. Projections vary, but even if donor financing remained at year 2000 levels—an optimistic scenario—the gap would reach 60 million by 2010.

The key challenges that DELIVER encountered and continues to face are—

- How can Bangladesh meet the growing demand for contraceptives. Modern method prevalence rose to 14 percent by 1983, 23 percent by 1989, and 42 percent by 1996–1997. Modern method prevalence, according to the *2004 Bangladesh Demographic and Health Survey* is 47 percent. For all methods, prevalence is 58 percent.
- Procurement issues that delay processing. The lack of understanding of World Bank and GOB requirements for bid document preparation and bid evaluation delayed the timely processing of procurement requirements. Continuous turnover of trained staff reduces the capacity of responsible agencies to properly implement procurement requirements.
- Delays in procurement of contraceptives.
- Inadequate policy level commitment for CS. The CS Task Force agreed to in 2002 was never instituted at the MOHFW.
- Lack of a policy to involve the private sector in CS. This policy is needed to facilitate the shifting of users who can afford to pay for contraceptives away from the public sector.
- Lack of policy for contraceptive pricing in the public sector. Such a policy could generate revenues, decrease misuse and waste, and improve sustainability.
- Frequent programmatic changes. This refers to a policy shift of integration of health and family planning under HPSP to reverting back to vertical health and family planning programs under the current HNPSP.
- Frequent turnover of key staff (logistics/procurement and policy level). This occurs at both the MOHFW and the Directorate of Family Planning.

GOALS AND OBJECTIVES

DELIVER OBJECTIVES

DELIVER and the Family Planning Logistics Management (FPLM) projects that preceded it have been working with the family planning logistics system since 1988. The main focus was on development, maintenance, and improvement of the logistics system for contraceptive availability at SDPs. DELIVER's current goal is to achieve CS in partnership with the GOB and other stakeholders. DELIVER provides technical assistance in CS, procurement, and logistics management to the Bangladesh National Health and Family Planning Program. It works primarily with the MOHFW/DGFP logistics system but also assists USAID/NIPHP NGOs through the government contraceptive distribution network. The overall goal of DELIVER revolves around CS by ensuring the availability of family planning and reproductive health commodities to end-users. The general objectives of DELIVER are—

- Support the MOHFW as it develops and implements a viable logistics system for the MCH and FP Program.
- Ensure reliable forecasting, proper storage, efficient distribution, and effective transportation of MCH and FP commodities.
- Ensure reliable and timely procurement of MCH and FP commodities for GOB and NGO service delivery programs.
- Explore innovative approaches to improve the MCH and FP logistics system.

RELATIONSHIP TO USAID AND CLIENT OBJECTIVES

The overall objective of DELIVER's activities over the past six years has been to improve CS by ensuring availability of family planning and reproductive health commodities to users. This objective directly contributed toward achieving the USAID/Bangladesh NIPHP Intermediate Result 3: Increased Contraceptive Prevalence and Contraceptive Security, under Strategic Objective 1: Fertility Reduced and Family Health Improved.

Over the project period, DELIVER through its technical assistance to the MOHFW, DGFP, and DGHS has made considerable accomplishments in the areas of forecasting, procurement, and supply chain management of contraceptives and other reproductive health commodities, which are summarized as follows:

DELIVER supported the DGFP in estimating contraceptive requirement for the public-sector program, resulting in long-term and short-term projections of contraceptive requirements—one for 2000–2015 and another for 2006–2010. DELIVER also supported institutionalizing PipeLine reports at DGFP. These projections and PipeLine data helped DGFP accurately estimate the amount of contraceptives needed to be procured over the past six years, as well as in the next four years.

To build capacity of the procurement personnel of DGFP and DGHS, DELIVER provided procurement training (on public procurement regulations in 2003 and on World Bank procurement guidelines in 2004) to the personnel of the Procurement Unit of the DGFP and to the CMSD of the DGHS. In addition, a procurement consultant from DELIVER provided full-time on-the-job training to the procurement desk officials of DGFP and CMSD. As a result of this technical assistance from DELIVER, both the DGFP and CMSD have made significant progress toward procuring health and family planning and reproductive health commodities on time under HPSP and HNPSP.

With technical support from DELIVER, the DGFP has been able to institutionalize an effective supply chain management system. All the supply officers and storekeepers of regional warehouses and upazila stores were trained by DELIVER in logistics management. Their supervisors were also trained in logistics monitoring and supervision. DELIVER also assisted the DGFP to improve and operationalize the logistics management information system (LMIS) that provides routine logistics information for policy decisions and program improvement.

DELIVER played a leading role in coordinating development partners (DPs) in contraceptive procurement and funding. It organized periodic meetings of DPs (World Bank, the United Nations Population Fund [UNFPA], the Canadian International Development Agency [CIDA], *Kreditanstalt für Wiederaufbau* [KfW], and USAID) for reviewing the stock status of contraceptives and procurement issues and solicited support from DPs to avert stockouts of contraceptives.

DELIVER undertook substantial initiatives to raise awareness about the concept of contraceptive security and to increase understanding of barriers to contraceptive security in Bangladesh. These efforts were designed to elicit the support of GOB policymakers, development partners, and other stakeholders to ensure CS in the country. Activities included seminars, orientation workshops, publication of a white paper on CS, production of advocacy and public awareness videos, market segmentation analysis, and media advocacy through print and electronic media.

All of these efforts by DELIVER significantly contributed to increased contraceptive prevalence and CS and thereby contributed to achieving USAID/Bangladesh's strategic objective of reducing fertility and improving family health. Stockout of one or more contraceptives at upazila store level (which is an indicator of Strategic Objective [SO] 1, Intermediate Result [IR] 3) has declined from eight percent in 2000 to less than two percent in 2006. Also, among other programmatic factors, the increased efficiency in the logistics management system has considerably contributed to the increase in the contraceptive prevalence rate (which is another indicator of IR 3), from 53.8 percent in 1999–2000 to 58.1 percent in 2004. Consequently, this led to the decline of the total fertility rate (TFR) (which is an indicator of SO 1), from 3.3 in 1997–1999 to 3.0 in 2001–2003.

The demographic target of the HNPSF of Bangladesh is to achieve replacement level of fertility by 2010. To achieve this target, TFR has to be reduced from the current rate of 3, to 2.2, by increasing the contraceptive prevalence rate (CPR) to about 72 percent by 2010 from 58.1 percent in 2004. Ensuring a continuous flow of contraceptives to the users (i.e., ensuring contraceptive security) is an important prerequisite for attaining a CPR of 72 percent. One of the major strategies of HNPSF is to ensure a continuous flow of contraceptives to users through an effective and efficient logistics management system. The bulk of DELIVER's technical assistance provided to the DGFP was directed to make the family planning logistics system an effective and efficient one, capable of ensuring a continuous flow of contraceptives to users, and thereby contributed significantly to achieving the objectives of HNPSF.

DELIVER'S ROLE IN RELATION TO OTHER ORGANIZATIONS

The commendable performance in the family planning sector has been the result of effective collaboration among the various sectors and coordination between the GOB and development partners. The coordination mechanisms initiated by DELIVER—the Logistics Coordination Forum and the Forecasting Forum—and made functional at the behest of DELIVER, evolved into a single forum used by the DGFP for planning future activities, evaluating existing activities, and resolving issues and problems. Subsequently, the NIPHP Working Group meets periodically, bringing together representatives of the DGFP, USAID, UNFPA, the World Bank, the European Commission, and other donors. DELIVER and SMC report on the progress of their workplan activities, identify problems, and seek assistance from the DGFP to resolve them. The working group also approves yearly workplans for both DELIVER and SMC and recommends them to the Corporate Steering Group at the MOHFW.

SUMMARY OF INTERVENTIONS

DELIVER has worked in the following areas:

Logistics management. Adapted the vertical family planning logistics system to meet the requirements of health sector integration, and then assisted in the subsequent resegregation of the family planning program. Activities included adjusting the tiers or levels of distribution, determination of maximum–minimum levels, charting flow of supplies, developing tools and implementing LMIS, instituting monitoring of supplies, and implementing capacity building programs for all levels of supply chain personnel.

Forecasting. Established a system of short-term (pipeline analysis) and long-term (demographic and consumption-based) forecasts and supported instituting a forecasting forum for regular review and adjustment of forecasts for procurement-related decisions.

Warehousing. Established warehousing practices, developed and implemented store layout design, assisted in implementing a revised protocol on disposal of unusable (damaged, expired, or obsolete) commodities.

Distribution. Established monthly shipments to all levels based on a *push* system of supply, promoted increased use of private/commercial carrier as an efficiency measure, implemented a computerized WIMS at the regional level, and conducted physical inventory of contraceptives and other commodities.

LMIS. Established monthly reporting from all levels of the supply chain that has resulted in regular publication of a national logistics report and improved SDP level reporting on contraceptives.

Procurement. Provided extensive technical assistance to improve timely procurement of contraceptives and other commodities in association with the MOHFW/DGFP in the following procurement-related areas:

- needs assessment of contraceptives and other commodities
- preparation of procurement plan detailing commodities, method of procurement, timeline, and other information
- preparation of bidding documents, bid evaluation, contract management, pre-shipment inspection, and coordination with the World Bank on IDA credit funded procurements
- development of tools, e.g., procurement manuals, primers, procurement video, and so forth
- monthly procurement tracking of health and family planning commodities.

Capacity building and institutional strengthening. Provided technical assistance and training to improve and sustain system performance and institutionalize capacities in the GOB for procurement and logistics management, including training, monitoring, and supervision.

Contraceptive security. From 2002, DELIVER added CS as an explicit workplan component. DELIVER has provided technical assistance, including research, analysis, and communication for a long-term strategic approach to improve contraceptive security through awareness raising, assessment, and planning activities. DELIVER has worked with diverse partners in Bangladesh, including the GOB, DPs, NGOs, and CAs of USAID.

SUMMARY OF DELIVER FUNDING AND STAFFING

Over the six-year period of DELIVER assistance, a total of \$10,747,286 was provided to Bangladesh. Of this, 83 percent was for population goals and 17 percent for child survival, which proportionately represented the work done by DELIVER in Bangladesh. All of DELIVER's 26 staff members in Bangladesh (11 technical and 15 administrative) are Bangladeshi nationals. Their work is supplemented by local hire consultants and by external consultants as well as subcontractors, with an emphasis on utilizing the available pool of resources in training, an area in which we have successfully built a great deal of capacity over our time in Bangladesh. Short-term technical assistance from DELIVER's headquarters is supported in specialized areas, such as market segmentation, policy, communications strategy, and forecasting.

PROGRAM RESULTS

ELEMENT I: IMPROVED LOGISTICS SYSTEM

INFRASTRUCTURE AND DISTRIBUTION

Since the beginning of FPLM in 1988, DELIVER's forerunner project, supply chain improvement, including warehousing and distribution, has remained the prime area of operation. Efficiency in supply chain management is a precondition for ensuring a continuous supply of commodities throughout the different tiers of distribution and to the end user. Over the years, FPLM and DELIVER have invested resources, both human and material, to create efficiency in warehousing and distribution. The major results include—

- Reduced stockouts from 23 percent to less than 2 percent at the upazila level.
- Operationalized 210 USAID-constructed upazila stores by providing store equipment and necessary fixtures such as dunnages, cabinets, and shelves.
- Provided technical assistance to strengthen the five-tier distribution system to ensure supplies at all levels, following prescribed maximum–minimum inventory systems.
- Reduced distribution tiers from five to four, thus reducing the national pipeline requirement with a one-time savings of \$5 million. Also, recurrent savings resulted from management of fewer supplies.
- Introduced, funded, and institutionalized use of a commercial carrier with the DGFP central warehouse that covers approximately 50 percent of the upazilas in the country.
- Developed MSR kits that directly contribute to the CS efforts by promoting permanent and long-term methods.
- Instituted monthly logistics monitoring visits to about 40 upazila stores for troubleshooting and ensuring regular supplies. Conducted joint monitoring visits to problem sites for making on-the-spot management decisions to address management problems.
- Trained and retrained approximately 12,000+ DGFP and NGO logistics staff.
- Provided logistics internship training to DGFP officials and arranged overseas training and study tours.
- Developed new tools such as the Supply Plan Register and Compilation Sheet for ensuring product availability and accurate timely reporting.
- Provided computers, printers, accessories, and consumables for the operation of the LMIS.
- Supported pest control in warehouses and stores.
- Assisted the DGFP in installing a system of disposal of unusable commodities and equipment, increasing the storage capacity in upazila stores.
- Rationalized the catchment areas of regional warehouses, increasing the accessibility of upazila stores to receive supplies from regional warehouses.
- Funded facility improvements in the DGFP central warehouse to avert product damage.

FORECASTING

The Bangladesh family planning program, over the years, has established a reliable system of forecasting its contraceptive needs with technical support from DELIVER. The demand for contraceptives, which is dominated by a high level of use of resupply methods, could not be met without a precise method-specific forecast.

DELIVER prepared *Projected Contraceptive Commodity Requirements (2000–2015)* (Islam and Chakraorty 2002), which was endorsed and published by the MOHFW. DELIVER also prepared a five-year short-term forecast. The other notable achievement was the formation and operationalization of the Forecasting Forum¹ at the DGFP to review and adjust the forecasts periodically on the basis of consumption data and program priorities.

PROCUREMENT

Procurement is an essential component of contraceptive security as it enhances the capacity of the government to make contraceptives available to the users. For Bangladesh, procurement became central to contraceptive security since the government undertook the role of conducting procurements using IDA credits.

In 2000, USAID asked DELIVER to investigate the problems that were delaying the procurement of contraceptives and medical supplies under the IDA-financed HPSP program and to propose a technical assistance plan to strengthen the program's ability to successfully procure these items. DELIVER's assessment of the HPSP situation identified procurement implementation problems on four levels: operational, organizational, policy, and external.

DELIVER carried out the following actions to address the problems in these areas.

Operational

Problem: MOHFW desk officers were not familiar with World Bank procurement requirements and, therefore, were unable to properly prepare bid documents and evaluate bids in accordance with bank requirements. This contributed to delays in the procurement process.

Solutions: DELIVER's response was to develop a comprehensive training manual on the procurement of goods, designed specifically for desk officers, that provided guidance and step-by-step instructions for developing product specifications, preparing bidding documents, evaluating bids, awarding contracts, and monitoring suppliers' performance. The training manual, in conjunction with practical exercises, served as the cornerstone for developing a series of workshops to train desk officers to comply with World Bank procurement requirements. These procurement training workshops were held yearly to strengthen the capacity of desk officers to conduct international procurement and to train new personnel entering the procurement system who were replacing previously trained staff transferred to other agencies. In total, DELIVER provided training and retraining to 489 GOB procurement personnel.

Organizational

Problem: Line directors and MOHFW officials did not understand the overall World Bank procurement process and their roles and responsibilities in helping to support timely implementation of the procurement process. This often resulted in delays in receiving procurement requirements from line directors.

Solution: DELIVER/Bangladesh wrote the *Procurement Primer for Health and Family Planning Programs in Bangladesh* (Woodle, Dickens, and Fox 2003a). This primer provides busy line directors with a quick and simple explanation of procurement and contracting procedures in Bangladesh for World Bank-funded projects and describes the critical points in the process where the directors play a role. With

improved understanding of their responsibilities, line directors were able to contact programs at an earlier point in the procurement process and reduce the delays in receiving requirements.

Policy

Problem: In the first half of HPSP, there were inconsistencies between the government's procurement procedures and the good public-sector procurement practices required by the World Bank under IDA guidelines.

Solutions: In 2003, the government published the *Public Procurement Regulations of 2003* (PPR 2003), which brought the government's procurement regulations in line with good public-sector procurement practices. To support implementation of the regulations, DELIVER incorporated the new GOB procurement regulations of 2003, along with the updated World Bank IDA procurement guidelines of 2004, into subsequent procurement training workshops. In 2006, when PPR 2003 was officially approved as a government act, DELIVER/Bangladesh revised the training manuals *Procurement Primer* and *Bangladesh Bidder's Guide* (see following) to incorporate the requirements.

External

Problem: Local suppliers and local representatives of international suppliers had a limited understanding of the World Bank bidding process requirements, which often resulted in poorly prepared supplier bids being rejected.

Solutions: DELIVER/Bangladesh addressed this problem by developing the *Bangladesh Bidder's Guide* (Woodle, Dickens, and Fox 2003b) to help suppliers understand the documents and procedures they will encounter when they compete for MOHFW contracts financed wholly or in part by the World Bank. DELIVER provided orientation to 103 bidder representatives on GOB procurement requirements. In helping suppliers to prepare bids that meet World Bank requirements, fewer bids are rejected and the number of suppliers competing for the requirement is increased. This increased competition between suppliers traditionally produces more competitive prices for products.

Additional areas

In addition to addressing the four areas above, DELIVER initiated individual visits and small group presentations to help harmonize expectations among development partners and senior MOHFW personnel so that they could work together more effectively.

Furthermore, DELIVER provided limited TA to the CMSD of the DGHS to improve procurement of drugs and equipment for the health sector. The procurement desk officials were provided with training on IDA procurement guidelines and GOB procurement procedures outlined in PPR 2003. Full-time consultancy support was also provided to work as a resource at CMSD to support writing bidding documents and evaluation of bids and to provide on-the-job training.

RESULTS OF PROCUREMENT TECHNICAL ASSISTANCE

Perhaps the strongest indicator of the overall success of the procurement capacity building assistance program was the MOHFW/DGFP's ability to successfully conduct an international procurement according to World Bank requirements and achieve significant product savings as a result.

In 2002–2003, the DGFP independently conducted a successful international procurement for 446 million condoms that complied with World Bank requirements. The final price per unit was taka 1.27 (about U.S.\$2.5). MOHFW records indicate at the time that the UNFPA per unit price was taka 1.50 plus a 5 percent service fee on the total quantity. The resulting savings achieved by the DGFP by independently procuring its condom requirements was approximately taka 131,035,699 (U.S.\$2,271,376). The DGFP also achieved significant savings in pill procurement, obtaining per cycle prices of U.S.\$0.07 and

U.S.\$0.11 as compared to the CIDA and KfW per cycle price of 23 cents for pills procured in 2000. Overall, by executing procurement between 2001 and 2003, the DGFP achieved a savings of approximately taka 60 crore (U.S.\$10 million).

An additional benefit resulting from these savings achieved through independent procurement was the allocation by the MOHFW for the first time of U.S.\$690,000 of government revenue budget in 2004 and 2005 for contraceptive procurement. DELIVER's support to DGFP procurement activities has also contributed to reducing the procurement lead time substantially (by almost one-third).

MANAGEMENT INFORMATION

Bangladesh has an established and well-run LMIS that tracks contraceptives and other selected commodities. Over the last few years, there have been significant developments in LMISs. The activities that DELIVER undertook include the following:

- Provided technical assistance for an integrated LMIS under HPSP (2001–2003) through which selected essential health products were identified and grouped with contraceptives and an integrated reporting system was developed.
- Revised LMIS forms to collect, compile, analyze, and disseminate information on SDP-level stockouts of contraceptives.
- Modified the inventory control system and operationalized and installed a WIMS with additional features and data security.
- Developed and institutionalized an NGO LMIS.
- Assisted the DGFP in writing, printing, and disseminating the *Fieldworker Assistants (FWA) Register Manual* (Directorate General of Family Planning 2006) to improve documentation of information related to service delivery and logistics at the field level.
- Provided training on the LMIS to 2,653 DGFP supply officers, storekeepers, pharmacists, and upazila family planning officers (UFPOs) during the last six years.

DELIVER has further institutionalized the DGFP LMIS system that began in the 1990s. The system is now fully operated by DGFP staff, with DELIVER providing only as-needed information technology support. This process and the results achieved have been described as an “example of successful technical assistance to the government data collection and analysis” (Bornbusch, Johnson, and Raj 2006). Regional supply officers and upazila storekeepers now prepare their own monthly supply plans, while the central LMIS unit prepares its own monthly pipeline and logistics reports. The LMIS has been run entirely by DGFP since 1997. The LMIS unit produces its own, less-detailed monthly national pipeline report as well as a national logistics report that shows stock status at facilities throughout the country. DELIVER has provided technical assistance for automating these logistics functions.

EVALUATION

DELIVER's annual workplan with clearly stated objectives and results to be achieved provided the framework for performance measurement. Regular monitoring and evaluation (M&E) exercises using the standard Logistics System Assessment Tool (LSAT) were conducted every year to gain insights into logistics system performance. M&E exercises were carried out for the first time in 2002 and once in each of the years 2004 to 2006. Bangladesh has scored highly in all the relevant logistics areas and indicators. Table 1 shows the summary results for each year.

Table 1. Bangladesh M&E Summary Scores (2002, 2004–2006)

Section	Maximum Possible Score	Raw Score			
		2002	2004	2005	2006
LMIS	12	7	11	11	10.5
Forecasting	9	6	9	9	8
Obtaining supplies/procurement	9	8	9	9	8
Inventory control	11 (12)	8	12	11	10
Warehousing and storage	7	7	6	6	5.75
Transport and distribution	4	3	4	4	4
Organizational support	12	9.6	10	11.66	11.66
Finance	8	8	7	7	7
Total (all questions weighted equally)	72 (73)	56.67	68	68.66	*64.9

* Score for 2006 in LMIS, Procurement and Storage, is lower because (a) accuracy of SDP-level data is less reliable and percentage of SDPs reporting is less, and (b) there were delays in procurement causing sporadic stockouts.

ELEMENT II: IMPROVED HUMAN CAPACITY IN LOGISTICS

A logistics system cannot be run efficiently and effectively unless the people involved with the system have adequate knowledge, tools, and skills, and an environment that allows and supports their improved performance. In order to improve human capacity in logistics management, DELIVER provided formal and on-the-job training to public sector and NGO staff in procurement, logistics management, and use of the LMIS.

PROCUREMENT TRAINING

To improve procurement capacity, DELIVER organized 18 formal training courses and refresher courses for 489 desk officers who were directly involved in procurement from the DGFP and DGHS. The trainings focused on procurement of both goods and services following the GOB's Public Procurement Regulations of 2003 and World Bank guidelines. In addition, 116 senior officials from the MOHFW, DGFP, DGHS, and development partners were given orientations on procurement of health and family planning commodities. A procurement consultant was contracted by DELIVER and seconded to the DGFP procurement unit to provide on-the-job training and need-based technical support to the procurement staff. As a result of these interventions, the DGFP procurement unit has been able to procure large quantities of contraceptives and other commodities through both international and local competitive bid under HPSP and HNPS. The procurement unit is now able to procure all contraceptives through international competitive bidding for the national family planning program with limited technical support from the procurement consultant (see appendix A for additional details).

LOGISTICS TRAINING

To improve capacity in logistics management, 1,824 DGFP staff (storekeepers, pharmacists, and UFPOs) were given training or refresher training on logistics management. Additionally, 621 NGO staff (supported by the USAID-funded NSDP) were also given training in logistics management. This has resulted in a well-functioning supply chain system, managed by well-trained staff, ensuring a regular supply of contraceptives and other commodities to the SDP level without any interruption (see appendix B for additional details).

LMIS TRAINING

To further improve the family planning LMIS system that was established in the early 1990s, DELIVER conducted training for 2,653 DGFP staff (supply officers, storekeepers, pharmacists, and UFPOs) on the LMIS, including the WIMS. DELIVER also provided need-based off-site technical support to the Management Information System (MIS) Unit of the DGFP to keep the LMIS operational. The system is now fully operated by DGFP staff, with DELIVER providing only as-needed information technology (IT) support (see appendix C for additional details).

ORIENTATION ON MONITORING AND SUPERVISION

An effective monitoring and supervision system is an essential requirement for successful implementation of any public health program. Unfortunately, monitoring and supervision has been a missing link in the Bangladesh family planning program, particularly in logistics management. To improve the situation, DELIVER provided orientation training on logistics monitoring and supervision to approximately 150 monitoring cell members and officials of the DGFP (see appendix D for additional details).

OVERSEAS TRAINING/STUDY TOUR

DELIVER sponsored overseas training on logistics management for the DGFP and SMC staff to improve their knowledge and skills in logistics management. A total of 36 participants attended several courses on logistics management and monitoring and supervision organized by DELIVER/Washington. In addition, a study tour to India was organized for DELIVER and USAID/Dhaka officials to exchange ideas and experiences in procurement, logistics management, and contraceptive security (see appendix E for additional details).

ON-THE-JOB TRAINING

Logistics support officers (LSOs) from DELIVER, through their routine monitoring visits, provided on-the-job training to supply officers at the regional warehouses and upazila storekeepers to correct any mistakes in warehouse management, recordkeeping, and reporting. Over the past six years, LSOs made a total of 6,720 monitoring visits to upazila stores, SDPs, and NGOs, providing on-the-job training whenever required (see appendix F for additional details).

ELEMENT III: IMPROVED RESOURCE MOBILIZATION FOR CONTRACEPTIVE SECURITY

Contraceptive security (CS) is a relatively new concept in Bangladesh. In 2002, DELIVER took initiatives to introduce the concept of CS in Bangladesh. DELIVER published a white paper on contraceptive security entitled *A Consequence of Success: The Issue of Contraceptive Security in Bangladesh*. It was shared at a contraceptive security conference held in June 2002, and attended by about 75 technical experts, policymakers, donor representatives, and other stakeholders. The conference recommended 20 priority strategies in three important areas: (a) changing the mix of methods by reinvigorating the use of intrauterine devices, vasectomy, tubal ligation, and other permanent and long-term contraceptive methods; (b) using market segmentation and the role of social marketing and the commercial sector to encourage clients who are willing and able to purchase contraceptives from the private sector, reducing the burden of the public sector; and (c) improving the procurement and rationalization of the supply chain. A behavior change communications strategy for CS and a market segmentation analysis report were published in 2003.

DELIVER, in collaboration with the DGFP, undertook a number of activities toward achieving contraceptive security in Bangladesh. These are discussed below.

REINVIGORATION OF PERMANENT AND LONG-TERM METHODS

In the late 1970s and early 1980s, sterilization (both male and female) was the most popular method of contraception in Bangladesh. This trend, however, started reversing in the 1990s, and short-term methods, such as oral pills and injectables, gradually became the most popular methods, increasing to 69 percent of CPR in 2004, with PLTMs falling to a mere 12 percent of CPR. This increase in resupply methods has significantly increased the public-sector cost of contraceptive procurement. Therefore, in light of the recommendations of the 2002 CS conference, the DGFP with technical support from EngenderHealth and DELIVER, has taken initiatives to reinvigorate access to and use of PLTMs with a view to increasing the share of these methods and thereby to reduce dependence on short-term resupply methods. Accordingly, actions have been taken in the field to motivate clients to accept PLTMs and provide increased access. As a result, the number of acceptors of PLTMs has increased from 2.3 million in May 2004 to 2.9 million in May 2006, a 28 percent increase over two years.

PRIVATE-SECTOR PARTICIPATION

The private sector can play an important role in reducing the public-sector burden in procurement and distribution of contraceptives. The government encourages the private sector to participate in the contraceptive market. A market segmentation study was conducted in 2003 that suggests that the private sector can increase its share of the contraceptive market. A dialogue with private-sector representatives was held in 2004, and a study was conducted to identify the barriers to private-sector participation in importing and marketing contraceptives. An initiative is in process to ease the regulatory barriers to private-sector participation in this area.

BEHAVIOR CHANGE COMMUNICATION ACTIVITIES FOR CS

DELIVER developed and published a behavior change communication (BCC) strategy for contraceptive security in 2003. On the basis of that strategy, the CS IEC Forum was formed at the DGFP in 2005 to coordinate all family planning BCC activities and ensure that contraceptive security issues are addressed in these activities. A video on contraceptive security for service providers and users was developed and distributed to the IEC Unit of the DGFP.

MEDIA ADVOCACY

DELIVER undertook initiatives to involve press and electronic media in popularizing permanent and long-term methods as well as in motivating clients who can afford to buy contraceptives to purchase them in the market instead of using free contraceptives from the public sector. Toward this end, DELIVER organized three orientation workshops for a total of 130 local journalists working at the district level and below. The participants of these workshops were joined by district family planning officials to explore issues related to contraceptive security, identify topics for reporters, and provide reporters with knowledgeable sources for their stories. In addition, eight members of the Health Journalists' Forum were oriented on CS issues to encourage news coverage of the issues relating to CS in national print media. DELIVER also organized a television talk show on a popular private-sector TV channel to introduce the concept of contraceptive security to viewers.

LINKAGES/COLLABORATION WITH OTHER ORGANIZATIONS

DELIVER collaborated with other NIPHP partners, such as the NSDP, SMC, and EngenderHealth in the efforts to achieve CS in the country. DELIVER assisted NSDP NGOs in logistics management and in ensuring a regular supply of contraceptives from GOB supplies to NGO clinics. A quarterly review meeting between DELIVER and NSDP was held regularly to review the stock status at NSDP NGO clinics and to resolve supply problems to ensure contraceptive security. DELIVER also collaborated with SMC and EngenderHealth in ensuring CS. Instances of such collaboration included facilitating the transfer of 100 million condoms from GOB supplies to SMC and collaborative activities with EngenderHealth such as introduction of MSR kits to reinvigorate access to and use of PLTM services.

DELIVER regularly organized half-yearly meetings with the NIPHP partners (NSDP, SMC, and EngenderHealth) to review collaborative activities in contraceptive security.

POLICY-LEVEL COMMITMENT

At the initiative of and with technical support from DELIVER, a Logistics Coordination Forum chaired by the director general of the DGFP has been constituted. This forum includes representatives from the development partners (UNFPA, CIDA, KfW, and the World Bank), DELIVER, and senior GOB officials. The forum meets every quarter to review the stock status and the status of contraceptive procurements and to make policy decisions as needed. This forum has been playing a significant role in ensuring policy-level commitment to contraceptive security.

RESOURCE MOBILIZATION

During the course of the DELIVER project, there was no shortage of funds for procuring contraceptives in Bangladesh: there have been adequate funds from IDA credit under HPSP and HNPSp as well as bilateral funding from other donors. However, the challenge was to procure contraceptives in a timely manner using World Bank and IDA credits. DELIVER provided technical assistance to the DGFP to ensure timely procurement of contraceptives following World Bank guidelines so as to avert stockouts due to delays in procurement. However, prior to this intervention, procurement delays did result in potential stockouts of condoms, which were only averted by additional resource mobilization from donors. The DGFP's procurement capacity was eventually strengthened, and it achieved significant savings in bulk procurements by using IDA credits. In recognition of this achievement, the GOB has provided over U.S.\$600,000 from its own revenue sources to procure contraceptives in 2004 and 2005.

DONOR COORDINATION

DELIVER organized periodic donor coordination meetings to review the stock situation and procurement status of contraceptives. In 2005–2006, a number of such meetings were held to find out ways to procure condoms on an emergency basis to avert an anticipated shortage of condoms due to delays in procurement (see above). It must be noted that there are sufficient funds from the HNPSp IDA credit agreement to meet Bangladesh's needs for contraceptive procurement through 2009, but the use of these funds requires continued adherence to strict IDA procurement guidelines.

INCORPORATION OF CS ISSUES INTO THE MASTER OF POPULATION SCIENCES CURRICULUM

DELIVER has taken an initiative to incorporate CS issues into the Master of Population Sciences (MPS) curriculum of the Department of Population Sciences, Dhaka University, since the graduates of this department are likely to play an important role in the field of reproductive health and family planning. An agreement between DELIVER and the Department of Population Sciences has been signed to introduce CS into the MPS curriculum beginning in the 2006–2007 academic year.

ELEMENT IV: IMPROVED ADOPTION OF ADVANCES IN LOGISTICS

Over the years, DELIVER has invested significant resources in modernizing the logistics practices and systems of the DGFP. A major focus has been the computerization of the warehouses and LMIS, including—

- implementation of a WIMS in all regional warehouses, with provision of software, computers, and related accessories, including printers to the central warehouse and all 21 regional warehouses
- providing email connection to all regional warehouses for electronic data transfer and provision for data backup

- use of a computerized supply plan worksheet to determine supply quantity
- development and implementation of a web-based LMIS through which logistics data are transmitted to a central server, enabling timely generation of reports
- assessment of human and material resources needed for launching bar coding at the central warehouse.

LESSONS LEARNED AND FUTURE DIRECTIONS

DELIVER's technical assistance support over the last few years has contributed toward a significant strengthening of the Bangladesh FP-MCH supply chain. Notable improvements have been achieved in contraceptive procurement as well as in improved supply chain performance. However, there is a scope and need for further improvements, especially in attaining greater efficiency in these two areas. The investments made so far need to be protected and carried on further. In addressing future assistance in logistics and commodity security, the following areas merit consideration:

- continuation of dedicated support for institutional strengthening and capacity building for public-sector procurement presently conducted by the MOHFW through the DGFP and DGHS
- use of private-sector sources to support forecasting, monitoring and supervision, and training. The private sector could also be considered for executing public-sector procurements selectively, especially for large bulk procurements
- introduction and expansion, in phases, of appropriate approaches and state-of-the-art technologies (e.g., bar coding) for supply chain efficiency improvements
- capitalizing on the obvious benefits experienced by having a network of field-based staff for problem solving and provision of on-the-job training and technical assistance to address the field needs
- taking extra-cautious steps in planning a realistic timeline when contraceptive procurement is done by the GOB, following the requirements of the lending agency, as delays may occur at any step of the process, resulting in stockout
- improvement in donor coordination by using the existing Logistics Coordination Forum with analytical support in procurement and supply chain areas
- making adjustments in the program as it matures by restructuring field program activities, redefining the role of field-based Logistics Support Officers (LSOs) to continue as troubleshooters, and expanding LSO functions to include field-based training below the upazila level and last mile logistics issues
- identifying and increasing the capacity of young professionals in donor agencies, the GOB, NGOs, and in the private sector to function as champions for logistics and commodity security
- understanding and emphasizing the need for having a clearly spelled out agreement in writing, through a Memorandum of Understanding with the MOHFW, that involves USAID or the donor consortium, to carry out the agreed-upon activities on contraceptive security by setting up a high-level policy task force
- reviewing absorption capacity and timely processing of procurement activities of the MOHFW staff regarding the provision of procurement technical support, thus increasing effectiveness in ensuring timely procurement to avoid stockouts, and discussing and exploring alternative potential strategies.

Some major challenges for DELIVER in the future are—

- Staff turnover at all levels within the MOHFW remains a major constraint, while elections in 2007 could lead to a change in government and disruptive policy shifts. These challenges have made capacity building a continuously shifting target.
- There are emerging structures in the GOB—notably, cells for procurement and logistics monitoring at the MOHFW and DGFP levels—that need assistance to build GOB capacities.
- The Central Procurement Technical Unit housed in the Ministry of Planning, mandated to provide technical support for procurement to ministries, needs technical and capacity building assistance.
- There is a need to strengthen monitoring and supervision of the logistics system, which has remained the weakest link in the supply chain. The Monitoring Cell established in the DGFP needs to be strengthened and made functional.

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APPENDIX A

TRAINING ON PROCUREMENT (2000–2006)

Year	Trainees	Content	Number of Trainees	Duration of Training (days)
2000	DGFP & DGHS desk officers	Procurement of goods and services under HPSP	66	3–5
	MOHFW, DGFP & DGHS senior officers	Workshop on goods and services	58	1
	DGFP & DGHS desk officers, professors of medical colleges	Orientation on preparation of specifications of medical goods & equipment	28	1
2001	Key procurement officials of DGFP & DGHS	Testing the procurement manuals	20	3
	DGFP & DGHS desk officers	Procurement of goods	20	3
	DGFP & DGHS desk officers	Procurement of services	16	3
2002	DGFP & DGHS desk officers	Bid evaluation	22	2
	DGFP & DGHS desk officers	Proposal evaluation	17	2
	MOHFW, DGFP & DGHS senior officers	Orientation on evaluation of bids and proposals	23	1
	Expert Group Meeting: MOHFW, DGFP & DGHS senior officers and development partners	Review of organization and structure of procurement activities under MOHFW	35	3
	DGFP & DGHS desk officers	Refresher training on bid evaluation	21	2
	DGFP & DGHS desk officers	Refresher training on proposal evaluation	24	2
	DGFP & DGHS desk officers	Training on procurement of goods	31	2
2003	Representatives of bidders' organizations (goods)	Bidders' orientation on procurement of goods	35	1
	Representatives of consulting organizations (services)	Orientation on procurement of services	19	1
	DGFP & DGHS desk officers	Training on procurement of goods following PPR 2003	27	6
2005	DGFP & DGHS desk officers	Training on procurement of services following PPR 2003	26	3
	MOHFW, DGFP & DGHS senior officers	Orientation on PPR 2003	34	0.5
	DGFP, DGHS core group	Training on procurement of goods following PPR 2003	17	3
	Representative of bidders' organizations (goods)	Orientation on PPR 2003 and World Bank requirements	17	1
	Representatives of consulting organizations (services)	Orientation on PPR 2003 and World Bank requirements	32	1

2006	DGFP and DGHS desk officers	Proposal evaluation for procurement of services	30	3
2006	Senior GOB officials	PPR 2003 and new World Bank guidelines	30	1
2006	DGFP desk officers	Bid/tender evaluation	30	3
2006	DGHS desk officers	Bid/tender evaluation	30	3
TOTAL			708	

APPENDIX B

TRAINING ON LOGISTICS MANAGEMENT (2000–2006)

Year	Trainees	Subject	Number of Trainees	Duration of Training (days)
2000	Storekeepers, upazila family planning stores	Logistics management	290	5
	Upazila family planning officers (UFPOs)	Logistics management	73	6
	Storekeepers, pharmacists, warehouses/district reserve stores	Logistics management	55	5
	Storekeepers, upazila health complexes (UHCs)	Generic storekeeping	384	3
	NGO clinic managers, store-in-charge & documentation officers	Orientation on logistics management	319	1.5
2001	Storekeepers, UHCs	Generic storekeeping	70	3
	NGO clinic managers, store-in-charge & documentation officers	Orientation on logistics management	258	1.5
2002	Storekeepers, UHCs	Unified health & family planning logistics	148	6
	Upazila health and family planning officers	Orientation on unified health & family planning logistics	243	2
	Storekeepers, health district reserve stores	Generic storekeeping	87	3
2003	UFPOs	Logistics management	42	3
2004	UFPOs	Logistics management	38	3
2005	UFPOs	Logistics management	16	3
2006	Pharmacists, in-charge as upazila family planning storekeepers	Logistics management	132	5
2006	Upazila assistant-cum-typists, pharmacists, and UFPOs (store-in-charge)	Logistics management	250	3
2006	NSDP-NGO trainers	Logistics management	44	3
TOTAL			2,445	

APPENDIX C

COMPUTER AND LMIS TRAINING (2000–2006)

Year	Trainees	Content	Number of Trainees	Duration of Training (days)
2000	UFPOs, upazila health and family planning officers, storekeepers, field worker assistants, family planning inspectors, fieldworker assistants (FWAs)	Orientation on integrated health & family planning LMIS reporting	1,500	1
2001	Storekeepers & pharmacists, DGFP warehouses	Training on AICS and basic computer operation	55	5
2002	UFPOs, upazila storekeepers/ pharmacists	SDP reporting on modified forms	1,025	1
2003	Store assistants, CMSD	Warehouse Inventory Management System (WIMS)	18	1
2005	Storekeepers, pharmacists, DGFP warehouses	WIMS	55	5
TOTAL			2,653	

APPENDIX D

ORIENTATION ON LOGISTICS MONITORING & SUPERVISION (2000–2006)

Year	Trainees	Content	Number of Trainees	Duration of Training (days)
2006	UFPOs, storekeepers/store-in-charge	Monitoring and supervision of LMIS reporting, including SDP level reporting	934	1
2006	Divisional directors (FP), deputy directors (FP), and assistant directors	Monitoring and supervision of logistics system	132	1
TOTAL			1,066	

APPENDIX E

OVERSEAS TRAINING SPONSORED BY DELIVER (2000–2006)

Year	Training Type	Country Training Held	No. of Participants
2000–2001	Global contraceptive security	Turkey	4
2002–2003	Advanced logistics management	USA	1
2002–2003	Monitoring and evaluation	Thailand	2
2002–2003	Contraceptive security	Malaysia	11
2003–2004	Advanced logistics management	USA	1
2003–2004	Monitoring and evaluation	Thailand	6
2004–2005	Supply chain logistics	Ghana	2
2004–2005	Monitoring and evaluation	Thailand	7
2004–2005	Study tour	India	3
2004–2005	Supply chain logistics	Ethiopia	2

APPENDIX F

LOGISTICS MONITORING VISITS (2001–2006)

Year	Number of Visits Made				Total
	Warehouses	Upazila Stores	SDPs	NGOs	
2001–2002	62	516	143	277	998
2002–2003	82	539	141	384	1,146
2003–2004	86	458	381	246	1,171
2004–2005	108	434	1,338	244	2,124
2005–2006	196	190	705	190	1,281
Total	534	2,137	2,708	1,341	6,720

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