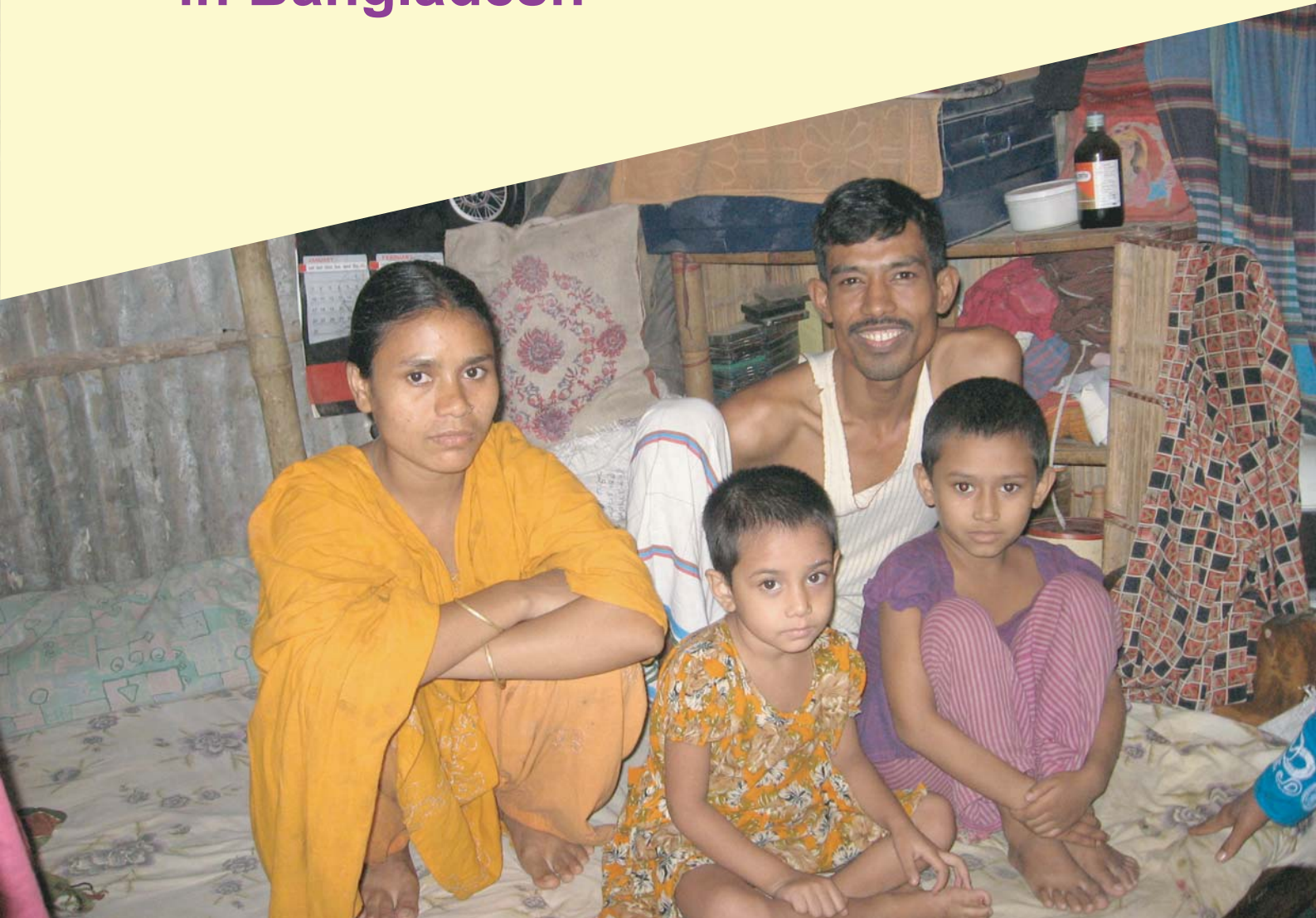


# Human and Economic Impact of RH Supplies Shortage & Stock-outs in Bangladesh



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## ***EXECUTIVE SUMMARY***

### ***Background***

Bangladesh with around 150 million population is one of the largest and most densely populated among the least developed countries. The population of Bangladesh is increasing at the rate of 1.43% (2 million) per year and Contraceptive Prevalence Rate (CPR) has reached 55.8% (BDHS, 2007). To achieve the Total Fertility Rate (TFR) of 2.2 by 2010, CPR should be increased to 72 % coupled with a progressive method mix supported by a robust BCC campaign.

In the Health, Nutrition and Population Sector Program (HNPS), the services like Family Planning, Menstrual Regulation (MR), Emergency Obstetric Care (EOC) and supply of medicines of DDS kits are included in RH services. Incidence of shortage/stock out/irregular supply of short-term and some long-term methods has been noticed occurring at repeated intervals during the last few years. This is a challenge to the national health and population programme having implications for the national economy. Among the supplies, Bangladesh Family Planning Programme procures the contraceptives and other RH commodities with World Bank credit money which is adequately available, but procurement is both time-consuming (18-24 months) and cumbersome. In addition, a number of FWA units have been suffering from inadequate field level manpower.

FPAB is implementing **Project Resource Mobilization and Awareness (PRMA)** in Bangladesh as an important catalyst to increase the financial and political commitment to sustainable RH supplies. The accompanying study has been conducted to understand various human impact of shortage/stock-out/irregular supply of contraceptives at the level of household as well as on national economy, and to examine the sufficiency of allocation of funds vis a vis need of GoB financial mechanism for it.

### ***Objectives of the Study***

1. To assess human impact, i.e., how much will be an increase in population and sufferings of the affected people due to commodity shortage/ stock outs/irregular supply.
2. To assess impact on national economy because of sufferings in the population due to commodity shortage/stock outs/irregular supply.
3. To ascertain the trends, sufficiency and priority for allocation of fund for health, RH and commodity, and to assess the trends in utilization of the funds.

### ***Methodology***

The research design has two broad segments - quantitative and qualitative research. The core research has been conducted with the contraceptive users (of oral pill, injectables, and condom) at 30 FWA units who have suffered at least once due to shortage/stock out/irregular supply during one year period preceding the survey (i.e., during March 2008-February 2009). The following data/information collection instruments were administered:

- Individual Interviews with 2756 Users (Quantitative)
- Individual Interview with 205 Sufferers (Quantitative)
- Focus Group Discussion (FGDs) (Qualitative)
- Group Discussions (GDs) at District Level (Qualitative)
- Group Discussions (GDs) at DGFP level (Qualitative)
- Data/Information obtained through Formats (Quantitative)

The findings were analyzed to prepare the draft report for submission to PRMA, FPAB and SARO/IPPF for their comment. The key findings with associated implications will be presented at a national seminar. After receiving comments on those from the national seminar, the report will be finalized by the Team Leader and Consultants.

### ***Current System of Procurement, Supply, and Monitoring***

#### **System of Procurement**

The current procurement activities from the beginning to end have 19 steps. If these steps are complied timely, 18 months are required for completion. Procurement of RH commodities, both off-shore and inland, is bound by rules. Consultation with and concurrence by Funding Partners (World Bank, donors) are needed to finalize the deal. It is usually time-consuming, and the system allows dual control, delay and inefficiency. Knowledgeable field managers viewed the system of procurement as not free from blemish.

#### **System of Supply and Distribution**

Supply process is initiated from the Central Warehouse (CWH) of FP Directorate at Dhaka, and then to 21 regional warehouses located at District HQs, to all Upazila FP stores (482 upazilas) and from there to the Service Delivery Points (SDPs) consisting of FWCs, FWAs, and NGO clinics. And finally, RH-FP materials (contraceptives, kits, MSR items) are being distributed/administered by FWAs and FWVs and other concerned to clients/users. The clients/users receive the supplies at home, satellite clinics, FWCs, MCWCs, community clinics (where this clinic is functioning) and also at NGO clinics. The main source of supply of RH-FP commodities is FWAs. They are supposed to make home visit to ELCOs once in every two months. In focus group discussions (FGD) with the “Sufferers”, FWAs were also identified as source in nearly 80% supplies to the clients. In case of stock-out/shortages, some field managers address situations through revising their distribution plan for RH commodities to meet the priority needs of users on a selective basis. Switch-over of FP methods is also encouraged by them.

#### **Monitoring System**

The national monitoring system is based on Form7 and Form7-B submitted to MIS by Warehouses and Upazila FP offices respectively. The Monthly Logistics Report is a monitoring tool which is providing useful “information on monthly distribution and stock balance of all major contraceptives and DDS kits of warehouses/upazila stores”. There is no forecasting mechanism to project commodity requirements for a growing population with diversified needs (of method-mix). The monitoring at the field level is also weak.

#### **Status of Stock-out Situation**

Regarding the status of stock-out/shortages of RH commodities during the last one year (November 07 to October 2008) the “Family Planning Monthly Logistics Report of DGFP” shows that stock-out was experienced by a large number of upazilas (44.58% highest, 24.16% lowest). Field Managers, in their interviews, admitted with hesitation that stock-out situation prevailed during the last one year in one FP method or the other.

#### **Causes of Stock-out**

The causes of stock-out as reported by the Field Managers and other concerned officials of the FP Department include irregular supply, bottlenecks in procurement process, dualism, lack of forecasting mechanism to assess/project needs, and overall management inefficiency.

### ***Discrepancy in Number of Users: Official Data vs. Field Reality***

The question of discrepancy, and finding out of real number of users and actual number of sufferers aroused when the data collected through a specific format from 437 FWAs didn't match with that of the data collected through Pre-test and small-scale field survey. As a result the study strategy was changed and data were collected through 2,756 household interviews with the users of 3 major FP methods (pill, injectables, and condom) in 30 FWA units. In study, the statistical discrepancy found in number of users between FWA register and the actual users of FWA unit was 4.8%, where real users were 95.2% and 132 were non users (out of 2,756 household respondents interviewed) during any time in the last 365 days preceding the survey. Out of the 95.2% real users, 83.5% got regular supply and 11.8% did not receive regular supply. However, according to FWA reporting – stock out or shortage or irregular supply of these 3 methods is 0.6% as against 11.8% found in the field survey.

Of this 11.8%, 7.4% (205 persons) are “sufferers” and 4.3% are “non-sufferers” (switched to other method). Lack of effective supervision of field visit of the FWAs and lack of updating of the FWA register book are thought as contributors to this type of statistical discrepancy.

At the second stage, *Individual level sufferer interview* were conducted with 205 sufferers suffering from various problems due to shortage/stock outs/irregular supply of oral pill, or injectables, or condom during last one year. The 7.4% sufferers (205 persons) include 3.7% sufferers of oral pill, 2.1% sufferers from injectables, and 1.6% sufferers of condom.

### ***Demographic and Socio-economic Characteristics of Sufferers***

The average age of the users in the sample is 32 years. A large part of the users in sample (27.7%) are in the age group of 26-30 yrs. The average household size of ‘suffering household’ is 4.5. More than 98% of the members fall into categories of married and unmarried. Primary level education dominates over other categories of education. About 39% of the members of ‘age 5 or above’ have primary education. About 76% are literate and 24% illiterate. Illiteracy is higher pronounced among female members (56.5%) than that among male members (43.5%). Majority of the members (29.9%) by occupation constitute the student group followed by housewives (23.5%). It was also found that 68.8% of the sample households have their own agricultural land and 99% have their own homestead. A 14.1% are living in the houses which are vulnerable. About 77% of households can meet their educational and 52% can meet their medical expenses. The yearly income per household is Tk. 66,826. For 50.2% of the suffering households the annual income is less than Tk.50,000.

### ***Impact on individuals/households***

#### ***Contraceptive practice of three major contraceptives***

Among the number of actual sample users, majority 56.9% use pill as their contraceptive method, followed by 27.5% and 15.6% for injection and condom respectively. At the early stage of their married life, they use pill as their prime method (68.9%). However, at the later stage, the highest prevalent method was condom (93.8%).

#### ***Sufferer situation of shortage/stock-out/irregular supply***

Of the users who were facing with the irregular supply, about 63% suffered from different dimensions of ailment and set-back like physical, psychological, social, income generating, and household related activities.

Out of 205 sufferers, about 55% suffered physically. Among the physical sufferings, headache has been found as the prime causes of physical sufferings (18.9%), followed by general weakness (15.6%). Each physical sufferer suffered from more than one problem. About 79% suffered psychologically. Anxiety and fear of being pregnant had been found to be the two major causes of psychological sufferings. About 25% faced problems regarding income generating activities (IGA) and 31% suffered from household related activities, and 6% suffered from activities related to family care. In IGA, the most frequent loss happened from the absence to the non-agricultural sector. Each suffered from more than one problem regarding IGAs. On an average, each suffered from more than two problems regarding household related activities and family care. On an average each social sufferer suffered from more than one problem. About 31% of the total sufferers incurred medical costs due to their physical or health related problems/sufferings. The average cost per suffering household stood at Tk. 1,286. Medicine was found as the major cost item which is slightly higher than that of the transportation costs. Among the total users in the sample, 0.8% suffered from unexpected pregnancy. More than one alternative sources of having FP methods were mentioned by each sufferer.

### **Income Loss to Sufferers**

About 64% of the total sufferers lost some portion of their net income. The average net annual income loss per suffering household amounted to Tk. 1,026. Among the income losers, more than 80% lost their portion of net income which is below 2.5%, and 70% of the income losers lost income less than Tk. 1,000. The highest loss incurred is found for the stock-out of condom (36%), followed by oral pill (34%), and injectables (30%) respectively. As for the loss of hours, the annual mean hours lost per suffering household for physical sufferers was 1,344 hours ; 936 hours for psychological sufferers; 121 hours for IGAs; 394 hours for disruption of household activities; and 21 hours for disruption of social activities.

### ***Impact of Shortage/Stock-out/Irregular supply on National Economy***

Estimates show that the annual total number of users suffering from stock out/shortage/irregular supply of three family planning commodities (oral pill, injectables and condom) is 160,585 in Bangladesh. Nationally, estimates show that the total loss of time of the sufferers (during last year) would be about 4,306 million hours, money value of which amounted to Tk. 61,353 million. Loss of net income at the national level due to shortage/stock out/irregular supply amounted to Tk. 1,010.7 million. Medical cost, at the national level, incurred due to shortage/stock out/irregular supply amounted to Tk. 618.9 million. Loss of time from physical or health related problems was 1,132.4 million hours, money value of which amounted to Tk. 16,136.6 million for the sample period nationally. Loss of time of the sufferers those suffered psychologically stood at 1,154.4 hours which amounted to Tk. 16,450 million for the sample period nationally. Loss of time of the sufferers those suffered from disruption of income generating activities (IGAs) had been calculated at 46.57 million hours, and its value amounted to Tk. 663.7 million. Loss of time due to disruption of household related activities at the national level has been calculated at 1,949.4 million hours and amounted to loss of Tk. 27,778.9 million. Loss of time due to disruption of social activities at the national level due to shortage/stock out/irregular supply had been calculated at 23.4 million hours and its money value amounted to Tk. 322.8 million.

### ***Adequacy of Financial Support and Priority of Health, Nutrition and Population Sector Programme***

It is well-established that Health-Nutrition-Population Sector is priority one and to carry on a major thrust, the government has brought the Ministry of Health and Family Welfare under Medium Term Budgetary Framework (MTBF) from 2006-07. The government has also been increasing allocation (13-15%) in the ADP almost every year. But on close examination of R-ADP allocations and expenditures for last 3 years from FY 2005-06 to FY 2007-08 for the national FP Programme a quite different scenario had been captured. Allocation of fund was erratic with rise and fall – from Tk.9767.10 million in FY 2005-06 to Tk. 12153.94 million in FY 2006-07 (an increase of 24.44%) to Tk. 9,633.62 million in FY 2007-08 (a decline of 21.26%). Even the allocation of FY 2007-08 compared to allocation of FY 2005-06 decreased by 1.36%. Again, allocations/expenditures for contraceptive procurement under non-development budget was ‘Zero’. The pattern of financing for contraceptives procurement was one-sided and single dimensional (development budget only); for DDSkits, allocations under development budget (for last 3 years) fluctuated beyond a reasonable degree – from “0.0” (FY 2005-06) to Tk. 968.90 million (FY 2006-07), to Tk.134.21 million (FY 2007-08) showing dramatic rise and fall. Allocation for DDS Kits under non-development budget was ‘nil’ in FY 2007-08. The scenario in its totality gave an impression of infinite uncertainty in procurement planning. The result was shortage/stock-outs/irregular or delayed supply from time to time as it had been revealed in this study.

The government of Bangladesh spends not more than US \$ 5 per capita annually for HNPS services which is meager to the ever growing needs of an expanding population. Although, the issue of how much money is needed for what purpose is debatable, the central point focused was absorption capacity and efficiency of spending the available resources. Pouring in more resources may not be much difficult for Health-Population sector-wide programme, but the real difficulty lies with management efficiency to get the investment hit at the bottom, where it is needed most, to ensure services to the rural poor deprived of most of the basic needs of subsistence living.

#### ***Key Findings***

The key concluding findings of this study to ascertain the human impact of stock-out/shortage/irregular supply of three select family planning commodities (oral pill, injectables, and condom), and its impact on national economy during last one year are as follows.

- Total number of annual users suffering from stock out, shortage and irregular supply of three family planning commodities – oral pill, injectables and condom – is 160,585 in Bangladesh.
- During the last year preceding the survey a 7.4% of the users of oral pill, injectable, and condom faced shortage/stock-out/irregular supply and as a result suffered from various problems. Nationally, the estimates show that the total loss of time of the sufferers (during last year) would be about 4,306 million hours, money value of which amounted to Tk. 61,353 million.
- Number of unexpected pregnancy due to shortage/stock out/ irregular supply of these 3 methods have been calculated at 159,800, of which 90,240 (57%) went for MR and 22,560 for abortion. Thus, shortage/stock out/ irregular supply of these 3 methods are responsible for 47,000 additional child birth due to unexpected pregnancy which had contributed to the incremental population during last year.

- There are 19 steps in the Procurement process which take 18 to 24 months and there is lack of proper forecasting mechanism for projection of procurement needs.
- There is acute shortage of field staff for motivation and service-delivery, and they lack in spirit, motivation and skill-based training.

The programme requires multiple inputs and safeguards from different authorities to reach a sustainable level.

### **Highlights of Some Field Problems**

From field Investigators interaction with FP users and sufferers of stock-out/shortages of RH commodities, major problems that could be gleaned on the surface were inefficient management of FWA register, lack of clients care, negligence to ‘cafeteria’ approach to motivate clients, irregular household visits, and inadequate counseling of ELCOs by FWAs.

### ***Recommendations***

#### **Sufferers Opinion about Shortage/Irregular Supply**

Sufferers expressed that authorities should supply RH-FP commodities in sufficient quantity and on regular basis. FWAs and other field staff should not charge money for providing injectables, oral pill, and condom. Besides, home delivery, depot holder system (nearest to clients housing area) should be established to make RH commodities readily available in times of need. Supervision of field staff by responsible supervisors should be geared up.

#### **Service Providers and Managers**

Service Providers and Managers consider simplification of procurement procedure is critically important to avert stock-out situation. Besides, to appropriate forecasting of actual needs of RH-FP commodities, a mechanism must be evolved and set-up as safeguard against hazards from shortage or stock-out situation. The programme managers also viewed the logistic system as a part of the entire gamut of organization-management services system and suggested a holistic approach to sustainable improvement in the complex sector of Health-Nutrition-Population planning and development.

### ***Summary of Recommendations***

- **Streamline** procurement system – reduce steps of bureaucratic bottlenecks, cumbersome and time-consuming formalities.
- **Effect** need-based, bottom-up procurement plan.
- **Encourage, promote/patronize for local production** (through providing incentives) of quality FP-RH commodities, particularly contraceptives such as pill, condom, injectables etc. in public and private sectors.
- **Empower District FP Authorities** to make local procurement of available RH commodities to meet shortages in the supply line/stocks.
- **Allocate fund from Revenue Budget** of the government for procurement/production of RH commodities to reduce donor-dependence with the objective of achieving self reliance and sustainability.
- **Establish a sound monitoring system**, a forecasting mechanism of procurement and supply.

- **Ensure training and re-training** of field functionaries to build up their work skill (motivation, service-delivery, record-keeping, reporting, monitoring etc.). Capacity building should be given high priority.
- **Undertake basic studies** to develop suitable contraceptives for use by the ever growing population of Bangladesh. This is an area neglected most. Experience shows that most of the hormonal contraceptives are not suitable for women of Bangladesh.
- **Expand and equip storage** facilities to have a capacity for 24 months stocks in stores at different levels (regional/local).
- **Increase manpower at the field level** to regularize home visit and proper service delivery near the door steps of clientele. **Alternatives/options to increased manpower** in the field should also be seriously examined, pilot tested and adopted, if found economically-socially suitable/viable.
- **Utilize the services of NGOs in service delivery and monitoring** where there is shortage in manpower to strengthen home visit and service delivery.
- **Strengthen FP programme by professional people** (population-FP) of the Department (cadre) to get the best out of present day bureaucracy, democratic culture and specialization.

*In view of the findings of the study and recommendations by Programme Managers, Service Providers and Clients, the study team suggest to institute a full-fledged Project Resource Mobilization and Awareness (PRMA) Unit for effective monitoring of procurement and supply activities of RH-FP commodities. PRMA may also be given the responsibility of advocacy at various levels. The study team also suggests a time-bound implementation plan for implementation of all feasible recommendations for the greater interest of the nation.*