

# Saving Lives of Women and Children:

## Systems Strengthening Approaches to Improve Access to Contraceptives in Bangladesh



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Systems for Improved Access  
to Pharmaceuticals and Services

Access to family planning (FP) commodities saves the lives of women and their children by allowing women to delay, limit, and time and space pregnancies in a healthy manner. Recognizing this, the Government of Bangladesh (GoB) has made significant progress in increasing access to family planning methods over the past decade. From 2001 to 2011, the total fertility rate decreased by 23%, from 3.0 to 2.3 births per woman and the percentage of married women with an unmet need for FP decreased from 17% to 14%.<sup>1</sup> Similarly, the maternal mortality ratio decreased by 40% from 322 to 194 maternal deaths per 100,000 live births during the same time period.<sup>2</sup>

To continue this progress, GoB, as part of the Family Planning 2020 global partnership, has further committed to increasing adolescent-friendly sexual reproductive health and family planning services, providing them at one-third of maternal, newborn, and child health centers and reducing the total fertility rate to 2.0 by 2016 and 1.7 by 2021.<sup>3</sup> However, to meet these targets, ensuring access to family planning commodities to women and their partners is essential.

In 2013, the GoB, through support from donors including the US Agency for International Development (USAID), invested over 35 million US dollars (USD) on family planning commodities.

This investment led to more than USD 28 million in savings in direct health care spending by preventing:

- **760,016** unintended pregnancies
- **498,996** live births
- **948** maternal deaths
- **6,565** deaths among children under 5 years of age attributable to sub-optimal birth spacing<sup>4</sup>

### SIAPS Works to Improve Access to Contraceptives

Ensuring access to life-saving family planning methods requires strengthening the national supply chain system so that quality products are available when and where they are needed. Since 2011, the USAID-funded Systems for Improved Access to Pharmaceuticals and Services (SIAPS) Program has been employing a systems approach to pharmaceutical supply chain management that includes:

- Strengthening governance of supply chain functions within the Directorate General of Family Planning (DGFP)
- Reforming procurement systems and streamlining procurement processes
- Building the capacity of supply chain managers and storekeepers
- Increasing the availability of data for decision making

<sup>1</sup> Bangladesh Demographic and Health Survey (BDHS) 2011. NIPORT, Mitra and Associates and ICF International. Bangladesh Demographic and Health Survey 2011 Preliminary Report. Dhaka, Bangladesh, and Calverton, Maryland, USA.

<sup>2</sup> National Institute of Population Research and Training (NIPORT), MEASURE Evaluation, and icddr,b. 2012. Bangladesh Maternal Mortality and Health Care Survey 2010. Dhaka, Bangladesh: NIPORT, MEASURE Evaluation, and icddr,b.

<sup>3</sup> <http://www.familyplanning2020.org/countries/all-countries/bangladesh#commitment>

<sup>4</sup> Marie Stopes International (MSI) Impact Calculator; downloaded from [mariestopes.org/impact-2](http://mariestopes.org/impact-2)

### Improved Coordination in Forecasting and Supply Planning Leads to Cost-Savings

In 2012, SIAPS worked with the DGFP to create the Forecasting Working Group. The group is tasked with forecasting medicine needs and ensuring that resources are allocated to meet these needs. With SIAPS support, a five-year (2012-2016) forecast and a two-year supply plan were developed for family planning commodities. As a result of this exercise, DGFP decided not to move forward with an anticipated procurement of 65,000 implants in FY 2012-13, leading to a cost-savings of USD 1.38 million.<sup>5</sup> Similarly, in the following year, because of coordination between the working group and other stakeholders, DGFP reached a consensus not to procure 410,000 implants for FY 2014-15. This led to approximately USD 4.1 million in savings.

### Improved Governance Leads to Streamlined Procurement Processes

SIAPS worked closely with the GoB to develop the Supply Chain Management Portal (SCMP), an online procurement system that allows DGFP to track and monitor the procurement process of FP commodities. The portal provides information on delays in procurement processes and alerts managers so that appropriate action can be taken. The system has reduced procurement lead time by an average of 32.8 weeks since 2010, facilitating the timely procurement and distribution of family planning commodities.<sup>6</sup>

### Improved Logistics Information Systems Contributes to a Responsive Supply Chain

SIAPS developed a Logistics Management Information System (LMIS) that collects data on consumption and availability of family planning commodities from the district and sub-district (upazila) levels throughout the country. Data from service delivery points is consolidated and entered into the SCMP, allowing managers to respond quickly and efficiently to avoid stock-outs and overstock of FP commodities. This data has been used to plan for appropriate distribution as well as used to inform forecasting and supply planning at the national level.<sup>7</sup>

## Why Invest in Systems Strengthening Approaches to Supply Chain Management?

A recent analysis of the LMIS data showed a reduction of stock-outs of IUDs and implants as well as a continuous supply of condoms, oral pills, and injectables at DGFP warehouses from 2011 to 2013. Similarly, stock-outs of family planning commodities at upazila stores have been reduced by 85% since 2009.

Increasing availability of family planning commodities requires a systems approach that generates an efficient and responsive supply chain. This begins with evidence-based forecasting and supply planning of essential commodities, efficient and timely procurement processes, and effective logistic management information systems that make data accessible to decision makers so that medicines are available where and when they are needed.

**Table 1. Health Impacts of Investing in Family Planning Commodities<sup>3,8,9</sup>**

		2011	2012	2013
Total FP commodities distributed to service delivery points <sup>5</sup>	<i>Condoms</i>	126,750,000	135,540,000	144,030,000
	<i>Oral pills</i>	109,690,000	109,210,000	106,130,000
	<i>Injectables</i>	13,750,000	13,790,000	13,660,000
	<i>IUDs</i>	274,346	285,547	263,020
	<i>Implants</i>	257,973	254,388	274,192
Population growth rate for women (age 15-49)		1.8%	1.7%	1.6%
Unintended pregnancies averted		1,014,601	895,774	760,016
Unintended live births averted		666,147	588,129	498,996
Maternal deaths averted		1,266	1,117	948
Child (under 5) deaths averted due to birth spacing		8,764	7,737	6,565
<b>Direct healthcare costs savings (USD)</b>		<b>\$38,400,000</b>	<b>\$33,900,000</b>	<b>\$28,700,000</b>

<sup>5</sup> Technical Brief: National Reproductive, Maternal and Child Health Commodities Forecasting of Bangladesh for FY 2014-15 and DGFP FWG meeting notes; held in 2012, 2013 and 2014.

<sup>6</sup> M G Kibria, et al, Use of a Supply Chain Management Portal to Ensure an Uninterrupted Supply of Contraceptives in Bangladesh, 2013.

<sup>7</sup> M G Kibria, et al, Impact of a Computerized Inventory Management System in Ensuring Commodity Security of Contraceptives in Bangladesh, 2013.

<sup>8</sup> DGFP Supply Chain Information Portal-SCIP; available at [www.dgfp.lmis.org](http://www.dgfp.lmis.org). Accessed on September 24, 2014.

<sup>9</sup> MOHFW Supply Chain Management Portal-SCMP; available at <https://www.scmpbd.org/>. Accessed on September 24, 2014.