# STRATEGIC PLAN
# FOR
# HEALTH, POPULATION & NUTRITION SECTOR DEVELOPMENT PROGRAM (HPNSDP)
## 2011 - 2016

**APRIL 2011**

Planning Wing
Ministry of Health and Family Welfare
Government of the People's Republic of Bangladesh

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# FOREWORD

I am delighted that the 'Strategic Plan for Health, Population and Nutrition Sector Development Program (HPNSDP) has been formulated by the Ministry of Health and Family Welfare as an improved framework for the HPN service delivery and systems to support the next sector program (2011-16) commencing July 2011. This strategic document supports the goal of ensuring quality and equitable health care for all citizens of Bangladesh and is in line with the relevant national policies.

The strategic plan describes Government's intentions for developments and innovations of the next sector program, taking into account the strengths, lesson learned and challenges reflected through the past HPSP and the current HNPSP implementation. Scaling up of HPN services, equity in health care, revitalization of Community Clinics as part of a functional Upazila Health System, CDC and NCD priority services, health system strengthening and mainstreaming nutrition are the various 'drivers', identified for achieving improved health status of the poor, women and the marginalized. This reflects the directions and determination of the Government's commitment to serve the people with their needs of health, population and nutrition services, as stated by the Honorable Prime Minister while addressing the 65th General Assembly of the UN on progress in attaining the MDGs:

> *"Doubling the percentage of births attended by a skilled health worker by 2015 (from the current level of 24.4%) through training an additional 3000 midwives, staffing all 427 sub-district health centres to provide round-the-clock midwifery services, and upgrading all 59 district hospitals and 70 Mother and Child Welfare Centres as centres of excellence for emergency obstetric care services. Bangladesh will also reduce the rate of adolescent pregnancies through social mobilization, implementation of the minimum legal age for marriage, and upgrading one third of MNCH centres to provide adolescent friendly sexual and reproductive health services. Bangladesh will halve unmet need for family planning (from the current level of 18%) by 2015; and ensure universal implementation of the Integrated Management of Childhood Illness Programme".*

I appreciate the hard work of the DGHS, DGFP, all LDs and PPC members under the guidance of the Planning Wing, who participated actively in the preparation of the document with the assistance of local and expatriate consultants. It has been prepared through a wide consultation process. I thank all who directly or indirectly have supported and contributed to the preparation of this document. We all must work with utmost dedication for implementation of the sector development program involving all stakeholders including the Development Partners (DPs) to assist in the process of best funding modality, monitoring the future activities with results framework for smooth implementation of the program, which will have system-wide development impact. We must be able to respond quickly and appropriately to face the challenges and opportunities at hand.

The DPs have been playing a significant role in the HPN sector development of Bangladesh. I expect them to continue with their support in line with principles of Paris Declaration. I hope that the DPs will show their interest with a higher level of support for the next sector development program and that we will remain hand-in-hand in implementing the HPNSDP.

Dr. A. F. M. Ruhal Haque
Minister
Ministry of Health and Family Welfare

# ABBREVIATIONS

| | |
|---|---|
| ABCN | Area Based Community Nutrition |
| ADP | Annual Development Program |
| AIDS | Acquired Immune Deficiency Syndrome |
| AMC | Alternate Medical care |
| ANC | Ante Natal Care |
| APIR | Annual Program Implementation Report |
| APR | Annual Program Review |
| ARI | Acute Respiratory Infection |
| BBS | Bangladesh Bureau of Statistics |
| BCC | Behavioral Change Communication |
| BCPS | Bangladesh College of Physicians and Surgeons |
| BDHS | Bangladesh Demography and Health Survey |
| BHW | Bangladesh Health Workforce |
| BMA | Bangladesh Medical Association |
| BMDC | Bangladesh Medical and Dental Council |
| BMMS | Bangladesh Maternal Mortality Survey |
| BMRC | Bangladesh Medical Research Council |
| BNC | Bangladesh Nursing Council |
| BNNC | Bangladesh National Nutrition Council |
| BPC | Bangladesh Pharmacy Council |
| BSMMU | Bangabandhu Sheikh Mujib Medical University |
| CBO | Community Based Organization |
| CC | Community Clinic |
| CCHPU | Climate Change and Health Promotion Unit |
| CCMG | Community Clinic Management Group |
| CCR | Clients Charter of Rights |
| CCU | Coronary Care Unit |
| CDC | Communicable Diseases Control |
| CES | Cluster Evaluation Survey |
| CEmOC | Comprehensive Emergency Obstretic Care |
| CHCP | Community Health Care Provider |
| CHT | Chittagong Hill Tracts |
| CME | Centre for Medical Education |
| CMMU | Construction and Maintenance Management Unit |
| CMSD | Centre for Medical Store Depot |
| CNU | Child Nutrition Unit |
| CPR | Contraceptive Prevalence Rate |
| CSBA | Community based Skilled Birth Attendant |
| CSO | Community Social Organization |
| CVD | Cardio-Vascular Diseases |
| DALYs | Disability Adjusted Life Years |
| DDS | Drugs and Dietary Supplements |
| DG | Director General |
| DGDA | Directorate General of Drug Administration |
| DGFP | Directorate General of Family Planning |
| DGHS | Directorate General of Health Services |
| DMIS | Data Management Information System |
| DNS | Directorate of Nursing Services |
| DOTS | Direct Observed Treatment-Short Course |
| DPHE | Department of Public Health Engineering |
| DPs | Development Partners |
| DRA | Drug Regulatory Authority |
| DSF | Demand Side Financing |
| EBF | Exclusive Breast Feeding |
| EDL | Essential Drugs List |
| EmOC/EOC | Emergency Obstetric Care |
| ENC | Essential Newborn Care |
| EPI | Expanded Program on Immunization |

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| ESD | Essential Service Delivery |
| ESP | Essential Service Package |
| FCTC | Framework Convention on Tobacco Control |
| FHA | Female Health Assistant |
| FM | Financial Management |
| FMAU | Financial Management Audit Unit |
| FMR | Financial Monitoring Report |
| FP | Family Planning |
| FWA | Family Welfare Assistant |
| FWV | Family Welfare Visitor |
| FYP | Five year Plan |
| GAVI | Global Fund for Vaccination Initiative |
| GDP | Gross Domestic Product |
| GEV | Gender, Equity and Voice |
| GFATM | Global Fund for AIDS Tuberculosis and Malaria |
| GIS | Geographic Information System |
| GMP | Growth Monitoring and Promotion |
| GMP | Good Manufacturing Practice |
| GNSP | Gender, NGO and Stakeholder Participation |
| GOB | Government of Bangladesh |
| GP | General Practitioner |
| HA | Health Assistant |
| HED | Health Engineering Department |
| HEU | Health Economics Unit |
| HFA | Health For All |
| HFRG | Health Financing Resource Group |
| HFWC | Health and Family Welfare Centre |
| HIS | Health Information System |
| HIV | Human Immunodeficiency Virus |
| HL | Hearing Loss |
| HNP | Health Nutrition Population |
| HNPSP | Health , Nutrition and Population Sector Program |
| HPN | Health Population Nutrition |
| HPNSDP | Health, Population and Nutrition Sector Development Program |
| HPSP | Health and Population Sector Program |
| HR | Human Resource |
| HRH | Human Resource for Health |
| HRD | Human Resources Development |
| HSSP | Hospital Social Service Program |
| ICDDR,B | International Centre for Diarrheal Diseases Research, Bangladesh |
| ICT | Information Communication Technology |
| ICDP | Integrated Child Development Program |
| IDA | International Development Association |
| IDS | Integrated Disease Surveillance |
| IEC | Information, Education and Communication |
| IEDCR | Institute of Epidemiology, Disease Control and Research |
| IEM | Information Education Motivation |
| IHD | Ischemic Heart Disease |
| IMCI | Integrated Management of Childhood Illness |
| IMR | Infant Mortality Rate |
| IPH | Institute of Public Health |
| IPHN | Institute of Public Health Nutrition |
| IPMS | Individual Performance Management System |
| IST | In Service Training |
| IT | Information Technology |
| ITN | Insecticide Treated Net |
| IUD/ICD | Intra Uterine /Contraceptive Devise |
| IYCF | Infant and Young Child Feeding |
| JCS | Joint Cooperation Strategy |
| JFA | Joint Financing Arrangement |
| JNM | Junior Nurse Midwife |
| LAPM | Long Acting Permanent Method |
| LCG | Local Consultative Group |

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|---|---|
| LDs | Line Directors |
| LLP | Local Level Planning |
| LLIN | Long Lasting Impregnated Net |
| LMIS | Logistic Management Information System |
| M&E | Monitoring and Evaluation |
| MATS | Medical Assistant Training School |
| MBT | Medical Biotechnology |
| MCH | Maternal and Child Health |
| MCRH | Maternal, Child and Reproductive Health |
| MDGs | Millennium Development Goals |
| MDR | Multi Drugs Resistance |
| MDTF | Multi Donor Trust Fund |
| MEU | Monitoring and Evaluation Unit |
| MICS | Multiple Indicators Cluster Survey |
| MIS | Management Information System |
| MMR | Maternal Mortality Ratio |
| MNCH | Maternal, Neonatal and Child Health |
| MNH | Maternal and Neonatal Health |
| MNT | Measles and Neonatal Tetanus |
| MOA | Ministry of Agriculture |
| MOC | Ministry of Commerce |
| MOCHTA | Ministry of Chittagong Hill Tracts Affairs |
| MOE | Ministry of Education |
| MOF | Ministry of Finance |
| MOFDM | Ministry of Food and Disaster Management |
| MOFL | Ministry of Fisheries and Livestock |
| MOHFW | Ministry of Health and Family Welfare |
| MOI | Ministry of Information |
| MOLGRDC | Ministry of Local Government Rural Development and Cooperatives |
| MOLJPA | Ministry of Law, Justice and Parliamentary Affairs |
| MOIn | Ministry of Industries |
| MOPME | Ministry of Primary and Mass Education |
| MOSW | Ministry of Social Welfare |
| MOU | Memorandum of Understanding |
| MOWCA | Ministry of Women and Children Affairs |
| MOYS | Ministry of Youth and Sports |
| MR | Menstrual Regulation |
| MSR | Medical and Surgical Requisite |
| MTBF | Medium Term Budget Framework |
| MTR | Mid Term Review |
| MWM | Medical Waste Management |
| NASP | National AIDS/STD Program |
| NCD | Non Communicable Diseases |
| NGO | Non Government Organization |
| NID | National Immunization Day |
| NIPORT | National Institute of Population Research and Training |
| NIPSOM | National Institute of Preventive and Social Medicine |
| NMR | Neonatal Mortality Rate |
| NNP | National Nutrition Program |
| NNS | National Nutrition Service |
| NPSU | NGO and Private Sector Unit |
| NSAPR | National Strategy for Accelerated Poverty Reduction |
| NT | Neonatal Tetanus |
| NTC | National Technical Committee |
| NTCC | National Tobacco Control Cell |
| NTD | Neglected Tropical Diseases |
| NTTB | National Taskforce on Biotechnology in Bangladesh |
| NVAC | National Vitamin A Campaign |
| OP | Operational Plan |
| OPMS | Organizational Performance Management System |
| OTS | Online Tracking System |
| PAC | Post Abortion Care |
| PBF | Performance Based Financing |

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|---|---|
| PCB | Pharmacy Council of Bangladesh |
| PHC | Primary Health Care |
| PHED | Public Health Engineering Department |
| PIP | Program Implementation Plan |
| PLMC | Procurement and Logistic Monitoring Cell |
| PMMU | Program Management & Monitoring Unit |
| PNC | Post Natal Care |
| PPC | Program Preparation Cell |
| PPP | Public Private Partnership |
| PPR | Public Procurement Rules |
| PW | Planning Wing |
| PWD | People With Disability |
| PWD | Public Works Department |
| QA | Quality Assurance |
| QATG | Quality Assurance Task Group |
| R&D | Research and Development |
| RDT | Rapid Diagnostic Tool |
| RNM | Registered Nurse Midwife |
| RPA | Reimbursable Project Aid |
| RTA | Respiratory Tract Ailment |
| RTI | Reproductive Tract Infection |
| SIA | Supplementary Immunization Activities |
| SOP | Standard Operating Procedure |
| SS | Sero-surveillance Survey |
| STD | Sexually Transmitted Disease |
| STH | Soil Transmitted Helminthes |
| STI | Sexually Transmitted Infection |
| SVRS | Sample Vital Registration System |
| SWAp | Sector Wide Approach |
| SWPM | Sector Wide Program Management |
| TA | Technical Assistance |
| TFR | Total Fertility Rate |
| TOR | Terms of Reference |
| TQM | Total Quality Management |
| TSC | Technical Steering Committee |
| TTU | Technical Training Unit |
| UESD | Utilization of Essential Service Delivery |
| UHC | Upazila Health Complex |
| UHFWC | Union Health and Family Welfare Centre |
| UHMC | Upazila Health Management Committee |
| UHS | Upazila Health System |
| UN | United Nations |
| UP | Union Parishad |
| UPHCP | Urban Primary Health Care Project |
| WB | World Bank |
| WHO | World Health Organization |
| WID | Women In Development |
| WMS | Waste Management System |
| XDR | Extensively Drug Resistant |

# EXECUTIVE SUMMARY

Health, Population and Nutrition (HPN) are intimately related and complimentary to each other, both as an outcome and also as an input. HPN status is universally regarded as an important index of human development. Bangladesh has been implementing sector-wide approach (SWAp) in the HPN sector since 1998. The first SWAp – the HPSP was implemented during 1998-2003 while the current program (HNPSP) expires in June 2011. The Government of Bangladesh plans to initiate the third SWAp in HPN sector to be implemented from July 2011 to June 2016.

The purpose of this **Strategic Plan for Health, Population & Nutrition Sector Development Program (HPNSDP)** document is to indicate GOB's policy intentions for five years commencing July 2011. The goal of HPNSDP is to *ensure quality and equitable health care for all citizens by improving access to and utilization of health, population and nutrition services and the development objective is to improve both access and utilization of such services, particularly for the poor.*

The HPNSDP sets out the sector's strategic priorities and broadly explains how these will be addressed, taking into account the strengths, lessons learned and challenges of implementing the two sector programs, the HPSP and the current HNPSP. The details of priorities and interventions along with their implementation mechanisms will be further described in the Program Implementation Plan (PIP) and incorporated into the respective Operational Plans (OPs) to be developed subsequently.

Both HPSP and HNPSP focussed on pro-poor essential services packages (ESP)/ESD, which resulted in reducing gap between rich and poor with respect to outcomes in rural areas. However, there are gaps in primary health care coverage of urban areas, particularly the quality and accessibility of health, nutrition and family planning services are yet to be managed efficiently both in public and private sectors, addressing issues and concerns of maternal-child care and nutrition services.

The strategic plan document specifies strategies to achieve its objectives, of particular ones are: (i) expanding the access and quality of MNCH services, (ii) revitalizing various family planning interventions to attain replacement level fertility, (iii) mainstreaming nutrition within the regular DGHS and DGFP services, (iv) strengthening preventive approaches as well as control programs to CDCs and NCDs at all levels, (v) strengthening the various support systems by increasing the health workforce at Upazila, Union and CC levels, (vi) improving MIS with ICT and establishing M&E system, (vii) strengthening drug management and improving quality drug provision, (viii) increasing coverage and quality of services by strengthening intra and inter-sectoral and private sector coordination, and (ix) pursuing priority institutional and policy reforms, such as decentralization and LLP, incentives for service providers in hard to reach areas, PPP, etc.

The HPNSDP will have elements that would be different and or add value to the current program (HNPSP), particularly in addressing maternal, neo-natal health and nutrition. Some notable ones are: (i) emphasizing MNCH interventions/services in the urban slums through a separate OP, (ii) increasing number of skilled birth attendants, (iii) gradually increasing facility based 24 hour/7 days services for appropriate management of maternal complications, (iv) prioritizing areas of high maternal mortalities, geographically and socially disadvantaged population, (v) women-friendly services at the CCs and domiciliary level and by NGOs (where feasible and appropriate), (vi) sharing of expertise and facilities between DGHS and DGFP for MNH services, (vii) strengthening sick newborn services including home-visit by a trained worker within two days of child birth, (viii) rapid and effective referral systems for sick newborns, (ix) emphasizing LAPM and unmet needs of FP services, and (x) mainstreaming nutrition services through DGHS and DGFP.

Strong investments have led to continuous reduction in the annual population growth rate and the total fertility rate (TFR). However, family planning services are yet to reduce the TFR at the

desired level and the resultant increase in population size is set to impede the achievement of economic development of the country. Diversified and country wide mass scale effective family panning service delivery will be emphasized during the next sector program.

Nutrition is a priority area in the next sector program and all will be housed in the DGHS and implemented through an OP titled "National Nutrition Service (NNS)", services will be strengthened by adequate trained manpower, preparing all facilities providing MNCH services under DGHS and DGFP and the CCs for effective and integrated nutrition services. Strengthening of nutrition services will be made through scaling up of nutrition activities throughout the country, with particular priority to remote and poorer areas, and collaborating with MOLGRDC for providing nutrition services in the urban areas.

The major components of the HPNSDP are: (i) Improving Health Services and (ii) Strengthening Health Systems and these are interdependent and mutually reinforcing. The component of improving health services aims at improving priority health services in order to accelerate the achievement of the health related MDGs by capitalizing on and scaling up the interventions undertaken under the HNPSP as well as introducing new interventions. This component will support the priority interventions of (a) Maternal, Neonatal, Child, Reproductive and Adolescent Health; (b) Population and Family Planning Services; (c) Nutrition and Food Safety; (d) Communicable and non-communicable Diseases; (e) Climate Change and Health Protection; (f) Disease Surveillance; (g) Alternative Medical Care (AMC); and (h) Behavior Change Communication (BCC) related programs.

The key elements of improving service provisions relate to primary health care through the Upazila Health System (UHS); CC led expansion of PHC services, piloting the UHS, making the union health and family welfare centers (UHFWC) and union sub-centers fully functional as part of the UHS, deploying nurse midwives at union level facilities under secured and congenial atmosphere, etc. Every union facility will be strengthened with capacity and readiness to conduct normal delivery and refer complicated cases to facilitate reaching the MDG 5 and to reduce newborn deaths. The CCs as part of the UHS will be the first contact point and entry to the health system. The essential service package (ESP) to be provided in the CCs will be updated, strengthened and promoted.

The hospital services will be improved through prioritizing: introduction of clinical protocols, equipping with modern materials and diagnostic facilities, making existing hospitals women friendly and improving EmOC services, establishing hospital accreditation and licensing and supervision of total quality management, initiating referral systems at secondary and tertiary hospitals and performance based system for all service providers, establishing effective hospital waste management system and ensuring provision of safe blood in the public and private hospitals, introducing hospital autonomy initially for the tertiary level specialized hospitals etc.

For improving service provision in urban areas, an urban health strategy and urban health development plan will be prepared in collaboration with MOLGRDC. Urban dispensaries will be expanded for providing PHC services, referral system established between the urban dispensaries and the second and third level hospitals and feasibility of introducing GP system will be explored.

The HPNSDP will give priority to address difficult to reach populations through motivating and counseling the service providers for giving adequate care to the marginalized and socially excluded population, strengthen collaboration with the MOSW, MOCHTA, the CHT Board, the NGOs and the private sector. ESP will be provided in the difficult to reach areas through appropriate arrangements with NGOs/CBOs to overcome shortage of public sector human resources.

To strengthen the health systems, the second major component of HPNSDP, MOHFW will give priority to addressing issues in the areas of stewardship and governance, legal and regulatory framework, mainstreaming gender, equity and voice in the core programs, like MNCH,

nutrition and strengthening roles of the parastatal organizations like BMA, BMRC, BMDC, etc including effective use of the NGO and PPP. Other priority areas for strengthening health systems relate to planning and budgeting, decentralization/deconcentration and local level planning, monitoring and evaluation, health sector financing including development of resource allocation formula, and demand-side financing, health information system, research and development, strengthening of human resources for health, pre-service education and in-service training, nurse/midwifery services and training, establishing quality assurance system, regulation of drug administration and quality drug management, procurement and supply chain management, maintenance of physical facilities, inter-sectoral coordination and financial management.

**Resource Envelope for HPNSDP**

Currently the combined public and private sources of health financing are insufficient to achieve full coverage of health services. On an average, about 3.2 per cent of GDP is spent on the HPN sector in Bangladesh, of which about one percent of GDP is allocated by the public sector. This share is low for ensuring a sustainable development of the sector. Although there is scope for improved utilization of available funds and achieving greater equity, the HPN sector merits a higher allocation in every fiscal year and an upward rise year by year in the share of HPN allocation to national budget is very much needed. This also calls for incremental funding from the Development Partners (DPs), who have been providing support to the development of the HPN sector in Bangladesh.

The total budget for the MOHFW has been estimated at Tk. 55,275.66 crore (US$ 8,010.96 million) for the next sector program, inclusive of the development and non development budget requirement. MTBF projection shows that the estimated non development budget for 2011-16 will stand at Tk. 29,244.23 crore (US$ 4,238.29 million). Based on a three scenario calculation and considering absorption capacity, the MOHFW has finally decided to set the development budget ceiling according to the low scenario (Tk. 26,031.00 crore).

The MTBF projection of the development budget of MOHFW considers not only the budget spent under the OPs but also some parallel projects outside the OPs. Therefore, finally Tk. 23,000 crore (US$ 3333.33 million) has been set as the estimated development budget requirement of HPNSDP to be spent through the OPs assuming the rest (Tk. 3,031.00 crore) will be spent through other ADP projects of MOHFW.

**The Resource Gap: Expected DP Share**

A total development budget of Tk. 23,000 crore (US$ 3333.33 million) is expected to be spent through the OPs during the next five years starting July 2011. Due to fund constraint the GOB is currently in a position to contribute to a maximum of 35% (Tk. 8,050.00 crore equal to US$ 1,166.67 million) of the resources needed for HPNSDP implementation. The rest 65% (Tk. 14,950.00 crore equal to US $ 2,166.67 million) is considered to be the funding gap and needs to be ensured from external sources. There has been significant contribution of the DPs in the development programs of the HPN sector of Bangladesh. The contribution from the DPs for HPNSDP is expected to be Tk. 14,950 crore (US$ 2,166.67 million). It is to be noted that DP contribution to HPSP development budget was 65.58%, which came down to 62% during HNPSP implementation.

However, combining development and non development budget of MOHFW, the GOB share stands at 72.95 % and the DP share is expected to cover 27.05 % of MOHFW's budgetary requirement for implementation of HPNSDP and some parallel ADP projects during 2011-16.

Strong commitment to embrace change and bold decisions to tackle difficult tasks along with quality and result based management are required for implementing the next sector program. MOHFW, during the next sector program will ensure implementation of these changes in collaboration with all stakeholders, including the development partners of the HPN sector.

# CHAPTER I: INTRODUCTION

Health, Population and Nutrition (HPN) are intimately related and complimentary to each other, both as outcomes and also as inputs. HPN services are fundamental rights of the people and therefore HPN status is universally regarded as an important index of human development. Constitutionally, the Government of Bangladesh (GOB) is obligated to ensure provision of basic necessities of life including medical care to its citizens (Article 15(a)) and to raise the level of nutrition and to improve public health (Article 18 (1)).

Bangladesh has been implementing sector-wide approach (SWAp) in the health sector since 1998. The first SWAp – the Health and Population Sector Program (HPSP) - was implemented during 1998-2003 and the second is the ongoing Health, Nutrition and Population Sector Program (HNPSP) for 2003-2011. The MOHFW plans to implement the next sector program from July 2011 onwards, without any interruption between the current and next sector program.

The framework of the proposed Health, Population and Nutrition Sector Development Program (HPNSDP) from July 2011 to June 2016 is set against the broader perspective of the GOB's commitments (Constitution, MDGs, Vision 2021, the proposed National Health Policy and the National Population Policy, National Food and Nutrition Policy) and other programs and strategies including the National Strategy for Accelerated Poverty Reduction II and the draft Sixth Five Year Plan ($6^{th}$ FYP) of GOB.

## 1.1. Strengths of the HPN Sector

Commendable progress in the development of the health sector has been achieved over the past twenty years as evidenced by the findings of successive Bangladesh Demographic and Health Surveys, partly as a result of HPSP and HNPSP implementation. Bangladesh is on track to achieve MDG 4 with infant mortality rate per 1000 live births declining from 82.2 in 1996-97 to 52 in 2007 and under-five mortality rate per 1000 live births declining to 65 in 2007 from 115.7 in 1996-97. In the $65^{th}$ UN General Assembly Session, the honorable Prime Minister of Bangladesh received the MDG award for progress towards MDG 4.

The achievements in the area of child health are largely due to the successful implementation of EPI, IMCI, diarrheal disease control and control of acute respiratory tract infection programs, facilitated by an improvement in the care seeking behavior of the people. However, neonatal mortality rate per 1000 live births has shown only a small decline to 37 in 2007 from 42 in 1996-97.

The maternal mortality ratio (MMR) declined from 322 in 2001 to 194 (2010 BMMS, MOHFW), indicating that Bangladesh is on track to achieving the primary target of MDG 5. The entire decline in MMR has been due to reductions in direct obstetric deaths. Much of this decline is attributed to success in increased coverage of ANC and PNC, facility based EmOC services, and gains in female literacy and increased age at first childbearing. However, much more needs to be done to reach MDG 5 target of 143 deaths per 100,000 live births by 2015. Polio and leprosy have been virtually eliminated. HIV prevalence is still very low, but there is high risk of increase in its prevalence.

Strong policy and investments have led to continuous reduction in the annual population growth rate (1.48% 2007). In 2007 the total fertility rate (TFR) declined from 3.3 in 1996-97 to 2.7 and the contraceptive prevalence rate (CPR) reached 55.8 percent. Considerable progress has been made in reducing malnutrition and micro-nutrient deficiencies. Percentage of children 1-5 years receiving vitamin-A supplements in last six months has increased from 73.3 (2000) to 88.3 (BDHS 2007). Life expectancy at birth has continuously been rising (66.6 years BBS-SVRS 2008) from the level of 58 years in 1994.

Various output indicators are also laudable. Percentage of children who completed vaccination has risen to 81.9 in 2007 from 54.1 in 1996-97. TB case detection and cure rates have almost achieved MDG targets. Percentage of ante-natal check-ups by trained providers has improved from 29 in 1996-97 to 51.7 in 2008. Percentage of delivery by trained persons shows a modest improvement, i.e., an increase from 18 in 2007 to 26.5 percent in 2010 (BMMS 2010). Gains are also impressive in the areas of malaria, soil transmitted helminthes, night blindness and iodine deficiency disorders, due to

prompt identification, case holding, communication interventions and improvement in water and sanitation.

The development of a countrywide network of health care infrastructure in public sector is remarkable. Various interventions taken by Government and NGO service providers, the overall expansion of literacy, female income generating prospects, expansion and utilization of mass media portals, e.g., television, mobile phones have contributed to achieving encouraging results.

## 1.2. Challenges in the HPN Sector

**Service Delivery:** Despite expansion of emergency obstetric care (EmOC) services at the district and upazila level and successful piloting of the maternal voucher schemes, institutional deliveries remain quite low. Only 26.5% of all births were attended by a medically trained provider. There are real concerns around availability, use and quality of skilled attendance at birth with variations between the administrative divisions and districts. In addition, there are significant inequities in the use of maternal health service by wealth quintile as well as rural/urban disparities. Piloting of maternal health vouchers was found to be successful with some weaknesses that can be considered before further scaling up. In spite of efforts taken by the government, high rates of malnutrition and micronutrient deficiencies along with gender discrimination still remains a challenge.

While communicable disease control efforts appear well on track, but there is a growing risk of spread of HIV/AIDS, Hepatitis B and C, emerging and re-emerging diseases, some due to climate change and others due to consequences of natural disaster. Cardio-vascular diseases and cancer have become leading causes of morbidity and mortality and deserve more attention. Diabetes prevalence is currently estimated at around 7%, and Bangladesh is projected to be among the top ten countries globally for numbers living with diabetes by 2025. There is also steep rise in non conventional, non-communicable diseases (NCDs). Arsenicosis, the incidence of injuries including acid and other burns, drowning and other accidents due to natural disasters are increasing.

Family planning services are yet to reduce the TFR at the desired level and the resultant increase in population size is set to impede the achievement of economic development of the country. Diversified and country wide mass scale effective family panning service delivery remains a challenge with considerable discontinuation rate and unmet needs. Rapid increase in urbanization has led to a new challenge for effective urban primary health care service delivery.

Discrimination in terms of gender, disability, age, type of disease and cultural differences is found with regards to access, equity and utilization of services. Poor women and children, especially those from tribal populations are poorly served by the current system, as are People with Disabilities (PWD), the Elderly, Adolescents and HIV/AIDS patients. People living in disaster prone areas are very vulnerable to further impoverishment and deterioration of their health status and the 'voice' of the poor and vulnerable remains unheard at local level. This calls for gender sensitive and equity based inputs, e.g. in terms of geographical location, poverty, literacy, ethnicity. Responsiveness of the service providers especially to the socially excluded groups should form a criterion while deciding for rewards or other incentives.

**Support Systems:** Planning and budgeting procedures are yet to provide adequate flexibility for necessary revisions in Operational Plans (OP) with regard to certain percentages of approved PIP enhancement and inter and intra-OP cost adjustments. Moreover, the bifurcated structure in the MOHFW hinders adequate and efficient monitoring of sector performance and sustained use of routine information for decision-making.

Inadequacies in Human Resources (HR) remain a major obstacle to providing quality service delivery. Major problems are shortage of human resources for health, inappropriate skill and gender-mix, poor coordination and inefficiencies in their utilization and deployment and skewed concentration in urban areas. It has not been possible to alter substantially the recruitment, deployment and promotion policy along with career planning for the health workforce or structuring of incentives for rewarding good performance and sanctioning bad ones to providers. Current MIS functions along with M&E is also inadequate to reap the benefit of the support systems.

The financial performance of the sector is a conundrum with under utilization of available funds, inadequate funding of services and unmet needs. The resolution of this contradiction calls for a radical re-examination of sector strategies along two lines: (i) increasing efficiency of utilization of public-sector funds and (ii) increasing the HPN financial resource base. A more judicious way of public resource management therefore might be: (i) spending more on the most important services, (ii) improving the efficiency of HPN service delivery, (iii) spending more and better on the lowest quintiles, and (iv) improving efficiency of the budget management processes. Internal audit and control mechanism is also an issue to be addressed to improve financial performance.

Allocation of public resources continued to be incremental on the basis of historical norms, like the number of beds in a health facility, rather than on the extent of poverty, disease incidence and prevalence, population size, peculiarities of the localities and topographies. Appropriate resource allocation formula need to be developed along with preparation of a single work plan for avoiding duplication in inputs.

Out of pocket payments remain high accounting for 64% of the health expenditure, 80% of which is spent for medicines and diagnostic tests. Steps need to be taken to minimize this expenditure and control 'over the counter' sale of expensive medicines without medical prescription. Improvement of quality assurance system, medical auditing and facility accreditation will be helpful in this respect.

Centralized procurement procedures coupled with lack of adequate capacity in GOB/WB procurement planning, management and supply maintenance systems creates delay and inefficiency, despite bulk purchase to achieve economies of scale. Development of both ccapacity and capability for procurement planning, management, storage, distribution and supervision at various levels are much needed.

Utilization of public health facilities by the poor remains low despite the huge expansion/construction of physical facilities for service delivery by both DGHS and DGFP. Supply-side barriers, such as lack of HR, insufficient drugs and supplies, poor maintenance, inadequate management, unfriendly attitude of the service providers still remain.

**Stewardship and Governance:** Weak legal framework and institutional capacity of regulatory functionaries, like DGHS, DGFP, DGDA, DNS, BMDC, State Medical Faculty, BNC, Boards relating to AMC have weakened the stewardship role of the public sector. Although some reforms have taken place in BNC and BMDC, these need to be put in practice, with technically and socially skilled leadership. Institutes with public health functions, i.e., IEDCR, IPH, IPHN, NIPSOM, NIPORT, etc. suffer from lack of effective use, quality, support or leadership and still remain to be optimally utilized.

Too many Operational Plans (currently 38) dilute and duplicate program priorities, offering bifurcated services with limited coordination among the line directors (LD), program managers and focal points working in independent offices. Insufficient coordination between various sub-sectors in HPN, duplication of services, inefficient use of manpower and other resources reduce possibilities of making facilities fully functional and result in poor service delivery, wastage and missed opportunities both at the top and at the operational level. While implementation of programs of multiple line directors at the national level, fall on the shoulder of the far fewer workers at the lower levels. Rationalization of OPs along with increased coordination and collaboration with other ministries affecting health outcome, needs to be made to streamline activities and improve efficiency.

Rigid fund release and disbursement procedures, limited capacity coupled with frequent change of key personnel at the policy/program implementation level, resulted in limited access to and delayed utilization of resources and increasing fiduciary practices.

Categorized pooled funding, covering limited area of procurement of goods, works and services in a centralized environment, provided little opportunities for instant hiring of manpower, procuring or using funds locally. Cumbersome fund management procedures of the World Bank added to barriers in accessing funds to accomplish the program activities. Parallel and non-pool funding further aggravated the situation and therefore optimal harmonization of development partners is yet to be seen.

With the signing of the Joint Cooperation Strategy (JCS June 2010) by the Government of Bangladesh and the Development Partners, the MOHFW is faced with a new challenge of developing in-house capacity for addressing performance-based financing (PBF). PBF is seen as a strategy to align the incentives of providers and purchasers of health care services, and improve health systems efficiency through linking allocations of financial resources to achievement of pre-defined performance targets.

## 1.3. Lessons Learned

The first SWAp (HPSP) marked a shift from a multiple project approach to a single sector program. This not only ensured Government's leadership in preparing and implementing the program but also created an opportunity for better coordination, harmonization and alignment of multiple donor funded projects and resources. The SWAp helped to focus on critical development objectives like equity and access and also led to efficiency gains. It enabled the government to establish linkages between identified objectives, strategies, activities, resources and outcomes and reduced transaction cost in terms of DP engagements.

Focus on pro-poor essential services packages (ESP) under the HPSP and HNPSP sector programs have resulted in reducing gap between rich and poor with respect to outcomes in rural areas. However gaps in primary health care service quality, coverage of urban areas, efficient management of health, nutrition and family planning services are yet to be addressed both in public and private sectors.

Sustained improvements in the area of maternal and newborn health require adequate skilled personnel (in Emergency Obstetric Care and anesthesia) to be deployed and retained in the right places besides, up-gradation and equipping of the facilities in a coordinated way. To harness optimal gains in reduction of child mortality, effective intervention program on neonatal health care is very much needed.

Revitalization of community health care initiative through the community clinics (CCs) is likely to ensure health care service delivery at the grass root level, provided it is integrated in the wider Upazila Health System. Therefore mainstreaming of CC based services in the next sector program will be key step in improving service delivery, which is very much needed.

Improvements in the health systems are necessary to allow the service providers to do their work timely and efficiently (staff, drugs, money, materials, equipment, management practices, etc). Effective and evidence based decision making is necessary to guide and coordinate the interactions of the service providers and the support system components that ultimately define the performance of the health, population and nutrition (HPN) sector as a whole.

# CHAPTER II: FRAMEWORK OF HPNSDP 2011-16

## 2.1. The Premise

The Government of Bangladesh (GOB) seeks to create conditions whereby its people have the opportunity to reach and maintain the highest attainable level of health as a fundamental human right and social justice. GOB has targeted to achieve MDG 4, 5, 6 and part of the MDG 1 and 8 and also of the vision 2021 through the next health sector program. To this end Government intends to establish a people oriented and people responsive health care, particularly emphasizing the needs of women, children, adolescents, the elderly, the poor and the marginalized, through developing an effective, efficient and sustainable health service delivery and management system with skilled and special emphasis on the development of a sustained health system and an improved and responsive efficient human resources.

The purpose of this strategic plan document is to:

- Define an overall strategic framework to guide investments in the sector, both by the MOHFW and the DPs. More specifically, it is intended to provide the basis for sector developments and innovations over the next five years in a consistent direction.
- Define the Government's intentions for a period of five years commencing July 2011.
- Highlight the sector's strategic priorities and explain to a certain extent how these will be addressed.

The strategic document therefore does not spell out all the activities and interventions along with detailed implementation mechanisms to address these priorities.

## 2.2. Sector Boundary

The boundaries of the sector are yet to be well defined and extend beyond the mandate of the MOHFW. The current sector program, though the largest to support the health sector, is not the only one. There are a total of 23 projects under the HPN sector of which 4 are under the responsibility of other Ministries e.g., Urban Primary Health Care Project under the MOLGRDC. Moreover MOHFW implements several other parallel projects included in its ADP but outside the SWAp program. A true SWAp would encompass both urban and rural health services (i.e. MOLGRDC, MOCHTA, MOHFW) and the buy in and participation of other players including the Ministry of Finance (MOF).

MOHFW is not in a position to change the mandate of any of the Ministries. Health being an outcome of multi-sectoral interventions is not also desirable to be handled by the MOHFW alone. In the next sector program MOHFW will strengthen its coordination and functional relationship with other ministries involved in providing health services and will try to gradually bring new and existing parallel projects of MOHFW under the SWAp modality. It will formulate a clear strategy for working with the private sector, an essential step given that more than half of all health expenditure in Bangladesh takes place within the private sector. It will also develop a formal mechanism for engaging with the large NGO sector that fills the gaps where public services are deficient.

### 2.3. Vision, Mission, Goal and Development Objective

The **Vision** is to see the people healthier, happier and economically productive to make Bangladesh a middle income country by 2021.

The **Mission** is to create conditions whereby the people of Bangladesh have the opportunity to reach and maintain the highest attainable level of health.

The **Goal** is to ensure quality and equitable health care for all citizens in Bangladesh by improving access to and utilization of health, population and nutrition services.

The **Development Objective** is to "improve access to and utilization of essential health, population and nutrition services, particularly by the poor."

### 2.4. Program Priorities and Strategies

The HPNSDP sets out the sector's strategic priorities and explains how these will be addressed to a certain extent, taking into account the strengths, lessons learned and challenges of implementing the last two sector programs, the HPSP and the current HNPSP. The Program Implementation Plan (PIP) will describe details of the priorities and interventions along with their implementation mechanisms and will be subsequently incorporated into the Operational Plans.

The **drivers** of the strategic plan are as follows:

- Scaling up services for the achievement of the targets of MDG 1, 4, 5 and 6 by 2015.
- Addressing population growth with vigorous, fully integrated family planning services, and cross-cutting, multi-sector interventions.
- Mainstreaming nutrition in all service delivery points through the channels of DGHS and DGFP.
- Expanding access to services for priority communicable and non communicable diseases.
- Revitalizing the Community Clinic based services as part of a functional Upazila Health System (UHS).
- Strengthening overall health system and governance including establishing a sustainable Monitoring and Evaluation System along with Health Information System (HIS).
- Improving health equity for the poor and geographically marginalized population.

**Sector specific strategies include:**

- Streamline, expand the access and quality of MNCH services, in particular supervised deliveries (MDG 4 and MDG 5).
- Revitalize various family planning interventions to attain replacement level fertility (MDG 5).
- Improve and strengthen nutritional services by mainstreaming nutrition within the regular DGHS and DGFP services (MDG 1).
- Strengthen preventive approaches as well as control programs to communicable diseases (MDG 6).
- Expand NCD control efforts at all levels by streamlining referral systems.
- Strengthen hospital accreditation and management systems.
- Strengthen the various support systems by increasing the health workforce at Upazila and CC levels, including capacity building and enhanced focus on coordinated implementation of OPs, MIS with ICT and M&E functions.
- Strengthen drug management and improve quality drug provision; and improve procurement processing to reduce the time between procurement and distribution.
- Increase coverage and quality of services by strengthening coordination with other intra and inter-sectoral and private sector service providers.
- Pursue priority institutional and policy reforms, such as decentralization and LLP, incentives for service providers in hard to reach areas, PPP, single annual work plan, etc.

## 2.5. Program Components

The key components of the next sector program are: (i) Improving Health Services and (ii) Strengthening Health Systems. The component one comprises of (a) improving health services and (b) improving service provisions. These two components are interdependent and mutually reinforcing.

Responsibilities for improving and providing health services are shared among the Directorate General of Health Services (DGHS), the Directorate General of Family Planning (DGFP) and the

Directorate of Nursing Services (DNS). Other Directorates like the Directorate General of Drug Administration (DGDA), Health Engineering Department (HED), National Institute of Preventive and Social Medicine (NIPSOM), Institute of Epidemiology, Disease Control and Research (IEDCR), Institute of Public Health and Nutrition (IPHN), Institute of Public Health (IPH), National Institute of Population Research and Training (NIPORT) and other relevant institutes share the responsibility of strengthening health systems.

The next sector program will have elements that are different and or add value to the current program (HNPSP), particularly in maternal and neo-natal health and nutrition. Some notable ones are stated below:

- A new OP titled Maternal, Neonatal and Child Health Care will be put in place under DGHS for emphasizing MNCH issues separately.
- MNH services will address needs during preconception, pregnancy, childbirth and the immediate postpartum period by increasing number of skilled birth attendants.
- Facilities will be staffed and equipped to gradually provide 24/7 services, for appropriate management of complications in EmOC.
- Areas with high MMR, the geographically and socially disadvantaged, and the poor will be prioritized for providing quality MNH services including maternal and peri-natal death audits.
- The current maternal health strategy will be updated incorporating new born care and other recent issues needing attention for MNH service improvement.
- Community Clinic and domiciliary level will provide women-friendly preconception and pregnancy care. NGOs will be encouraged to provide similar services where appropriate.
- Detailed guideline will be prepared for functional integration of MNH services, incorporating expertise and facility sharing between DGHS and DGFP.
- Home-visit by a trained worker within two days of child birth will be ensured. Sick newborn services will be strengthened at the UHCs and district hospitals with rapid referral systems.
- MNH services for urban slums, in collaboration with MOLGRDC and other health care providers including NGOs will be promoted.
- Nutrition intervention is a priority for the next sector program and will be made available in an integrated way through all facilities providing MNCH services under DGHS and DGFP.
- The nutrition service will be housed in the DGHS and implemented through an OP titled "National Nutrition Service (NNS)".
- A medical officer of the UHC will be designated as medical officer (public health and nutrition) and will be responsible for coordinating NNS activities at upazila level and below.
- Community nutrition activities will be merged with the CCs for effective service provision.
- Nutrition activities will be scaled up in all the upazilas, with particular priority given to remote and poorer areas through community based IMCI programs.
- MOHFW will collaborate with MOLGRDC for providing nutrition services (e.g., awareness creation, vitamin A and other micronutrient supplementation) in the urban areas.

A willingness to embrace change and bold decisions to tackle difficult tasks along with quality and result based management will be required if these strategies are to be implemented during the next sector program. MOHFW, during the next sector program will ensure implementation of these changes in collaboration with all stakeholders of the HPN sector.

# CHAPTER III: COMPONENT 1A: IMPROVING HEALTH SERVICES

This component aims at improving priority health services in order to accelerate the achievement of the health related MDGs by capitalizing on and scaling up the interventions undertaken under the HNPSP as well as introducing new ones. These are described below.

## 3.1. Maternal, Neonatal, Child, Reproductive and Adolescent Health

### (a) Maternal and Neonatal Health

In Bangladesh, commendable reduction of maternal and neonatal mortality has been achieved through strong Government commitment reflected in the implementation of HPSP, HNPSP and formulation of other national policies and programs. Particularly of note are the successful expansion of CEmOC services, CSBA training, increased coverage of FP and safe MR services, piloting of maternal voucher schemes, expansion of private sector services and expansion of female education.

As per MDG indicator 5.1, MMR is to be reduced by 75% from the 1990 level i.e. MMR is to reach 143 per 100,000 live births by 2015. Bangladesh is on course to achieve this goal with MMR at 194 per 100,000 live births as per the findings of the latest survey (BMMS 2010). Two major causes of maternal deaths are hemorrhage and eclampsia and this implies greater use of facilities for delivery and for management of obstetric complications by trained providers. Similarly neonatal mortality rate has been reduced from 45 in 1990 to 37 per 1000 live births in 2005-06.[1] However neonatal mortality still comprises 57% of under-5 and 70% of the infant deaths. The incidence of adolescent births remains high, with 33% of the women beginning to bear child while still in their teens and are therefore at high risk of complications and death. 46% of the non-pregnant and 39% of the pregnant women is reported to suffer from anemia.[2]

Skilled attendance during pregnancy, childbirth and the post-natal period and provisions of comprehensive emergency obstetric care services remain critical. Successive BDHS surveys show increase in antenatal care coverage by a skilled provider from 21% in 2004 to 52% in 2007. BMMS 2010 showed an increase in antenatal care coverage with a skilled provider to 53.7 percent in 2010, but only 23.4 percent made the recommended four or more antenatal visits. In addition to absolute shortage of medically trained providers like midwives, nurses and doctors, great disparity exists in use of skilled birth attendants between urban (48%) and rural (24%) areas. Effective postpartum care by skilled attendants can prevent many deaths among mothers or their newborns. However post-partum care from a trained provider remains very low at 38.9% in the urban and 16.5% in the rural areas respectively. Maternal morbidities like obstetric fistula are also critical issues to be adequately addressed.[3]

Maternal and newborn health (MNH) services are inter-related and need to be delivered simultaneously covering preconception, pregnancy, childbirth and the immediate postpartum periods. The services need to be delivered by skilled providers along with prompt and appropriate management of complications in adequately staffed and equipped EmOC facilities, functioning at 24/7 levels gradually. As such a two-pronged strategy will be followed: (i) promotion of institutional services in all districts and upazilas and (ii) sustaining and expanding home-based services, in varying degrees based on local needs, particularly in places with geographic or social restrictions on seeking care from facilities.

Institutional births will be promoted actively through BCC at personal, group and national levels through innovative strategies incorporating the mass and electronic media. Preconception and pregnancy related services will be provided by trained providers at the CC level and by NGOs where found feasible and appropriate. Priority will be given to areas with high rates of MMR and to the economically, geographically and socially disadvantaged.

1 Macro International; Bangladesh Demographic and Health Survey, 2007

2 UNICEF; The State of the World's Children, 2009

3 BDHS 2007

Improvements in maternal and newborn care services at various tiers require excellent coordination at the district, upazila, union and CC levels. For this, a detailed guideline will be prepared for functional integration of MNH services, incorporating expertise and facility sharing between DGHS and DGFP. The current MNH services will be reviewed to maximize the efficiency and effectiveness of services. Given the existing availability HR and facilities, maternal and neonatal care services may be further improved through a single line of service delivery at district, upazila, union, CC and domiciliary levels. Strategies to improve effectiveness of referrals will be developed and implemented. There is great need to strengthen regulation of the private sector, given the high levels of cesarean sections in these facilities.

Measures to improve the quality and availability of EmOC services will continue. Standardization of the existing training curricula and strategies to improve clinical supervision and support of health workforce will be undertaken. Quality MNH services will also include maternal and peri-natal death audits. The current maternal health strategy will be updated, incorporating and emphasizing new born care and other emerging issues.

Specific attention will be given to promote essential newborn care services with emphasis on prevention and management of asphyxia and neonatal infections, and care for the Low Birth Weight and pre-term babies. This will require extensive training of the existing community based workers (FWA, HA, NGO workers) and the new community health care providers (CHCP) and supporting them through operational guidelines, monitoring and supervision and where appropriate with incentives. A specific task to be ensured is a home-visit by a trained worker within two days of child birth. Sick newborn services will be strengthened at the UHCs and district hospitals with rapid referral systems of sick newborns to these facilities.

**Priority interventions to improve Maternal and Neonatal health will include:**

- Promoting MNH services nationwide including the urban slums, in collaboration with other health care providers including NGOs and using mass media.
- Improving quality of maternal and neonatal health services from preconception to the postnatal period in facilities from the medical colleges to community clinics including management of satellite clinics and including evidence-based interventions, notably to address haemorrhage and eclampsia.
- Strengthening 24/7 EmOC services gradually through improving HR development, placement and retention with skill mix at various tiers of service delivery and in identified facilities through a detailed mapping exercise considering emergency referrals, communication and transportation.
- Improving strategies to expand skilled birth attendance at institutional level by initiating first aid/ basic EmONC services at the UHFWCs and at home through continued CSBA training program with strengthen management and clinical supervision and in facilities.
- Increasing efficiency through functional integration of MNH services, incorporating expertise and facility sharing between DGHS and DGFP and prioritizing low performing and hard to reach areas.
- Updating the current Maternal Health Strategy and strengthening newborn care services at all levels with rapid referral mechanisms.
- Expanding the DSF scheme based on the recommendations from the economic evaluation.
- Strengthening the pre-service curriculum of doctors, nurses and paramedics in midwifery, essential newborn care and adolescent health.
- Strengthening the maternal morbidity (Obstetric Fistula, Cervical Cancer, Breast Cancer, Uterine Prolapsed) related treatment, prevention and rehabilitation services with referral mechanism.

**(b) Child Health**

Though Bangladesh is on track to achieve MDG 4, the progress is challenged by the slow progress in

preventing neonatal deaths, which accounts for 57% of all under-five deaths and 70% of infant deaths (BDHS 2007). Acute Respiratory Infections (ARI, 21%) and Diarrheal Diseases (5%) still threaten the lives of many children and are responsible for more than one-quarter of under-5 deaths. With the reduction of infection related child deaths, childhood injuries, especially drowning, has emerged as a considerable public health threat comprising a quarter of the deaths among children 1-4 years of age. High prevalence of under-nutrition, especially wasting and stunting, is also a serious challenge to the progress in reaching the child survival goals.

The Integrated Management of Childhood Illness (IMCI) strategy adopted in 1998 was developed into a program gradually covering 343 upazilas in 2010. IMCI has been included in the under-graduate medical curriculum and is being included in the nursing and MATS curricula. IMCI will be expanded throughout the country effectively, particularly at the community level and emphasizing child nutrition services, guided by quarterly joint review and monitoring, with emphasis on flexible programming for hard to reach areas.

The remarkable improvement in service delivery coverage with vitamin A supplementation and the Expanded Program of Immunization (EPI) has provided significant positive results, successfully addressing the MDG indicator 4.3, which measures the proportion of 1 year-old children immunized against measles. Building on the current success efforts will be strengthened to maintain and increase coverage of the immunization program, incorporating vaccines for greater number of diseases with especial focus on low performing areas. Policy dialogue will be initiated for the introduction of new and under used vaccines.

The next sector program will sustain and expand all the on-going child health and nutrition initiatives with special emphasis on reaching the poorer and disadvantaged children more effectively and through partnering with NGOs following a mapping exercise, where appropriate.

Priority interventions to improve Child Health will include:

- Expanding IMCI particularly community based IMCI including child nutrition services.
- Tackling ARI and diarrhea through expansion of IMCI particularly at the community level to cover the whole country with special emphasis on hard to reach areas.
- Ensuring growth promotion with counseling on appropriate feeding practices including exclusive breast feeding.
- Strengthening and sustaining of routine immunization and disease surveillance along with Supplementary Immunization Activities, NID, Measles/ MNT Campaigns etc.
- Developing and implementing strategies to prevent childhood injuries including drowning, accidental poisoning and other injuries.
- Sustaining and expanding the ongoing School Health Teachers' Training activities including promotion of healthy school environment and practices, nutrition education etc.
- Carrying out appropriate training of the doctors, nurses, paramedics, FWVs and field workers as per need.

**(c) Reproductive and Adolescent Health**

Early marriage and motherhood is very common in Bangladesh. Two in three women marry before the legal age of marriage (18 years) and one in three starts childbearing before age 20. Of the young women aged 15-19 years, 27% have given birth and another 6% are found to be pregnant with their first child (BDHS 2007). Thus the high adolescent fertility is a major social and health concern.

The National Reproductive Health Strategy prioritizes four service areas in reproductive health: safe motherhood, family planning, MR and care for post abortion complications and management of RTI/STD. Both the DGHS and DGFP implement reproductive health services through their programs on MNCH, reproductive and sexual health including family planning. The Adolescent Health Strategy and national standards guide the services to be provided to the adolescents.

Awareness building of this age group and the community will be carried out on the legal age of marriage for boys and girls, the deleterious effects of early marriage, early pregnancy and motherhood and legal prohibition of dowry through social mobilization. Following the Adolescent Health Strategy, life-skills education and correct information on physical and psychological changes will be provided to better prepare the adolescents.

These interventions will be implemented through strengthening and partnering with existing school health programs and non-formal education initiatives. School Health Program and Bureau of Health Education of DGHS and Information, Education and Motivation Unit of DGFP will be responsible for these services. MOHFW, with TA support and in collaboration with Ministry of Education, will formulate appropriate RH issues for inclusion in the school curricula.

The reproductive and adolescent health related priority interventions will include:

- Improving knowledge of women, men and particularly the adolescents, on reproductive health (RTI/ STI, abortion, infertility, etc) including HIV/ AIDS, relevant legal and gender equity issues through the activities of DGFP and DGHS and MOWCA, MOYS, MOE and NGOs.
- Increasing access to reproductive and adolescent friendly health services through the frontline health and family planning personnel and appropriate NGO workers at individual level, school based programs, Community Clinics, strong social/community mobilization and opening up adolescent corners.
- Creating positive change in the behavior and attitude of the protectors of adolescents (parents, guardians, teachers, religious leaders, Peers, etc.) towards adolescent RH issues.
- Carrying out appropriate training/ orientation of service providers of health and family planning and community health workers.
- Implementing the National Reproductive and Adolescent Health Strategies along with targeted intervention for out of school adolescent boys and girls.

## 3.2. Population and Family Planning

### (a) Population

Bangladesh is currently Asia's fifth and the world's eighth most populous country with an estimated population of about 162 million. Even though the population growth rate has fallen from 3% per annum at the first five year plan (1973-78) to about 1.39% p.a. (BBS 2009), the population is expected to grow by another 40% by mid century, to 222 million, and finally stabilize around 240 million several decades after. The rural population (about 73%) will cease to grow at around 140 million by 2025, mainly due to rural to urban migration while the urban population will continue increasing. The urban population currently constitutes one third slum and two-thirds non-slum populations; however the slums are growing at twice the rate (5% p.a.) of the overall urban growth rate (2.5% p.a.) implying that the slums will account for a rapidly increasing proportion of urban dwellers.

Identifying a massive population as an obstacle to economic development, the Government formulated the National Population Policy, which seeks to reduce fertility to replacement level (TFR 2.2) by 2015. This requires a further TFR decline of 0.5 children per couple. However at replacement level the country will still be adding about two million people annually and population experts think that a greater decline (i.e. TFR 1.7) is required to have substantial benefits across many sectors. It will not fall any lower, so all future population growth will be determined entirely by the fertility level. An increased population size impedes achieving the objectives in various sectors of the economy. As such all the ministries and agencies affected by population growth need to share the responsibility of population control and family planning, in addition to the MOHFW.

Building on the current positive experiences, greater awareness and realization by families of the need and benefits of delayed marriage, delayed first birth especially when the bride is young, need for more and higher female education, and small and medium scale employment opportunities for young

women need to be expanded. Unmarried adolescents/ young people need to be reached more effectively on these issues. A social movement is needed to eliminate dowry. All these challenges need to be addressed through interventions of the MOHFW as well as other relevant ministries.

**(b) Family Planning Services**

The family planning (FP) program comprises of a nationwide community based FP service delivery system, relying primarily on non-clinical methods such as oral pills and condoms. The current pattern of temporary contraceptive use, with oral pill users accounting for almost 30% of all married couples, is reaching saturation (only two other developing countries exceed this proportion). With persistent early marriage and high fertility, many women complete childbearing by the mid-late twenties, leaving them with two decades of reproductive life to avoid unwanted pregnancies. The emphasis on short and long acting clinical methods, which was relatively high in the 1980s, has faded and the proportion of couples relying on long-acting or permanent FP methods (IUD, implants, male or female sterilization) remains very low (less than 15%). The drop in CPR (58.1% to 55.8%), due largely to stock outs of injectables, high discontinuation rate (57%) and unmet need (17%) indicate greater need for strengthening management and quality of family planning services. Diversified and mass scale FP services will need to be undertaken to bring back the tempo of 1980s and achieve the target of fertility to replacement level. Specific intervening areas are described below.

**Promote increased FP usage before and after the first birth:** Efforts will be made to increase FP use before and after the first birth through mass media communication, BCC activities and developing/ implementing collaborative multi-sectoral interventions to influence the long standing culture of social pressure on the newly married couples to bear children quickly.

**Provide better support:** The high rate of around 50% discontinuation in the first year by new adopters can be halved to 25%, and contraceptive prevalence could be doubled, with necessary interventions to reduce discontinuation including better counseling on side effects, especially in the first six months of use; recruitment of additional FWAs to bring the ratio of couples to workers back to a manageable level around 500 specially in the low performing areas; providing FP supplies and other support including provision of post abortion care (PAC) services from the static service point (CC); adopting region specific different service approach and emphasizing greater role of NGOs and private sector for servicing the urban slum dwellers and hard to reach areas.

**Promote and facilitate use of LAPM:** With the clear need for a shift from short-term methods to long acting and permanent methods (LAPM), the public sector will continue to play a major role in ensuring provision of free or low cost quality clinical services. To increase LAPM provision, security of commodity stocks will be ensured. Simplification of routine procurement procedures, training to upgrade the skills of community level workers, filling vacant positions and new recruitments, will be carried out. Various incentive packages will also be practiced to increase use of LAPM and partnership with NGOs established where necessary.

Priority interventions to improve Population and FP services will include:

- Promoting delay in marriage and childbearing, use of post partum FP, post abortion FP and FP for appropriate segments of population.
- Strengthening FP awareness building efforts through IEC activities with special emphasis on mass communication and considering local specificities.
- Using different service delivery approaches for different geographical regions and segments of population.
- Maintaining focus on commodity security and ensuring uninterrupted availability of quality FP services closer to the people (at the CC level).
- Registering eligible couples with particular emphasis on urban areas to establish effective communication and counseling.
- Compensating for lost wages (reimbursement for opportunity costs) for long acting and permanent method contraceptive performance.

- Strengthening FP services especially post partum and post abortion FP and demand generation through effective coordination of services with DGHS utilizing appropriate opportunities

## 3.3. Nutrition and Food Safety

### (a) National Nutrition Service

In Bangladesh both chronic and acute malnutrition levels are higher than the WHO's thresholds for public health emergencies. Percentage of children underweight for age decreased from 47.5% in 2004 to 37.4% in 2009[4]; but percentage of children underweight for height (wasting) increased from 14% in 2004 to 17% in 2007; and percentage of children short for age (stunting) was found to have increased from 43% in 2007 to 48.6% in 2009. More than half the mothers abandon exclusive breastfeeding at about 2 months (e.g. BDHS, 2007 median EBF 1.8 months) as compared to the recommended duration of six months. Appropriate feeding practices for children also remain very low, with only 42% of children of age 6-23 months fed appropriately according to the recommended standards for Infant and Young Child Feeding (IYCF). The prevalence of iron deficiency anemia among pregnant women and in pre-school children is 51% and 48% respectively. Maternal under-nutrition is significantly associated with maternal mortality and morbidity and with increased probability of low birth weight, resulting in higher probability of neonatal deaths. More than one third of the pregnant women, and 34% of children of age 6-12 years are iodine deficient[5]. Under nutrition remains a major problem in urban areas especially for the poor living in informal settlements or urban slums. Moreover over nutrition due to life-style changes and intake of junk food is an emerging problem in urban areas as well.

However, there has been considerable progress in decreasing malnutrition and micro nutrient deficiencies. Percentage of children of age 9-59 months receiving vitamin-A supplements in the last six months has increased from 82% in 2004 to 88 in 2007 (BDHS 2007). The rate of night blindness among children of age 18-59 months is 0.04 in 2005, well below the WHO Public Health threshold (<1.0%), though the prevalence of night blindness among pregnant women is 2.7% and 2.4% in lactating women.

Essential nutrition interventions should follow a 'life-cycle approach', to be provided to the clients (mother and baby / child) along with changes in their development over time. The GOB is planning to accelerate reduction of the persistently high rates of maternal and child under nutrition by mainstreaming implementation of high-impact evidence-based nutrition interventions into health and family planning services, scaling-up the provision of community based nutrition services, updating the National Plan of Action for Nutrition in the light of food and nutrition policies, amongst other important priority actions. To achieve this, nutrition has been made a priority for the next sector program with concrete steps. The key strategies and actions to be pursued in the next sector program are highlighted below.

**Mainstreaming Nutrition Service:** Both the Directorates of DGHS and DGFP will streamline and strengthen nutrition service through their regular channels. All the facilities providing MNCH services will be made available for providing integrated nutrition services and will be staffed with adequately trained personnel (details in the Action Plan for Mainstreaming Nutrition, Annex 7.1).

The streamlined nutrition service will be implemented through an operational plan titled "National Nutrition Service (NNS)", housed in the DGHS and under the overall leadership of the Line Director, NNS, reporting directly to the Director General of DGHS. The LD, NNS will oversee the delivery of the program, manage the budget, maintain liaison with all concerned and coordinate activities with the MNCH related OPs of DGHS and DGFP. Both the Directorates will identify respective focal points, at the level of program managers, for monitoring and coordinating nutrition activities. One of the medical officers of the UHC will be designated as medical officer (public health and nutrition) and assigned the responsibility of coordinating NNS activities at upazila level and below, while a nutrition

4 MOHFW, IPHN, UNWFP and UNICEF; Household Food Security and Nutrition Assessment, 2009

5 Child and Maternal Nutrition in Bangladesh: Key statistics

officer (under DGHS) will be responsible for the technical management of nutrition activities. In addition, NNS will become part of other national plans of action, notably the National Food Policy Plan of Action (2008 -2015).

The NNS will include (i) facility based services, (ii) area based nutrition activities, (iii) capacity building through training of staff and development of relevant manuals etc, (iv) provision of micronutrient activities, and (v) research and surveillance. Capacities of UHC and district hospitals will be strengthened to adequately manage severe malnourished cases. At the community level, similar to current arrangements, area based nutrition activities will be performed by the health personnel working in the CCs and through the NGOs contracted for community based IMCI activities. Thus NNS will be scaled up in the remaining upazilas, with particular priority to remote and poorer areas. Effective nutrition surveillance will be developed as part of the existing surveillance system.

**Micronutrient Supplementation:** Interventions include further improving the coverage of bi-annual vitamin A supplementation for children 9 months to 5 years; assuring breastfeeding in the neonatal, early infancy and beyond, complementary feeding from 6-24 months; improving coverage of iron-folic acid supplements for pregnant women; promoting provision of therapeutic zinc supplements for management of childhood diarrhea; provision of de-worming drugs for pregnant women, pre-school and school-going children; strengthening the monitoring of universal iodization of salt, etc. MOHFW would collaborate with MOLGRDC for providing the nutrition services in the urban areas.

**Treatment of Severe Acute Malnutrition**: Mainstreaming implementation of nutrition services will ensure more coordination in the treatment of moderate and severe acute malnutrition at the health facility as well as the community level. Internationally recommended protocols will be followed to manage children with severe acute malnutrition and those with additional medical complications while community-based management of acute malnutrition will be addressed through the community based IMCI program.

**BCC to Promote Good Nutritional Practices:** Social mobilization and BCC activities will be implemented to promote good health and nutrition. Specific behaviors to be targeted include promotion of exclusive breast feeding for 6 months and continued breastfeeding up to 2 years; timely introduction of complementary foods of adequate nutritional quality and quantity and improved hygiene practices including hand washing.

**Coordination of Nutrition Activities across Different Sectors:** Nutrition is intrinsically multi-sectoral issue, and hence achieving sustainable nutrition security is fundamentally a multi-sector cross-cutting challenge. Therefore NNS will develop mechanisms for effective coordination with other relevant sectors, capable of synergistic impact on nutrition, for example, food security, food safety, food fortification, livelihoods programs etc.

**Mainstreaming Gender into Nutrition Programming:** Gender and nutrition are closely associated in Bangladesh, strong linkages between a woman's status and her health and nutritional outcomes of her children exist. Therefore both facility and community based nutrition interventions will involve all those responsible for decision making and influencing maternal, infant and young child feeding practices. Such an approach will strengthen the joint responsibilities of men and women towards household food and nutrition security leading to well-being of all household members and the community as a whole.

Priority interventions to improve nutrition services will include:

- Providing high potency Vitamin A supplementation and de-worming to children during measles vaccination and to children 1-5 years during national events and through fortification of food with vitamin A, iron and iodine for children.
- Providing micronutrient supplementation to pregnant women (Iron folate) and Vitamin-A supplementation to mothers and neonates at postnatal period.
- Providing nutritional education and counseling to adolescent girls, pregnant and lactating mothers on appropriate caring and feeding practices, breast-feeding, supplementary feeding, micronutrients, etc.

- Ensuring management of severe acute malnutrition and other nutrition services at facility level.
- Ensuring expansion of community based nutrition services through C- IMCI programs along with programs in Community Clinics.
- Managing malnourished cases at community and facility level, IYCF, etc.
- Strengthening inter-sectoral collaboration and efficient program implementation.

**(b) Food Safety**

Intake of safe and quality food constitutes the third pillar of the three pillars of food security (i.e., increased availability of food, access to food and utilization of food), where in the health sector is a key player. Unsafe food is a major threat to public health and failure to adequately address food safety significantly impacts on quality of food security. Each year millions of citizens suffer bouts of illnesses following consumption of unsafe food while long term health impacts may result from consumption of food tainted by chemical substances and toxins.

In order to reduce the impact of unsafe food on citizens, a number of measures need to be adopted. Developing awareness of food hygiene and safety among food producers and processors, food handlers and the general public is important. The Bureau of Health Education will be engaged for popularizing the food safety acts/laws/ ordinances and public rights and for promoting good food handling and hygiene among consumers. The Consumer Association of Bangladesh will also partner in this program.

Implementation of modern food laws, standards and regulations will serve as a benchmark for evaluating and maintaining food safety, and will provide enforcement officers with the capability to target and reduce unsafe practices and unscrupulous food producers, processors and vendors. These efforts will be supported by strengthened food inspection services and enhanced laboratory analytical capability. A national food safety policy and action plan will assist in steering the direction of efforts to improve food safety.

Several Ministries oversee sectors of the food supply chain, and it is important they continue to work together (through regular meetings of the National Food Safety Advisory Council) to eliminate gaps in food control and duplication of effort. DGHS will take a strategic role in managing food safety in collaboration with the city corporations and municipal authorities. The development and improvements of the IPH laboratory along with adequate operational fund must be supported as well.

Priority food safety interventions will include:

- Raising awareness of relevant stakeholders on food safety and hygienic practices including hand washing.
- Developing a food safety policy along with the action plan for implementation.
- Establishing a central food testing laboratory at IPH and strengthen capacity of scientists and technicians.

## 3.4. Diseases Control Program

**(a) Communicable Disease Control (CDC)**

Priority Communicable diseases include TB, Malaria, HIV/ AIDS and STDs, leprosy and neglected tropical diseases (NTDs). As these are poverty-related diseases, improvements in overall living conditions and nutrition status, increase in household income etc impact on reducing the burden of communicable diseases, including the NTDs.

**Tuberculosis:** TB control is a successful public health program which needs to be maintained. All forms of TB prevalence and incidence rates have reduced significantly in 2007 as compared to 1990 levels. As per National Strategic Plan to Control TB (2011-15), the objectives to halve the prevalence and mortality and begin to reduce the incidence will be achieved by emphasizing DOTS

implementation with effective referral to preclude development of MDR, XDR-TB, compliance improvement, mobilization of private practitioners, liaise with AIDS/ nutrition programs, supportive supervision, regular monitoring and strengthening of MIS.

**Malaria:** About 12 million people in 13 districts of the north-eastern border belt, including Chittagong Hill Tracts, live in malaria high-risk areas and account for about 98% of malaria cases. However diagnosis, treatment and quality assurance of diagnosis by IEDCR (for all vector borne diseases) need to be strengthened. To achieve the priority target of 90% of cases identified and treated in the 13 highly endemic districts by 2015, the malaria control program will further strengthen diagnostic procedures, RDT and emphasize training of staff.

**HIV/AIDS and STD:** Bangladesh has low prevalence of < 1% among the Most At Risk (MAR) population groups, in the region. MDG indicator 6.1 of prevalence among population aged 15-24 years data shows that the prevalence of HIV/AIDS in Bangladesh currently is less than 0.1%. However an increasingly large number of Bangladeshi laborers live abroad and therefore risk of spread of HIV is significantly high and requires constant vigilance. HIV is closely linked to poverty and gender discrimination. Active syphilis rate among the street based sex workers are reported to be very high, further increasing the risks.

The mission of the national AIDS/STD program (NASP) is to improve the quality of life of the high risk and vulnerable groups and general population of Bangladesh by preventing spread of HIV infection and reducing the impact of AIDS. Its priority program objectives are: (i) provide support and services for priority groups; (ii) prevent vulnerability to HIV infection; (iii) promote safe practices in the health care system; (iv) due care and treatment services to people living with HIV; and (v) minimize the impact of the HIV/AIDS epidemic. Achieving the priority objectives will be continued during the next sector program through strengthening both management and technical capacities of the NASP. The comprehensive national HIV/AIDS strategy will be revised focusing involvement of stakeholders and NGOs.

**Leprosy:** Leprosy was practically eliminated (prevalence of less than 1 per 10,000 people) nationally in 1998 except in 5 districts; 5,238 new cases of leprosy were detected in 2009. Leprosy elimination target is to be achieved for every district during the next sector program, and requires training of health care staff, raising awareness among the population, active detection and patient management in pockets of high leprosy prevalence.

**Neglected Tropical Diseases (NTD)**

Control of NTDs such as filariasis, kala-azar, soil transmitted helminthes are some of the priority communicable diseases requiring further attention during the next sector program. Strategies for controlling and eliminating the NTDs will be revisited and updated in collaboration with relevant private sector and NGO actors. Appropriate budget will be allocated on a priority basis in line with the Government's international commitment.

**Filariasis:** Filariasis is endemic in 34 districts, with approximately 70 million population. The filariasis control program, with the target of elimination from Bangladesh by 2015, covers almost all the prevalent areas in the northern part of the country. More attention will be given in future to door to door administration of the mass dose by health and family planning workers and volunteers including boy scouts and girl guides. Extensive community mobilization will be undertaken before each yearly event. Staff will be trained to implement community-based services for disability prevention and morbidity reduction.

**Kala-azar:** About 51.2 million people live in areas with active transmission of visceral leishmaniasis (Kala-azar). The disease occurs in about half of the country, with a higher prevalence in 10 districts. Elimination of kala-azar, defined as prevalence of less than 1 case per 10,000 people, will be the goal of the next sector program. Both active and passive case detection and management and disease and vector surveillance will be strengthened following a DOTS approach for kala-azar treatment.

**Soil-transmitted helminthes (STH):** STH is the main cause of disease burden and ranked highest in DALYs lost in children 5-14 years in developing countries. A national de-worming program for

school children (6-12 years) was started in November 2008, in synergy with the filariasis elimination program with an aim to de worm 75%-100% of school children by 2010 and will be continued during implementation of the HPNSDP. Health and hygiene education will be given to school children on STH control. Use of water and sealed latrines by all the family members will be promoted in collaboration with the Department of Public Health Engineering.

Other communicable diseases, like Avian flu, Swine flu, Nipah virus, Anthrax, Mass psychogenic illness and Dengue Hemorrhagic Fever Toxoplasmosis, Zoonotic Diseases, Hepatitis etc are emerging and re-emerging diseases to be addressed as separate programs.

Priority interventions to improve CDC include:

- Pursuing quality DOTS expansion and enhancement and establishing interventions to address HIV associated TB and drug-resistant TB.
- Forging partnerships to ensure equitable access to an Essential Standard of Care for all TB Patients; engaging people with TB and affected communities.
- Strengthening identification and treatment of Malaria cases especially in 13 highly endemic districts.
- Promoting ITN/ LLIN in endemic areas, particularly in the three CHT districts.
- Strengthening diagnosis and management of NTDs along with control of other communicable diseases.
- Providing support and services for high risk groups, addressing vulnerability to HIV, strengthening treatment services to people living with HIV and promoting safe practices in the health care system.
- Increasing provision of diagnosis and management of HIV/ AIDS and STD, and raising awareness especially among the women

**(b) Non-Communicable Diseases (NCD)**

These include conventional diseases such as Ischemic Heart Disease (IHD), Arsenicosis, Cancers, Diabetes, Kidney diseases, Eye Care, Mental and Oral Health, Hearing Disability (Deafness) and non-conventional areas such as Road Safety and Injury Prevention, Violence against Women, Occupational Health, Emergency Preparedness and Response, Climate Change, Environmental Health and Air Pollution, Water and Sanitation.

Reduction of morbidity and premature mortality due to the 'conventional' NCDs require appropriate actions at all levels and in an integrated manner from primary prevention to treatment and rehabilitation. The government, in partnership with local government bodies and the private sector, will create greater awareness with the assistance of Bureau of Health Education and provide services for the control of unhealthy diet and lifestyle related major NCDs such as cardio-vascular diseases, cancer and diabetes. Existing preventive and curative measures for the NCDs will be further strengthened and expanded to increase access through providing effective number of personnel, training, logistics and funding.

**Conventional Non-Communicable Diseases**

**Arsenicosis:** About 30 million people are being exposed to arsenic contaminated water. Patients are gradually increasing and recent knowledge of health threats posed by arsenic indicates rise to cancer, diabetes mellitus and cardiovascular diseases. At present, DGHS conducts awareness programs, training of health care service providers and patient screening. DPHE conducts water screening for arsenic. DGHS will continue the arsenicosis mitigation interventions and increase collaboration with DPHE in the next sector program to help increase effectiveness of their interventions.

**Cardio-Vascular Disease:** Rapidly increasing incidence of Ischemic Heart Disease (IHD) has reached 10% due to modern life style and has led to increased premature mortality and morbidity. The disease will be addressed through scaling up both preventive and curative approaches. Raising

awareness through mass-media and gradually creating more CCU facilities at the tertiary hospitals will be the priority interventions during the next sector program. The disease, however, can be reduced by interventions starting at community level.

**Cerebro-Vascular Diseases:** Stroke constitutes about 9% of the hospital admission among those aged 30 or above. A CC based preventive approach along with monitoring hypertension will be introduced during the next sector program. The rate of hypertension could be further reduced by applying cost effective prophylactic measure.

**Cancers:** Every year about 150,000 people are diagnosed with cancer (Cancer Society of Bangladesh). Cancers of the breast and the reproductive organs e.g., uterus, cervix, ovary are the most common among the women; Tobacco consumption is the leading cause of lung cancer in Bangladesh. Oral, laryngeal and lung cancers constitute 37.4% of all cancers irrespective of sexes. Tobacco control program will be intensified for prevention of lung cancer. Emphasis will be given to prevention of cancerous diseases during the next sector program and BCC campaign on the causes and effects will be undertaken.

**Diabetes:** Population data indicate an increasing trend (double, 10.5% in urban Dhaka, WHO, 2007) in diabetes prevalence, especially in urban areas. This reflects the effects of unplanned urbanization that lacks opportunity for physical activity, consumption of junk food and exposure to stressful city life. Reduction in the prevalence of diabetes in urban areas will be addressed by developing awareness, educating people on the causes and consequential effects, motivating people to changing the life style through a large scale BCC program. Diabetes corner will be gradually established at tertiary and secondary hospitals.

**Eye Care:** Studies have shown that 4 to 11% of the Bangladeshis suffer from permanent disability due to blindness. To facilitate prevention, case identification, referral, management, treatment and rehabilitation, the relevant activities need to be integrated with primary health care (PHC) especially through the services of the community clinics. School Sight testing will be included in primary schools and the past emphasis on successful vitamin A administration will be continued. More attention will be given to postnatal vitamin A administration through CC staff, in collaboration with school teachers and senior students as relevant. The National Eye Care Plan will be upgraded and implemented in the next sector program.

**Mental Health:** Mental health problems are emerging amid changing life styles. In pursuance of the government's strong commitment for adequately addressing the counseling and treatment of mental health, partnerships with the media and NGOs will be developed to raise public awareness about appropriate attitude and behavior towards mental patients. Public sector, NGO/ CBO workers and school and religious teachers, will be trained to identify and counsel substance abuse and mental and emotional cases, provide and follow up simple treatment as feasible, life skill training and refer serious cases to an appropriate facility.

**Hearing Disability (Deafness):** About 13 million people are suffering from variable degree of hearing loss (HL) in Bangladesh of which 3 million have severe to profound HL and are major but neglected causes of disability. Early detection of impaired hearing and proper management could prevent permanent hearing disability. Early detection at the primary level and management of these cases at the secondary and tertiary level will be initiated. The strategic plan for control of hearing disability (Deafness) will play an important role for implementing hearing disability related activities in the next sector program.

**Oral Health:** Lack of knowledge and awareness regarding oral hygiene are the main issues which cause oral diseases to be a public health problem. Preventive approach through mass education and raising awareness will be prioritized. Adoption of proper cleaning procedure of the oral cavity and bringing strict restrictions in bad habits can reduce most of the common and complicated oral diseases.

**Non-conventional Non-Communicable Diseases**

**Road Safety and Injury Prevention:** Approximately 70,000 deaths occur each year due to injury

(burning, drowning, acid and accidents at work). Some 40 to 45% of injuries are due to road traffic accidents in urban areas and 54% of them are pedestrians. The NCD strategy (2007-10) will be the guiding principle to implement NCD related programs, e.g., dialogue with the Ministry of Communication and Transportation for safety policies and regulation, enhance skills of MOHFW service providers to handle injury patients, build up awareness of the people on pedestrian safety measures. Community mobilization will be done in collaboration with urban NGOs and city corporation authorities to keep walkway free of any hindrance which discourage people from using walkways.

**Violence against Women:** Violence against women and girls is perhaps the most pervasive human rights violation that devastates lives, fractures communities, and stalls development. High levels of domestic violence in Bangladesh imply that a large proportion of the victims of violence are women. In collaboration with the Ministry of Women and Children Affairs (MOWCA), MOHFW will carry out expansion and strengthening of the one stop crisis centers to serve the affected women. All health care providers will be sensitized through relevant programs to pay special attention and prioritize women violence victims in all public health facilities.

**Emergency Preparedness and Response:** The geographical location and the topographical features of the country make Bangladesh vulnerable to natural disasters. The main strategies aim to increase the level of readiness at all tiers of the health system and improve the capacity of the sector for coordinated post-disaster management. Standard national guidelines for mass casualty management as well as manual for local level health response will be issued and necessary training will be conducted. Standardization of emergency health supplies and their stockpiling will be part of the readiness program for flood, cyclone, tornado and earthquake.

**Occupational Health and Safety:** The occupational health and safety services in Bangladesh is inadequate, both in terms of quality and quantity, and covers the needs of industrial (both formal and informal) and manufacturing plant workers only to some extent. A major portion of workers in the informal sectors are at risk of developing acute and chronic toxicity due to exposure to toxic pesticides, chemicals and fertilizers, occurrence of occupational diseases and injuries. MOHFW will continue its preventive and control measures in collaboration with other relevant ministries (e.g., Ministry of Industries, Ministry of Labor and Employment) to address occupational health hazards, diseases and risks in a cost effective manner.

**Tobacco Control and Substance Abuse:** Over 1.2 million cases of tobacco related illnesses occur annually and around 9% of all deaths in a year (57,000 deaths) in the country result from tobacco use (WHO, 2008) and substance abuse and drug dependence have increased significantly. Bangladesh has ratified WHO Framework Convention on Tobacco Control (FCTC) and a National Tobacco Control Cell (NTCC) has been formed by the MOHFW to streamline tobacco control activities. The NTCC will be strengthened by building capacity. Advocacy and awareness campaigns, innovative community-based management programs, training material development, support for research on substance abuse etc will be promoted. BHE will be supported in mounting anti-tobacco and anti-substance use messages.

Priority interventions to improve NCD services will include:

- Strengthening BCC activities for prevention of NCDs, and diagnosis and management of kidney diseases, diabetes and arsenicosis patients in primary, secondary and tertiary hospitals.
- Strengthening prevention awareness and diagnosis of CVD in all three tiers of facilities in the health system and treatment and management in secondary and tertiary hospitals.
- Screening for early detection of cancer and strengthening diagnosis and management including palliative care of cancer patients in secondary and tertiary hospitals.
- Implementing the strategic action plan on injury prevention, NCD and Tobacco Control.
- Updating and implementing the National Eye Care Plan and strengthening and expanding Emergency Medical Services.

## 3.5. Environmental Health and Climate Change

Natural disasters and climate change are increasingly impacting upon health and well being. Respiratory diseases, heat strokes, cardio-vascular illness and exposure to vector-borne diseases like malaria, dengue, risk of water-borne diseases such as cholera are on the rise while reduced food availability is leading to increased malnutrition. Though eventually many people will be affected but the initial health risks will be on the groups burdened mostly by the resulting diseases, i.e. poor children, women and elderly people. Bangladesh in recent years has experienced some severe effects of climate change and has demonstrated remarkable achievement in natural disaster /emergency response through better preparedness and proper management. Health risks and hazards have been minimized through emergency drugs and supplies such as oral saline, water purifier tablets, IV saline, essential antibiotics, etc. Recently World Health Organization (WHO) has drawn the attention of the world community to the inevitable effect of climate change on basic requirements for maintaining health: clean air and fresh water, sufficient food and adequate shelter. Creating a well coordinated approach for protecting health from climate change and post disaster health hazards still remains a challenge for the government.

To build capacity and strengthen health systems to combat the health impact of climate change, the Climate Change and Health Promotion Unit (CCHPU) has been formed to strengthen necessary activities. The level of readiness at all tiers of the health system will be strengthened for emergency response; capacity of the sector will be increased for coordinated post-disaster management and protecting people's health from climate change. Standard national guidelines for mass casualty management as well as manual for local level health response will be issued, necessary training will be conducted and emergency health supplies and their stockpiling will be standardized. Partnership will also be forged with disaster management agencies, groups and individuals for improving emergency preparedness, prevention and mitigation. A national program outline will be developed for this.

The existing health research agenda will include the adverse effect of climate change on health, and field surveys and studies will be conducted to identify the short, medium and long term effects of climate change on health. An advanced preparedness plan will be developed to face the consequences of climate change.

An autonomous institute for 'Environmental and Occupational Safety and Health', with two distinct divisions: Environmental Health and Occupational Health & Safety, manned by relevant multidisciplinary personnel needs to be established at the central level. It will develop cost-effective and locally acceptable preventive intervention and control measures and carry out academic courses, research and monitoring of the environmental and occupational health issues.

Priority interventions will include:

- Strengthening activities of the CCHP Unit to combat the health impact of climate change and updating guidelines for health protection from adverse effects and pre and post disaster situation.
- Developing an advanced preparedness plan to face the consequences of climate change.
- Standardizing emergency health supplies and their stockpiling as part of the readiness program on climate change.
- Creating an institute for environmental and occupational health safety.

## 3.6. Disease Surveillance

A functional disease surveillance system is necessary for planning, resource mobilization and allocation, prediction and early detection of epidemics, pandemic alert and response, monitoring and evaluation. Integrated Diseases Surveillance (IDS) has been endorsed in the Strategic Plan of Surveillance and Prevention of Non-Communicable Diseases in Bangladesh 2007-10, by the DGHS. IEDCR will be strengthened to carry out epidemiological surveillance of communicable diseases with

laboratory support along with non-communicable diseases to turn it into an apex Institute for epidemiological surveillance in the country.

A coordination mechanism identifying roles and responsibilities of individual organization/agency/ relevant LD will be developed with respect to disease surveillance. DGHS will coordinate all activities currently carried out by relevant institutes/ agencies to establish an effective NCD surveillance system. Necessary support such as equipment, soft ware and training will be provided to these institutes for data generation, analysis and reporting, to be coordinated by InfoBase and Ban Net centre of NCD in collaboration with the MIS of DGHS.

Capacity of district and upazila hospitals will be strengthened to assist in disease surveillance and diagnosis. Teachers of primary schools, NGO workers and community volunteers will be trained to identify the clinical features of the most common endemic diseases, as these are the ones which assume epidemic proportions at times. Partnering with all types of private health care providers for better surveillance, reporting, referral and case management will be established. Mapping of all major diseases, on the basis of their incidence and prevalence, will be constructed for each district and Upazila.

Priority interventions include:

- Strengthening the capacity of IEDCR to carry out disease surveillance effectively.
- Preparing Map of all major diseases for each district and Upazila.

## 3.7. Alternative Medical Care (AMC)

Unani, Ayuverdic & Homeopathic medical services have been extended to outdoor departments of district hospitals and herbal centers at the upazila health complexes. AMC is weakened by the lack of standards of the system, poor job opportunity and educational system, teaching methodology, research, publication, information and awareness about AMC. The Homeopathic, Unani and Ayurvedic Board of Medicine have weaknesses and limitations too. A team of experts will be formed with clear terms of reference to prepare a national AMC strategy. Introducing license or registration by the Board of BMDC will require strengthening the educational system, research, monitoring, production and publication, workshop and training. Existing two AMC college and hospitals will also be strengthened.

Priority interventions include:

- Preparing a national AMC strategy to streamline AMC education, research, monitoring, training, etc.
- Strengthening outdoor services at the public AMC hospitals.

## 3.8. Behaviour Change Communication (BCC)

BCC activities are being conducted by the Bureau of Health Education (BHE) under DGHS. Communication, health education and promotion activities are handled through existing national, divisional and district offices with audio-visual capacity and district hospital based staff for imparting health education to the patients, their relatives and attendants. Similarly, the Information, Education and Motivation (IEM) Unit of DGFP conducts IEC/BCC activities through existing national, divisional, district and upazila family planning offices.

The activities of the BHE and the IEM are intended to bring about behavioral changes among the people towards safe motherhood, breast feeding, climate change, emerging and re-emerging diseases, food safety, vaccination, vitamin A administration, RTA, neonatal care, violence against women, family norms, promoting family welfare, nutrition and facilitating increase in CPR and decrease in TFR, IMR, MMR, etc through special emphasis on interpersonal communication, electronic and print media.

Comprehensive BCC/IEC programs will be developed in building community knowledge and skills to promote use of MNH services and to enhance basic health education in schools and madrashas for

children and youth. In addition to country wide approach, BCC/IEC materials are also to be prepared based on regionally focused specific needs as there is a wide range of variations from region to region in people's cultural practices.

The BCC/IEC activities have been elaborated in the National Health Education and Promotion Strategy and the National Communication Strategy for Family Planning and Reproductive Health. The BCC/IEC interventions will be functionally integrated in the areas of counseling, referral, reproductive health, BCC/IEC campaigns, etc to promote health, nutrition, and MNCH and FP services and to provide need based support.

Priority BCC/IEC interventions will include:

- Promoting health, family planning and nutrition services through electronic and print media and motivational programs in the form of feature films, posters, local dramas, etc.
- Producing and printing regionally focused BCC/IEC materials and distributing these materials at all facilities of health and FP services.
- Providing need based BCC/IEC support in order to increase awareness and community participation.

# CHAPTER IV: COMPONENT 1B: IMPROVING SERVICE PROVISION

## 4.1. Primary Health Care (PHC)

Bangladesh is a signatory to the declaration in the International Conference on Primary Health Care (PHC) held at Alma Ata in 1978, where the concept of primary health care (PHC) as the strategy for achieving the goal of health for all (HFA) was laid. Bangladesh started with pilot projects in 6 Upazilas in the year 1979-80 in the light of which subsequently PHC Program started in Bangladesh in 1980. The basis of the policy of the government was to provide health care to the un-served and underserved population as far as possible, at their door steps, at an affordable cost. Since then, considerable progress has been made in this sector, but due to lack of adequate investment the full potential of PHC services is yet to be realized.

Since the inception, PHC services in Bangladesh have been rendered in terms of 8 elements: health education, nutrition, adequate and safe water and sanitation, maternal and child health, immunization, prevention and control of endemic diseases, treatment of common ailments and injuries and provision of essential drugs. In the Health and Population Sector Program (HPSP), these services were remodeled as the Essential Service Package (ESP) with prioritization of some of the PHC activities.

The redesigned PHC approach already in place, includes: (a) Child health care, safe motherhood, family planning, MR, post abortion care, and management of sexually transmitted infections; (b) Communicable diseases (including TB, Malaria, others); (c) emerging non-communicable diseases (Diabetes, Mental health, Cardio-vascular diseases); and (d) Limited curative care and behavior change communication (BCC). The current Health, Nutrition and Population Sector Program (HNPSP) has included nutrition into the service package of PHC and renamed the same as the essential service delivery (ESD) program.

The basic pillars of the primary health care approach (universal coverage, equity in health, inter-sectoral collaboration and community participation, use of appropriate technology) remain valid even today. A careful, wider application of these principles in the upcoming program to strengthen health system in Bangladesh is necessary. With the changing political, socio-cultural, economic and epidemiological scenario, the concept of primary health care would continue to strengthen community-based public health interventions and the next sector program would deliver primary health care through the Community Clinics as it is considered cost-effective and appropriate tool for achieving the objectives of the Millennium Development Goals and the Sixth Five Year Plan.

The primary health care service provision operates at three tiers, i.e., upazila, union and the community linking them with the districts as part of the public sector health service.

**(a) The Upazila Health System (UHS)**

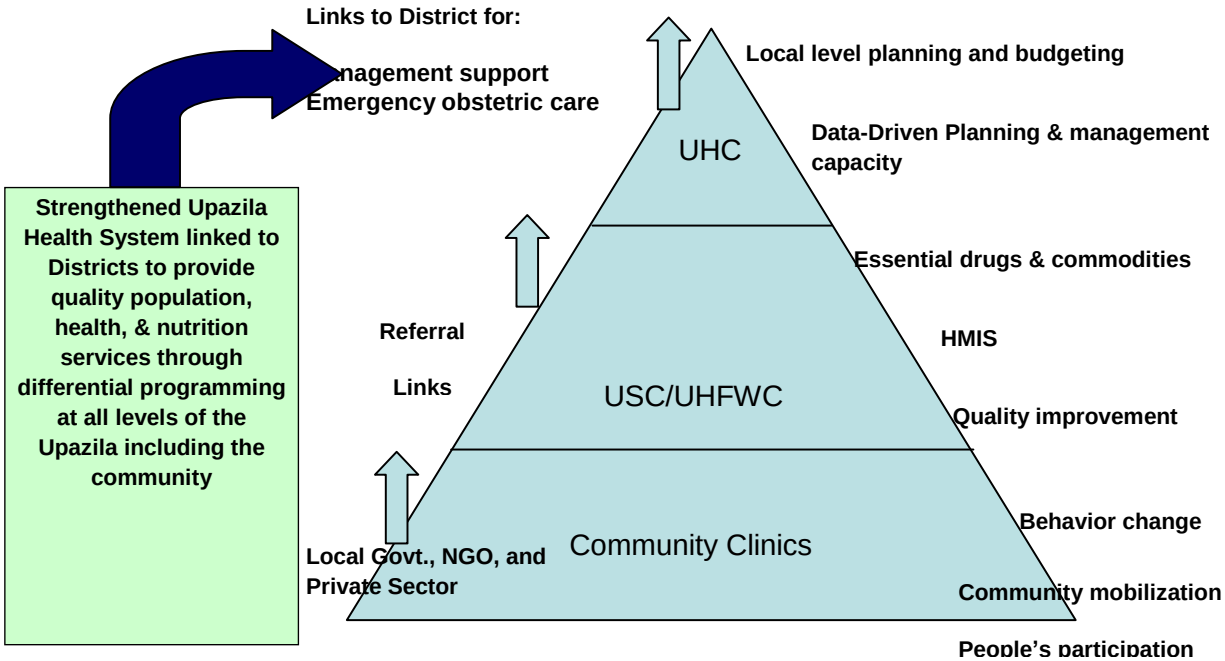
The Upazila Health Complex (UHC) is the first inpatient facility in the network, and provides both primary and secondary level services, serving as an apex of the Upazila Health System (UHS). Figure I below gives a pictorial presentation of the UHS in Bangladesh, linking a community with the district through the functional UHS.

The Upazila level management through a committee would be able to plan, budget, implement and monitor the day-to-day activities of service delivery for the people in their catchment area (averaging around 270,000 people). In short, such an UHS consists of a three-tier system, being (i) a Hospital (= UHC with 31-50 beds), (ii) Health Centers (with or without beds) and (iii) Community Clinics. Together these define the available service delivery facilities, each with a different staff mix (doctors, nurses and paramedics), most often of a multi-purpose or polyvalent nature. The district level health administration will play a crucial role to oversee the work of the UHS and provide the support needed as part of the national decentralization process.

The initiative of PHC through the UHS will be linked with the government policy on LLP. Priority activities will include initiation for an integrated PHC intervention through the UHS in a limited number of districts and Upazilas that will specifically integrate the CC led expansion of PHC services.

In the first 2-3 years of the next sector program, MOHFW would start piloting the UHS with a limited number of Upazilas in some selected districts, where the required staff (doctors, nurses, paramedics, etc) and equipment is available for caesarians and other surgical interventions. After successful piloting, the UHS will gradually be scaled up countrywide.

## Figure 1




**(b) Health Care at Union Levels**

Union health and family welfare centers (UHFWC) and union sub-centers will be made fully functional as part of the UHS. It has been targeted to gradually upgrade all the union sub-centers to the level of UHFWCs. Training will be arranged on priority basis for the staff to be posted or have already been posted at union level, like the skilled birth attendant. Every union facility will be strengthened with capacity and readiness to conduct normal delivery and refer complicated cases to facilitate reaching of MDG 5 and to reduce newborn deaths.

**(c) Community Health Care Service (CHCS)**

The community clinics (CCs), at the ward level, are the grass root level one stop PHC service facilities, catering to the day to day health needs of the vast majority rural population. The CCs will represent the first entry and contact point to the health referral system. Patients would be referred to the Union Sub-centers and the UHFWCs at the union level and the Upazila Health Complex (UHC) at the upazila level. The intent is to move to a facility based service with the ESP being delivered by an integrated team of health and family planning personnel up to Upazila level, with the entry point at a CC, serving populations of about 6,000. However, the door step or domiciliary service will continue to ensure coverage of at risk populations.

Work has begun to restore already constructed community clinics and to construct new ones where needed. In addition to an extensive program to repair 10,723 community clinics (CCs) established earlier, another 2,876 are planned for construction, of which 700 in the coastal belt will be double storied so as to provide shelter in case of emergencies. In addition to the two service providers (HA and FWA), a new post of community health care provider (CHCP) has been created in each of 13,500 CCs (recruitment is under process), which will strengthen service delivery at the grass root level and help increase access of the poor to essential primary health care services.

A project is being implemented outside the HNPSP titled *Revitalization of Community Health Care Initiative in Bangladesh* is considered as a flagship intervention of the Government. This program is headed by a Project Director and will be completed in June 2014. However, during the HPNSDP period, the gaps and issues identified (training, BCC activities, mainstreaming CC in the UHS, etc) will be implemented through a separate OP and community level PHC services will be strengthened and streamlined.

The services to be provided at the CCs through the provision of the essential services delivery (ESD) will be updated, strengthened and promoted. The functioning of the upazila health complexes, union health and family welfare centers/sub-centers will be strengthened and further consolidated through the provision of the ESD.

Priority interventions will include:

- Providing adequate human resources, drugs and equipment etc. through the Upazila Health System to the CC and the UHFWC.
- Defining the referral and supervision linkages between the various levels of care (District, Upazila, Union and Community) and spell out the responsibilities among all actors and stakeholders in order to ensure the necessary 'unity of command'.
- Defining the composition and tasks/responsibilities of the Upazila Health Management Committee (UHMC) with tasks in planning, budgeting, priority setting, implementation, supervision and reporting.
- Developing a Capacity Building Program that prepares the committee members in managing the various (support) services in the UHC, the Union-level facilities and the Community Clinics.
- Involving local government institutions and NGOs to support the CC Management Groups (CCMG) for stimulating informed demand, quality services and appropriate utilization along with accountability, particularly to the poor, women and elderly.

## 4.2. Hard to Reach Populations and the Disadvantaged

*Specific population:* It is estimated that there are 2.5 million people in Bangladesh, who are members of 'ethnic populations'. Majority of them (42%) live in three hill districts of the Chittagong Hill Tracts (CHT), while others are scattered in northern hilly regions and some coastal districts. They belong to 45 different communities with a very low level of literacy and nutritional status. These communities are particularly poorly served by health facilities. As they live in remote areas, it is difficult to attract health workers to stay in the area. These communities have specific needs in their cultural settings which necessitates special measures and adjustment in delivery mechanisms. Collaboration with MOCHTA and the CHT Board would be strengthened with a view to increase support of the health sector, in partnership with NGOs.

*People with disabilities (PWD):* Many of the disabilities linked to poverty are preventable, such as through actions on low birth-weight, malnutrition, iodine deficiency, eye care, injury prevention and skilled management of complications. Disabled girls face multifaceted problems, e.g., sexual abuse, unwanted pregnancies, marginalization in the family and society. They have limited access to health services due to physical, psychological, social and economic barriers. Both infrastructure and services will need to adequately address their needs such as accessibility and human resources development that addresses issues of attitudes and behavior of service providers towards them. Inter-sectoral

coordination is important in this area, as various other government ministries are also involved, such as the Ministry of Social Welfare (MOSW).

*Elderly:* People > 60 years of age constitute 8% of the total population of Bangladesh and are likely to increase the numbers as life expectancy increases. Widowhood and poverty affect the elderly women more socially and economically. The main aim for geriatric care is to promote health, well being and independence of the elderly. The specific program objectives are to create awareness for geriatric care management, train the geriatric caregivers and increase service facilities for elderly at all levels. The MOSW has introduced a Hospital Social Service Program (HSSP) in both government and non-government hospitals, where the needs of elderly patients are emphasized. This program needs to be reviewed and scaled up along with encouraging the private initiatives in this area.

*Geographically excluded population:* Difficulties in accessing different geographic locations have left some areas of the country isolated from the mainstream public services. These include the chars, the haor areas and the remote coastal areas. Particularly in the rainy season, access to these areas is difficult for government staff and access to government facilities is difficult for inhabitant of these areas. While government initiatives in infrastructural development are improving access, this is still insufficient. Alternative methods of increasing access of health service would be further explored and expanded including involvement of the NGOs, private and individual social institutions.

*Professionally marginalized and socially excluded groups:* Various professional groups are socially marginalized and excluded because of their professions. These include sweepers and sex workers who are also impoverished. They are often unaware of the health consequences of their professional activities, unable to take the necessary preventive or curative measures and are unable to switch occupations due to various social constraints. The health services providers are often unwilling to treat or advise such patients and also not always capable of dealing with their specific needs. In order to ensure equity in access for all, both the clients and the service providers have to be motivated to use the health services available and to enable these groups to access health services.

Priority interventions to address hard to reach populations and the disadvantaged will include:

- Preparing a map of the hard to reach areas of Bangladesh and ensuring need based provision of HPN services for the hard to reach population through the GOB network where available. Motivating the service providers through counseling for giving adequate care to the marginalized and socially excluded group of population.
- Strengthening collaboration with the MOSW, MOCHTA, the CHT Board, the NGOs and the private sector to address the health service of the hard to reach population and the disadvantaged.
- Engaging locally available private individuals, social clubs, CBOs and NGOs by MOHFW for stimulating informed demand of the hard to reach population and ensuring quality health services and appropriate utilization.
- Providing essential service packages with support from NGOs/CBOs, due to shortage of public sector human resources, through agreed arrangements, in the hard to reach areas.

## 4.3. Secondary and Tertiary Health Care

**Hospital Services Management:** The secondary level district hospitals range in size from 100 beds to 250 beds and provide specialized care in addition to primary health care. Presently, up-grading of district hospitals from 100 beds to 150/200/250 beds is almost completed. At the divisional and central level, Divisional level Hospitals, Medical College Hospitals and Specialized Hospitals (250-1700 beds) provide specialized services. The secondary and tertiary level hospitals are linked with other hospitals as referral centers. Hospital services in the public sector are the most utilized area of clinical service delivery. A flourishing non-public sector is growing very fast, mostly located at district and above. However, the services provided by the private sector are expensive and those needing emergency attention are least served by the private clinics and hospitals, and it is only the public hospitals which provide services for them.

Clinical management protocol for the major illness will be developed and introduced as a part of quality hospital management including selection and finalization of clinical indicators for different levels. In primary, secondary and tertiary hospitals, depending on bed capacity, services will be standardized along with human resource needs, skill mix and table of equipment (TOE) linked to the level and degree of services. Appropriate human resources and management structure will be needed for existing hospitals. Specialized services will be established in all medical college hospitals, so that patients do not need to rush to the capital city. Government will increase number of beds in different hospitals on the basis of local need and bed occupancy rate and establish new specialized hospitals under the private public partnership initiative.

Other than emergencies, it is the intention that all medical college and tertiary hospitals will only accept referred patients. A network of well-worked out referral system will be developed so that patients are assured of receiving treatment from health facilities and that patient load at the higher levels is not needlessly burdened by those who can be treated at the local level. Referral linkages will be developed between the specialized, tertiary and secondary hospitals effectively and given due profile. Local monitoring systems for implementation of the referral system will be strengthened.

**Hospital Autonomy:** Administrative and financial autonomy will be ensured for better management of the existing public sector hospitals. The principle to be adopted will center on maximum delegation of financial power and administrative authority, but with no compromise for transparency and accountability to the Government. Hospital autonomy will be introduced initially for the tertiary level specialized hospitals and gradually extended to medical college hospitals. Management Committees at hospitals will be strengthened for better monitoring and accountability will be ensured through public review of the hospital performance.

**Licensing and Accreditation:** DGHS licenses private sector hospitals and diagnostic centers based on certain criteria of space, bed number, equipment, departments, skilled manpower, etc. These private sector hospitals and diagnostic centers are supposed to be visited by teams of experts enlisted by the Directorate yearly and the approval status is continued for another year. DGHS needs adequate manpower and logistics for managing its licensing functions.

An accreditation tool, developed in the past by the MOHFW will be updated and be applied periodically for the private sector hospitals and diagnostic centers. No private sector hospitals/ diagnostic centers could be operated on "Applied for license" basis. The 1982 private practice and clinic ordinance is being examined to update it and make it more effective. Medical waste management system would be implemented and made mandatory for private sector hospitals and diagnostic centers. To ensure a transparent system in this regard an independent regulatory body would be formed with representation of the public and the private sector hospitals and diagnostic centers and relevant experts.

**Blood Transfusion Services:** To promote and ensure blood safety, Government has established 98 Safe Blood Transfusion Centers throughout the country for screening blood for HIV, Syphilis, Malaria, Hepatitis B and C in 2001 with the implementation of Safe Blood Transfusion Program (SBTP). Safe Blood Transfusion Law was enacted in 2004, which paved for formation of National Safe Blood Council for policy development. A draft Blood Transfusion Policy is under consideration of the MOHFW for the final approval.

The legislation gives emphasis to the implementation of regulatory systems for blood transfusion centers and application of good manufacturing practice. Legislation for safe blood transfusion is in place but its implementation countrywide is a challenge, as most of the blood screening centers and private health institutions need to be fully equipped with modern facilities to screen blood. Priority would be given to restructure the current uncoordinated collection of blood that poses considerable risk to the general population.

**Medical Waste Management (MWM):** Relevant issues relating to medical waste management (MWM) include solid and liquid waste; and appropriately disposal of medical waste. In-house management of medical waste is the MOHFW's responsibility and out-house management will be

done by MOLGRDC, Department of Environment and other relevant stakeholders. MWM is the most critical environmental issue that is within the remit of the health sector.

A MWM Strategy has already been developed by MOHFW and has been put in place for implementation. Steps will be taken to improve the capacity of DGHS for strengthening, inspection and monitoring of MWM. Cleanliness of public and private health facilities will be checked by using a formal tool and steps would be taken for implementation of "MWM Rules".

**Gender and Special Care:** Attention needs to be given to design the hospital facilities more gender sensitive, i.e. have space for child corner, breastfeeding corner for the service seekers and for changing and washing of duty nurses. Female patients or nurses must have homely environment, to feel comfortable in the work place and the cafeteria of a hospital. Feeding environment for patients, as well as service providers, need to be user friendly. Similarly, special facilities for disabled people need to be given specific attention (access for wheel chairs, etc.).

Priority interventions to improve hospital services management include:

- Strengthening performance of secondary and tertiary level hospital services by deploying skill-mixed HR; introducing clinical protocols; equipping with modern equipment and diagnostic facilities.
- Transforming existing hospitals into women friendly hospitals and improving EmOC services and the critical cares.
- Establishing hospital accreditation, licensing and supervision of total quality management (TQM) in the public and private hospital services.
- Developing and initiating a referral system among primary, secondary and tertiary hospitals and a performance based system for all service providers.
- Establishing effective hospital waste management system (WMS) and ensure provision of safe blood in the public and private hospitals.
- Strengthening emergency services in public hospitals and make them available in all non-public hospitals.
- Introducing evidence-based practice and risk management practices.
- Strengthening the Management Committees at hospitals for better and effective service delivery including ensuring utilization by the poor and women.
- Introducing hospital autonomy initially for the tertiary level specialized hospitals and gradually extending to medical college hospitals.

## 4.4. Urban Health Service

Bangladesh is going through significant social and demographic changes, including rapid urbanization (at an estimated rate of 6%), expanding industrialization, rising incomes and increase in non-communicable diseases. At present about 27% people of Bangladesh lives in urban areas. Population growth in urban areas is 2.5% whereas the national population growth rate is less than 1.4%. The biggest city, Dhaka alone accounts for 40% urban population. The other five divisional cities account for 29%, while 309 municipality towns have 31% urban population. Rapid influx of migrants and increased numbers of people living in urban slums in large cities are creating continuous pressure on urban health care service.

Urban health services are the responsibility of the Ministry of Local Government, Rural Development & Cooperatives (MOLGRDC). The Municipal Administration Ordinance of 1960, the Pourashova Ordinance of 1977, the City Corporation Ordinance of 1983 and the Local Government (Pourashova) Act 2009, clearly assigned the provision of preventive health and of limited curative care as a responsibility of the city corporations and municipalities. But due to their limited resources and manpower, public-sector health services have not kept up with needs. Private health care providers are the main source for delivery of curative care, including tertiary and specialized services to the urban

people, but private providers seldom provide preventive and promotional health services. On the other hand, MOHFW is tasked with setting technical standards, packaging services, strategies and policies of the country's health sector.

The urban areas provide a contrasting picture of availability of different facilities and services for secondary and tertiary level health care, while primary health care facilities and services for the urban population at large and the urban poor in particular are inadequate. With the implementation of two urban primary health care projects (UPHCPs) since 1998, services have been delivered by the city corporations and municipalities through contracted NGOs under MOLGRDC in the project's areas. The project provides free services to 22% (as per household survey 2007) of the total population of the project areas.

Non-project urban areas are being covered by the health facilities of MOHFW. In total, there are around 4000 satellite centers to reach the urban poor. Moreover, 35 urban dispensaries under the DGHS are providing outdoor patient services including EPI and maternal and child health (MCH) to the urban population. These urban dispensaries will be equipped with necessary facilities to use as the outlet centers of the tertiary hospitals. Various NGOs provide essential services as well some special services (52 HIV/AIDS clinics) through 158 PHC centers, 34 comprehensive centers, 56 DOTS center, 47 VCT centers. In conclusion, the various urban primary health care services are largely inadequate in view of the needs of the fast growing urban population.

There is need to establish a permanent coordination structure between the two Ministries to take up the mutual mandated responsibility on a sustained and effective manner. MOHFW will join in tackling this challenge through a consultative process with MOLGRDC, city corporations and concerned stakeholders to jointly assess, map, project and plan HPN services in urban areas. The emphasis on urban health will be a new (and very different) element compared to HPSP and HNPSP. It will involve MOHFW working in new ways with its partners, notably MOLGRDC, NGOs and others.

The UPHCP of MOLGRDC and NGOs have a wealth of experience in providing urban primary health care (UPHC) services through contracted NGOs. There have been impressive successes in terms of coverage, monitored quality of services and monitored exemption schemes for the poorest. These will continue, but side by side MOHFW will seek to extend the coverage of PHC services in urban areas not covered by the UPHCP. Services in the urban dispensaries under the DGHS will be improved by introducing an effective referral system in the facilities, so that the population will receive better services. MOHFW also provides health services through secondary and tertiary hospitals that will continue to be strengthened in terms of coverage, quality and equity of service delivery in response to demand.

Priority interventions will include:

- Developing an urban health strategy with time bound action plan in collaboration with MOLGRDC. The focal person for urban health in MOHFW will take the initiative for formulating the strategy in consultation with relevant stakeholders.
- Commissioning a study to determine how the two Ministries can jointly assess, map, coordinate, plan and work together to provide quality HPN services for the urban population.
- Establishing a permanent institutional arrangement and governance mechanism incorporating relevant ministries, agencies and institutions with responsibility to urban health.
- Expanding/upgrading urban dispensaries for effective and quality PHC services (including services for reproductive health, nutrition and health education).
- Defining an adequate referral system between the various urban dispensaries and the second and third level hospitals, and exploring feasibility of introducing General Physician (GP) system.
- Developing and utilizing urban HIS for effective management of urban health care.
- Building capacity of the various service providers under MOHFW and MOLGRDC.

- Determining the role and accountability of different NGOs and the private sector in the delivery of urban health. Formalizing relationships through PPPs and through diversification of health service delivery strategies.

# CHAPTER V: COMPONENT II – STRENGTHENING HEALTH SYSTEMS

## 5.1. Governance, Stewardship and Legal Framework

**Governance and Stewardship:** It broadly comprises of the policies and strategies adopted by government and their actual translation into improvements in the health status of the population. The GOB has established different professional regulatory and statutory bodies to oversee the development of a competent professional workforce ensure provision of standardized and quality health services and protect people's right to health while ensuring transparency and accountability as described in different sections of the document.

There is widespread public perception about the quality of health services provided either by the public or the private/ non-state actors, as being low. Unfortunately accident and trauma patients and those needing emergency attention are least served by the private clinics and hospitals and it is only the public hospitals that cater to them. In private sector, patients are subjected to expensive health care due to high cost and unnecessary laboratory investigations.

Weak governance in the public sector has led to unavailability of designated health personnel, pilferage of drugs and other essential supplies, mistreatment and negligence, unauthorized and illegal payments in public health facilities while internal monitoring and oversight mechanisms remain weak. The poor and the vulnerable members of the society bear the brunt of the weak governance in health sector both in terms of cost and deficient service delivery.

The stewardship role and capacity of the MOHFW will be strengthened through improved monitoring of quality of care and safety of patients in both public and private sectors. DGHS will develop a periodic inspection system of facilities and services, with necessary support, on a regular basis at all levels and act upon the findings to improve client satisfaction.

The Citizen's Charter for health service delivery is in practice in the public hospitals and health facilities. Practicing of the Charter will be monitored and strict adherence to its implementation will be ensured through establishing a continuous feedback mechanism and review of progress on its effective implementation along with various health watch groups.

**Legal and Regulatory Framework:** Bangladesh has a wide range of legal instruments and gazette policies narrating different mandates, responsibilities and authority for regulation of the health sector. The origin of much of the legislation dates back to pre-independence times, ranging from The Vaccination Act of 1880 to recent legislation such as the Medical and Dental Council Act of 1980. The legal framework to regulate the pharmaceutical sector in Bangladesh is contained in the Drug Act of 1940, revised in 1946, the Drug Control Ordinance 1982 and the National Drug Policy 2005. These acts are periodically revised and updated through Ordinances. The Safe Blood Transfusion Act 2002 (implemented in 2004) and the Safe Blood Transfusion Rules and Regulations 2008 provide the existing legal framework for the use of blood and blood related products.

The main regulatory functions under the MOHFW are: i) accreditation of hospitals, private health services, diagnostic centers and training institutions (including medical colleges); ii) licensing and control of pharmaceuticals and of some cadres of health workers; and iii) overall setting of standards, including for alternative medical care and medical waste management.

In the next sector program, the MOHFW proposes to revise the mandates, structures and build capacity of the various national regulatory bodies (BMDC, BNC, BPC, etc) to increase their effectiveness and functionality and review structure and capacity of the MOHFW Directorates (DGHS, DGFP and DGDA) to strengthen supervision and enhance institutional management.

The current regulatory framework for NGO and private-sector health care provision is inadequate for ensuring minimum standards of service quality, though successful replicable initiatives exist. Establishment of a suitable regulatory framework with adequate mechanisms for implementation and enforcement is therefore a high priority. This should emphasize regulation of the assurance of the quality of services and ensure fair competition. MOHFW intends to partner with NGOs and private sector for creating regulatory mechanisms to do so.

Priority interventions will include:

- Assuming strategic stewardship and governance role by MOHFW for policy management and setting up a coordinating system for synergistic, effective and efficient contribution of public, non-public including private sector and health NGOs.
- Strengthening MOHFW's regulatory and supervisory roles through revising the mandates of the regulatory bodies and capacity building for enforcement of standards.
- Facilitating and strengthening MOHFW's engagement with the NGO and private sector, based on comparative advantage.
- Reviewing and updating the existing health related legal frameworks to include the health consumers' rights in the Consumer Rights Protection Act (2009).
- Constituting a Taskforce to assess the need for (i) new law/ordinance, (ii) revising any existing ones and (iii) determining measures to improve existing legal framework.

## 5.2. Gender, Equity and Voice

The Government of Bangladesh has made it a priority to eliminate discrimination against women and girls and promote gender equity. The MOHFW will uphold the same in the next health sector program. The existing Gender Equity Strategy of MOHFW will be reviewed and revised as to various gender related issues including Human Resource planning, development and management at facility level, housing, promotion for women workforce, etc.

The voice of the citizens should be sought and listened to. Involving the community in planning, managing and supervision of health care is therefore critical to responsive, efficient and effective management of services and their utilization. The new sector program will adopt specific measures and adjustments in approaches and services to ensure that the needs of the various regions and groups are identified, analyzed and appropriate measures taken through decentralizing authority and allocating special funds. Voice and accountability mechanisms will be mainstreamed into the governance and stewardship functions of the overall program. A local level accountability mechanism will be developed in participation with the community people and local NGOs. Representation and participation of the particularly disadvantaged and marginalized groups must be ensured in community planning and management mechanisms to cater to their needs and to improve utilization of health services by such groups.

Clients' Charter of Rights (CCR) and patient's duties and responsibilities will be redesigned along with building awareness of service providers and its implementation in the health facilities will be ensured. Stakeholder's groups will be formed (elected local government. representatives, NGOs, women groups, private providers, etc) at all levels to monitor quality of services, ensure increased utilization, representation, voice and accountability.

Priority interventions for GEV include:

- Mainstreaming GEV issues in all components of the sector program and ensuring adequate budget for these (at central and local levels).
- Improving coordination on GEV issues through assigning and strengthening GNSP Unit as the focal point and aligning it with other GOB as well as WID mechanisms.
- Ensuring inclusion of GEV and accountability issues in the objectives, activities and indicators of all OPs and in the overall results framework (RFW).

## 5.3. Parastatal Organizations

There are a number of parastatal organizations/professional associations playing different functions in the health sector. The most important councils in the sector with licensing functions are: Bangladesh Medical and Dental Council (BMDC), Bangladesh Nursing Council (BNC), Bangladesh Pharmacy Council (BPC) and State Medical Faculty (SMF). Other parastatal organizations / associations with regulatory functions in specific fields are: Bangabandhu Sheikh Mujib Medical University

(BSMMU), Bangladesh College of Physicians and Surgeons (BCPS , Bangladesh Medical Research Council (BMRC), Bangladesh National Nutrition Council (BNNC), Bangladesh Homeopathy Board and Bangladesh Unani and Ayurvedi Board for alternate medical care, in teaching and medical education.

These parastatal organizations and professional associations are consulted in oversight of reinforcement of professional medical ethics, the elaboration of a 'Code of Conduct' for service providers, enforcement of regulations, strengthening government's stewardship and governance roles etc. MOHFW will ensure that these regulatory functions are also extended to the NGO and the private sectors. The existing government affiliated regulatory bodies need to be strengthened through ensuring a critical mass of skilled human resources, logistics, etc.

Priority interventions include:

- Reviewing, updating and revitalizing mandate and structure of the regulatory bodies, to increase their effectiveness in strengthening government's stewardship functions.
- Exploring requirements of setting new entities like accrediting bodies for medical education, hospital service delivery and for ensuring food safety.

## 5.4. Non Governmental Organizations and Public Private Partnership

**Non Governmental Organizations (NGOs)** are a significant and growing means of health service delivery in both rural and urban Bangladesh. There are some well established and institutionally strong NGOs as (i) health care providers, (ii) innovators in diversifying modalities of service delivery, (iii) training formal and informal health providers, (iv) research and development, (v) catalyst/facilitator for demand creation and linking community with health and FP facilities and (vi) facilitators/ drivers of increasing public accountability. NGO health programs have traditionally been supplementing and complementing government efforts, particularly in reaching the poor and hard to reach populations.

A number of NGO coordinating groups exists, e.g. National Health Alliance, Peoples Health Movement, and Coalition for Urban Poor, Breastfeeding Foundation. Building and strengthening linkages with these coordinating groups will be an important way of building stronger engagement with constituents in the sector. Currently in Bangladesh this representation of constituents is facilitated through "Bangladesh Health Watch", an independent eye/ watch on the health program, on behalf of users, citizens and other stakeholders.

The government recognizes the need for wider involvement of the private sector, including non-state institutions[6] for enhancing effective health service delivery. **Public Private Partnership (PPP)** in services delivery and in the areas of medical and allied education will be further expanded and strengthened with effective monitoring and regulatory mechanisms. PPPs can help address innovations in service design and management expertise, empowerment of the service recipients, protection of environment, social justice and right based service provision. The proposed "Private Health Care Facilities Services Act" is currently being reviewed to replace Clinical Practices Ordinance of 1982. MOHFW will address the issue of PPP and its potential benefits for the health sector through its inclusion in the proposed legislation. Provision of emergency medical / diagnostic services in the private health facilities will also be addressed through its inclusion in the proposed Act.

However, the stewardship and regulatory role of MOHFW will need to be strengthened simultaneously to properly administer the functioning of the PPPs. In this regard MOHFW will change the current NGO Cell of the GNSP Unit into an NGO and Private Sector Unit (NPSU), making it the focal point for NGO and PPP issues. NPSU will develop a strategy for facilitating NGO and PPP participation, with TA support, as a priority. It is hoped that NPSU will help strengthen coordination and collaboration between the public and private sectors.

[6] The **'private sector'** includes (i) the private for-profit institutions, organisations and individual care providers AND the private not-for-profit organisations (NGOs, CSOs and FBOs).

NGOs with limited financial resources and providing quality services in places where public services are not present, would be prioritized for funding support based on the strategy to be developed. An advisory committee headed by the Secretary, MOHFW will be constituted to provide policy guidelines and to oversee activities of funded NGO and PPPs. The NPSU will act as the secretariat for the advisory committee.

Priority interventions will include:

- Strengthening NGOs and private sector engagement based on comparative advantage.
- Reconstituting the current NGO Cell of the GNSP Unit into an NGO and Private Sector Unit (NPSU) as focal point for NGO and PPP issues and development of a strategy for facilitating NGO and PPP participation.
- Constituting an advisory committee to provide policy guidelines and to oversee NGO and PPP related activities funded by MOHFW.

## 5.5. Health Sector Planning and Budgeting

### 5.5.1. Sector Wide Planning and Management

The Planning Wing (PW) of the MOHFW oversees to a certain extent the planning and budgeting process of the whole ministry and as such fulfills an essential role in the systems that support timely submission of the Operational Plans (OPs) and their budgets. The PW is directly involved in the activities related to (i) Sector wide policy, strategy and planning/ budgeting, (ii) Sector wide coordination/collaboration, (iii) Processing of program and projects and (iv) Monitoring and evaluations. However its role in matching sectoral budget with OP and parallel projects and dividing/adjusting budgets among the OPs/projects still remains a challenge.

**Program Planning and Budgeting:** The PW of the MOHFW is responsible for the development of the medium (3-year, 5- year) and long term plans and development budget of the Ministry including the Program Implementation Plan (PIP) based on the medium term budget framework (MTBF) while respective LDs prepare their OPs based on the PIP.

The PW will initiate a revision of the standardized format of the OPs and provide guidance for their development. OPs will be made for 5 years with 3-years detailed budget and block allocation for the last 2-years budget, by the Line Directors, in response to the overall planning cycle of GOB and taking into account (i) the results of the earlier year's activities and expenditures, (ii) changing needs and budget provision as stipulated in the PIP and (iii) inputs from Local level planning (LLP), where applicable. A Mid Term Review is expected to take place during the implementation of the PIP following which the OPs can be further revised as necessary.

DGHS and DGFP Planning Units are responsible for (i) participating in the planning and budgeting process, (ii) conducting regular review/ monitoring of activities and financial expenditures; and (iii) developing local level plans annually and incorporating their budget and activities into the respective OPs of the relevant LDs and serve as constant links to the PW of MOHFW for carrying out program planning and budgetary exercises effectively.

Revision of guidelines for the PIP/OP will be formulated for the next sector program in consultation with the LDs and relevant Ministries and will be placed for the approval of the Executive Committee for National Economic Council (ECNEC). This will allow more flexibility and authority in terms of OP revision and approval by the Steering Committee of MOHFW.

The PW, in coordination and collaboration with other relevant sectors, agencies and stakeholders, ensures financial and performance reporting. It also coordinates the reporting on implementation progress of various projects directly funded by several DPs along with some GOB funded vertical projects within MOHFW.

**MOHFW wide Single Work Plan:** The Development and the Non-development budgets of the MOHFW are currently prepared based on MTBF resource envelop. However they are prepared and presented separately in two documents, making it difficult for decision makers and managers to derive

a holistic view of the resource allocations. Though many activities of the two budgets complement each other, some key activities/ items are funded from both the budgets while others are interdependent on the progress of separate activities under the two budget lines. In the absence of effective coordination such compartmentalized budgeting system runs the risk of duplication and under allocation of resources in priority areas.

For the purpose of MTBF budgeting, the MOHFW will formulate a Single Work Plan every year by the end of December/ January so that both the annual budget and ADP for the next financial year can be prepared on the basis of such a work plan. It will propose allocation for the upcoming financial year together with projections for the next two years. The proposed Single Work Plan will be a useful tool for common budget preparation, will help deepen the MTBF process in the MOHFW and will facilitate the initiatives for LLP at the upazila levels.

Directorates/Agencies are responsible (i) to facilitate the planning and budgeting process, participate in the formulation of different plans and (ii) to conduct regular review/ monitoring of activities and financial expenditures. DGHS and DGFP Planning Units are also responsible for developing yearly local level plans and incorporating the budget and activities of the LLP into the operational plans (OP) of the relevant line LDs. Moreover, these Units are the constant links to the PW of MOHFW for carrying out program planning and budgetary exercises effectively.

PW along with the Planning Units of DGHS and DGFP would eventually be providing expert support to LDs, guiding them to appropriately design standardized plans and budgets, strengthen their management and implementation mechanism, and produce reports relevant to OPs, especially with respect to the achievements in their respective Results Framework (RFW) and other sectoral progress reports.

**Resource Allocation Formula:** Public funding for health care through the MOHFW to geographic areas is currently based on norms related to the size of facilities. Such allocations often do not reflect population need since health facilities and staffing patterns are often distributed in a way that fails to take account of changing demographics and epidemiological requirements. The concern stems from evidence that although health status is improving, in poorer and more vulnerable areas the improvement is not as expected. Therefore, MOHFW would require a formula based on population needs and other relevant factors. Introducing such a formula for allocation driven by the needs of the local population might affect the way planning and budgeting is carried out at present. During the next sector program priority interventions will be made to improve resource allocation based on rational formula.

Priority interventions will include:

- Introducing joint review of non-development and development expenditure in the Ministry as well as in the Directorates on a monthly basis.
- Involving the field level cost centers in the preparation and management of development budget, similar to the preparation of non-development budget.
- Establishing a new Coordination Section in the MOHFW and at the Directorate level to facilitate preparation and use of single work plan.
- Conducting a study to explore the possibility of financing the commonly funded items from a particular budget, either non-development or development.
- Reviewing periodically for making further improvements in work plan formats and procedures and link the Single Work Plan with LLP.
- Ensuring adequate flexibility by MOHFW in revising the OPs based on the APRs and in inter and intra allocation and reallocation of development budget amongst the OPs.
- Reviewing and reaching agreement on the resource allocation formula, pilot sites, allocations for each pilot site and identification of additional funding, and mechanisms for accelerating local resource availability including new directives for financial delegation.

### 5.5.2. Decentralization: The UHS and LLP

**Decentralization:** The 1983 UP Ordinance, updated in 2009 accords formation of 2 of the 13 committees of the Union Parishad (UP) on health and family planning, and on water and sanitation. Although HPSP and HPNSP envisioned wide ranging decentralization of financial and administrative authority, this could not be implemented due to reasons beyond the control of MOHFW. However the next sector program proposes to address decentralization through the Upazila Health System (UHS) described in section 4.1. (a).

Decentralization of the management of service delivery with proper participation of the community in its management and delegation of financial power to the appropriate level to make the facilities "for, by and of the people" will be useful. The role of the MOLGRDC will be crucial in ensuring and facilitating public involvement in managing the provision of public health care. This will help in introducing alternative financing models (e.g. retention of local cost recovery mechanisms) to meet the financing gaps and improve fiduciary arrangements.

The next sector program will pay focused attention to initiating the PHC through the UHS. Intensive communication among the various bodies and committees at the local level will help define and explain the relations between the District Civil Surgeon Office, Deputy Director (Family Planning) Office, the Upazila Health Complex, the Union Health and Family Welfare Centers (UHFWCs) and the Community Clinics (CCs) to all the stakeholders. MOHFW, under the existing local government framework and GOB's financing procedures, will work out a mechanism for decentralization along with delegation of administrative and financial authorities.

**Local Level Planning (LLP):** Considerable experience has been gained through the lessons of a number of pilot initiatives on local level planning (LLP) in the past two SWAp periods. However, these exercises could not be linked to budget process and as such no resources could be allocated. With the current Governments' interest to support decentralization as a policy, also reflected in the draft National Health Policy 2010 and the draft National Population Policy, decentralized planning has found greater acceptance. The prioritized action plan prepared following the APR 2009, had 'feasibility and implementation plan for operation of pilots on 6 local level district plans' as one of the six performance based financing indicators.

MOHFW carried out various LLP exercises at Upazila level over the last few years and identified six districts i.e Bhola, Cox's Bazar, Sherpur, Satkhira, Lalmonirhat and Sunamganj, in six divisions as pilots for operation of LLP, for which an action plan was developed. MOHFW wanted to move forward with this action plan to give a fair trial time to LLP operation, but the feasibility of operation of a district plan under the present legal, administrative and budgetary system was found not realistic, as evident from a study. A number of suggestions have been put forward for the medium-term on LLP, based on which MOHFW will work in the next sector program while the PHC service will be linked to LLP through the UHS described in section 4.1 (a).

Priority interventions will include:

- Updating the LLP Toolkit reflecting the following changes: 3-year planning cycle; clearly spelt out responsibilities of LLP Core Cell in arranging resource envelope and providing feedback to the local-level; budget demands as per OPs; complementation of goals and activities between the field-level services of the two Directorates; role of the community, especially of the elected representatives of local government at Union and Upazila levels.
- Introduction of changes in the various support systems: (i) increased delegation of administrative and financial power to the cost centers, (ii) capacity building, including short training on administrative, management and financial management, (iii) developing performance indicators and evaluation mechanism, (iv) guidance and mentoring by the two Directorates and (v) meeting the needs for human resources, drugs and equipment.

### 5.5.3. Monitoring and Evaluation

The PW of MOHFW manages the monitoring and evaluation activities to facilitate the Annual Program Review (APR) by the Independent Review Team (IRT). Under the current health sector

program HNPSP, PW manages the monitoring and evaluation unit (MEU) and the data management information system (DMIS) to serve as the data warehouse in the MOHFW. The MEU was mandated to assist the PW in carrying out review and evaluation of the sector program through APR for developing policies, strategies and course corrections of the program implementation.

MOHFW's current M&E system is inadequate and MEU was not in a position to function properly due to lack of capacity and capability, logistics, etc. As NSAPR II categorically mentions to "strengthen capacity of ministries and divisions to monitor and evaluate progress of development projects", there is an urgent requirement of broadening the scope of work of the existing MEU and institutionalizing it as a permanent structure for sustainability, under the direct responsibility of the PW of MOHFW to provide professional, sustainable support to the Ministry, to monitor progress of HPNSDP and to strengthen the monitoring capacities within MOHFW and the Directorates to efficiently use the routine data systems for decision making. This will call for a wide range of activities including coordination and management of activities that span several LDs. Monitoring and evaluation of the sector program requires an overall M&E strategy and work plan, based on a thorough assessment at local and central levels, to guide the improvement of the system, especially the quality and capacity of the routine data collection systems (which includes development of registries, routine data collection forms, type and frequency of reports) and outline specific activities required for strengthening the organizational capacity to conduct effective M&E (including HIS) activities.

An effectively functioning unit in the name of Program Management and Monitoring Unit (PMMU) will be established in the PW of MOHFW, equipped with adequate skilled professionals and logistics, to work on program management and monitoring in the Ministry. The PMMU will be instrumental for management, coordination, monitoring and evaluation to track progress in the sector program.

The process of introducing RFW at program as well as at Operational Plan (OP) levels in the next sector program will strengthen the monitoring culture within the MOHFW. Developing an M&E system for the HPNSDP is essential to provide convenient and timely information to policymakers as they track its performance in order to make necessary adjustments over its course. The roles of the PMMU will also provide support to conduct APR/MTR missions and facilitate several important population surveys through the respective agencies in collaboration with the DPs.

A coordination committee headed by the Additional Secretary, MOHFW will be framed to institutionalize the M&E functions in the MOHFW and the proposed PMMU will provide secretarial support to this committee. The coordination committee will also establish a coordination mechanism with the MOLGRDC in relation to birth and death registration, and with Bangladesh Bureau of Statistics (BBS) in relation to decennial census, Sample Vital Registration Survey (SVRS), Multiple Indicators Cluster Survey (MICS), Health Economics Unit, NIPORT, etc.

Priority interventions to improve M&E system will include:

- Establishing a program management and monitoring unit (PMMU), equipped with adequate skilled professionals and logistics in the PW of MOHFW for management, coordination, and monitoring and evaluation to track progress in HPNSDP.
- Developing M&E Strategy and Work Plan to identify gaps, duplications and areas for improvement and streamlining the existing routine M&E system.
- Investing to the direct improvement of the routine information of all MIS, including the regular production of meaningful quality data by all health facilities in the country and ensuring an effective involvement of all Directorates and the DMIS.
- Developing a comprehensive capacity building plan comprised of courses and workshops to build M&E skills and capabilities at the central and OP levels.

### 5.5.4. Health Sector Financing

In the context of declining DP contribution to health sector and increasing out-of-pocket expenditure, the Government is faced with a challenge to cope with and manage the changing scenario in the

pattern of health financing to make it more effective and efficient for the poor. Considering experience of other countries, it has been felt that exploring alternative health care financing options would be necessary. Moreover, a rational approach to allocating resources would help achieve efficient resource allocation in the health sector.

**Health Financing Framework:** The MOHFW is committed to review and reform health financing, thereby, (i) developing a national health financing strategy that would guide the nation in adopting and choosing from amongst a variety of options, leading to a more effective channeling of public resources towards the achievement of better outcomes for the poor, women, children, disabled persons and older people, and by (ii) considering demand side issues (coverage, access and awareness), financial sustainability (costing, risk and contributions), management and organizational capacity needs, political feasibility and the legal and policy framework. The health financing strategy will help improving estimates for total resource requirements, options for mobilizing additional resources including the private sector, reducing out of pocket spending, addressing equity and social protection and improving resource allocation and use efficiency. MOHFW has also developed a preliminary model of health insurance piloting in Bangladesh and decided to go forward with the pilot as soon as possible in a number of unions simultaneously.

**Demand-Side Financing (DSF):** The ongoing demand side financing scheme (maternal voucher scheme) has evidence that this has helped to increase the utilization of safe motherhood services, but there are also some concerns. These relate to (i) affordability and sustainability, if the scheme is to be scaled up, (ii) procedural constraints related to fund disbursement and management, (iii) improvement of supply side (HR, logistics, equipment, quality) in order to consistently keep up with the increased demand, (iv) inclusion of private sector/ NGOs, (v) stewardship role of GOB, (vi) to the risk that some aspects of the design of the incentives (e.g. cash payments, service coverage) may be changing provider and patient incentives in ways that are not supportive of the maternal health objectives. However, the recommendations from the economic evaluation of DSF program will be considered for further scaling up.

Priority interventions will include:

- Reviewing different health financing instruments currently being discussed (demand side health financing, supply side financing, mixed systems, etc) on their inherent principles and in their capacity to contribute to an effective decrease of out-of-pocket expenditure and identify critical health financing constraints for their solutions.
- Developing short and long term strategies to ensure access of the poor to quality health services, including joint development of agreed methodology on how to identify the poor.
- Activating relevant task group that discusses the issues of health financing framework and review the weaknesses and strengths of the current national health financing system.
- Reviewing and evaluating innovative health financing approaches (e.g. role of pre-payment mechanisms (including community health financing), user fees (with and without retention), private sector financing and PPP, and various types of donor financing.
- Scaling up on-going DSF program based on economic evaluation and review and piloting of new ones.

### 5.5.5. Health Information System (HIS)

The existing health information system of the HPN sector needs much strengthening to ensure availability of a complete set of timely, reliable and representative data on core health, population and nutrition indicators. Gaps in information are at all stages e.g. in the secondary and tertiary hospitals, in the quality of the services, in HR availability etc.

The major components of the HIS will include: (i) Service based HIS; (ii) Human resource based HIS; (iii) Institute based HIS covering also logistics and financial HIS; and (iv) Program based HIS. The HIS NNS will be further strengthened and mainstreamed with the HIS of DGHS and DGFP. HIS functions will also include coordination and conduction of limited research and surveys. All the

agencies of the ministry viz. DGHS, DGFP, DGDA, HED, DNS, NIPORT etc. will maintain their own health information system albeit under a common interoperable framework allowing sharing of data, where necessary. The PW of MOHFW will also maintain a HIS function as part of overall M&E System of the sector program. The HIS strengthening program will include designing an integrated HIS to pull together data from a range of sources to strengthen the national capability to plan, monitor and evaluate the progress of health and family planning services along with human resources.

**HIS of DGHS:** HIS functions of DGHS will be accomplished under the name: "HIS, e-Health and MBT", where E-health and Medical Biotechnology (MBT), two components of Support Service Delivery, have been given utmost importance by the government. In continuation of the considerable recent progress made by MIS of DGHS, the design of the entire HIS system of DGHS will take a holistic approach to generate data from programs, institutions and households. This will be accomplished through developing an organizational framework for collecting, reporting and collating indicators, producing performance reviews, and developing a functional, responsive, and timely routine HIS; and completed by strengthening service statistics, personnel, financial and logistics MIS, rebuilding epidemiological information system, and expanding use of IT for data collection and for use at the field level, in an integrated web-based framework. Training and capacity building of human resources will be emphasized. As rapid deployment of ICT would require competent personnel, outsourcing will be carried out as a short term measure until internal capacity is built. New tools, including routine nationally representative survey data collections: annual service utilization and intervention coverage surveys for ESD, and a database of program coverage and features that uses GIS technology will be used for monitoring and evaluation.

The plan for developing population health registry through Geographical Reconnaissance (GR) will be materialized. Community clinics, union facilities, union parishads and upazila health system will be linked with the population based information system. Data will be disaggregated by poverty and gender and facility based logistics information system will be created. "Centralized database software" covering information of all programs (e.g., EPI, IMCI) will be developed and placed in central office of HIS of DGHS.

**e-Health:** It is one of the most focused development agenda of the government under its Digital Bangladesh Vision 2021, to be implemented by the MOHFW. As component of m-Health, the SMS-based pregnancy advice, launched in March 2010, is expected to emerge as one of the pioneering programs of DGHS wherein on registration via cell-phone, pregnant mothers will receive appropriate periodic antenatal, safe delivery and postnatal care advices through SMS, contributing to achieving the MDGs 4 and 5. Efforts to expand the network to all public health facilities up to the CC level are ongoing. The CCs will be provided with mini laptops for multiple purposes like helping patients consult upazila hospital doctors for video conferencing, telemedicine, updating community health data, health education, training health staff, etc.

**MIS of DGFP:** The objective of the MIS/ DGFP is to improve and strengthen national capacity to plan, monitor and evaluate the progress of DGFP services through systematic and effective recording, data management, analysis, report preparation and dissemination. The department of MIS of DGFP implements the MIS functions of the DGFP. Service statistics and logistics management information related to family planning are in operation since long and constitute the primary source of information of MIS-FP. The FWA register, based on robust data collection policy from the communities and the facilities, has become a unique longitudinal record at the community level. Reporting forms are filled and passed up through the ranks and are then regularly compiled, analyzed and disseminated as routine service and logistics data.

Priority HIS interventions include:

- Designing an integrated HIS consolidating data from a range of sources to strengthen national capacity to plan, monitor and evaluate progress of HPN services.
- Strengthening existing routine health information systems of DGHS and DGFP effectively, to ensure regular information flow and facilitate program monitoring.

- Strengthening the ongoing e-Health initiatives by covering all the health facilities with adequate number of IT equipment, devices and trained human resources.
- Encouraging participation of NGOs and private sector for innovation and promotion of e-health services to achieve the long term deliverables of the National Guidelines.

## 5.6. Research and Development (R&D)

Health research is essential to improve health systems, service delivery and pro-poor policies. Operations research is a key tool for evidence-based decision-making. Lack of robust public health research linked to non-public research institutions and inadequate financial, human and institutional capacity hinder generation of evidence and linkage to policy. Coordinating research and aligning it to program needs strengthening for usefulness of research.

Currently, HEU of MOHFW, Director of "Planning & Research" of DGHS and BMRC are the principal bodies for conducting and coordinating research and surveys. NIPORT carries out FP related research and training as well as conducts surveys (BDHS, UESD, BMMS, etc) and advocacy with national and international organizations. NIPSOM, IEDCR and ICDDR,B mostly carry out operational research.

Health research will emphasize priority areas of biomedical, public health, epidemiological, health systems and policy, social and behavioral, and operational research. It will also play a vital role in advocating research findings for informing policy and program and for raising citizen's awareness. The capacity of various research institutions and individuals will be augmented to achieve the above objectives.

From a technical point of view, the Bangladesh Medical Research Council (BMRC) is the focal point for health research and strengthening functional capacity in research. Its prime objective is to promote and coordinate the large number of health research, done by the medical teaching/ training institutions, throughout the country.

A National Health Research Strategy has been developed (January 2009) by MOHFW, to guide determination of research subjects, study areas and their funding. The PMMU, MOHFW will play a stewardship role ensuring effective coordination and facilitation of dissemination of key results of research carried out by various agencies and organizations and will be directly involved in implementing research and surveys only in a limited way. Appropriate measures will be taken to link research and survey findings to HIS of respective agencies.

**Medical Bio-Technology (MBT):** Recognizing the importance of medical biotechnology the Government of Bangladesh adopted a National Biotechnology Policy in 2006, which was updated in 2010. A National Taskforce on Biotechnology of Bangladesh (NTBB) with the Honorable Prime Minister as the chair and the Honorable Minister for Health and Family Welfare is an important member of the NTBB has been formed. To explore and engage the potentials of medical biotechnology a "National Guidelines on Medical Biotechnology" has also been formulated, which was revised and gazette in 2010 and sets out the deliverables to be achieved by the MOHFW through short, medium and long term specific action plans.

Priority interventions will include:

- Strengthening BMRC after reviewing its mandate and structure for assuming strategic stewardship and governance roles for health related research.
- Conducting demographic behavioral aspects of family planning, reproductive health and nutrition program focused research / survey to strengthen the national program.
- Conducting national surveys: BDHS, BMMS, UESDS, facility survey, Urban Health Survey etc and disseminate findings to policy makers/ program managers.
- Implementing medical biotechnology related activities based on the National Biotechnology Policy and the National Guidelines on Medical Biotechnology.

## 5.7. Human Resources for Health (HRH), Training and Nursing Services

### 5.7.1. Strengthen Human Resources

**Health Workforce:** Service providers constitute about two-thirds of the health workforce, while health management and support workers constitute the remaining third. There is a huge shortage of qualified practitioners and paraprofessionals in the country's formal health system. A large number of unqualified and formally unrecognized allopath providers and homeopaths provide services and act as the first point of contact for many patients. There is severe imbalance and dire shortage in the spectrum of essential competent workers, viz., ratio of nurses and paramedics to doctors, public health specialists, health policy planners and managers. Along with inappropriate skill mix, improper distribution characterized by urban concentration and rural deficits is another dimension of shortage of health professionals.

The Government recognizes the need for a comprehensive review of HRH issues with a view to maximizing the utilization of the human resources in health and family planning as much as affordable. To this end, MOHFW adopted the "**Bangladesh Health Workforce Strategy-2008 (BHW Strategy)**" in August 2009 and started preparing a comprehensive HR Action Plan based on the BHW. The HR Action Plan will include ongoing re-organization of the Bangladesh Civil Service Health Cadre, establishing career plans for health workforce, specific lines of specialization based on competence and experience and setting clear principles for promotions, posting, transfers, post – graduation education and in-service training.

DGFP has more than fifty two thousand officials of different levels, which is also constrained by inadequacies in both number and quality. The Directorate has a chronic difficulty in (i) filling up large number of vacant posts and (ii) the development of a wider system of encadrement.

MOHFW will address the issues of shortages, mal-distribution, skill-mix imbalance, performance management and quality of existing workforce in both the formal and the informal sectors. Steps will be undertaken to expedite development of additional workforce (Specialists, doctors, nurses, paramedics, technologists, etc.) in the public and private sectors.

The large and critical role of the informal health care providers need to be recognized and appropriate strategies developed to manage and improve their practices to minimum levels of acceptable care. They will be given need based short training in both public and non-state facilities, particularly on appropriate drug use and prevention of drug resistance, routine curative care management and referral of complex cases to the appropriate facility.

Trained people in key positions need to be retained to get the benefit of investment. MOHFW will continue necessary coordination and consultations with other ministries like establishment, planning and finance for promotion and implementation of HR strategy including compliance of the issue of retention of trained human resources in key positions.

**Pre-Service Education:** Given the shortage of qualified staff, the institutions for medical and paramedic education will be expanded in both public and private sectors. MOHFW will re-examine the current licensing arrangements for pre and in-service educational institutions in public and non-state sectors to establish a professional accreditation system. Priority will be given to pre-service education, recruitment and training of nurses, midwives, technicians and CSBAs to meet shortage and improve service delivery particularly to achieve MDG 4 & 5.

Priority interventions to improve health workforce include:

- Developing and implementing a long term comprehensive Health Workforce Master Plan with short, medium and long term interventions taking public, private and NGO sectors in perspective.
- Scaling up production of critical health workforce to minimize immediate gaps
- Introducing specific incentives packages to deploy and retain health workforce in remote, rural and hard to reach areas.

- Undertaking periodic comprehensive assessment of health workforce availability, requirements and gaps in all sub systems; measuring geographic, skill mix and gender inequalities; gathering data on national and international migration; and accordingly producing and deploying the required health workforce in all places.
- Creating a national health workforce career plan clearly describing staff development paths, promotion and deployment prospects for all types of health personnel and staff.
- Working out mechanism to scale up Individual Performance Management System (IPMS) covering more and more health institutions/ facilities; broaden concept of IPMS transforming it into Organizational Performance Management System (OPMS).
- Improving capacity of all academic and training institutes in required areas (quality teachers, laboratory, teaching facilities, ICT, library facilities, etc.) to train health personnel (nurses, midwifes, health technologists, medical assistants, community paramedics, FWVs, Junior Midwives, CSBAs, CHCPs etc).
- Carrying out effective quality assurance for medical education and training programs.

### 5.7.2. In-Service Training (IST)

The Line Director, IST is responsible for IST functions in DGHS. The Technical Training Unit (TTU), DGHS supports LD/ IST in need assessment, curriculum development, in identifying training institutes and facilities, contracting out training (local & abroad) and assigning different focal points for specific activities and evaluation. In-Service Training programs, local & abroad, will be need-based and based on an effective action plan. Existing and new training facilities at division, district and upazila levels will be identified, strengthened and used for conducting effective training courses or on-the-job routine training. Training of medical officers, nurses and midwives, laboratory technicians, FWVs, female HAs and FWAs on comprehensive and basic EOC will continue at a faster pace. NGO providers will also be trained under conditions of providing services to those who cannot pay. TTU needs to be further strengthened by adding subject matter specialists on ad-hoc basis to meet the demands of in- service training.

The National Academy for Health Management and Research is being established in light of the training need of health service providers and managers on different aspects of management e.g. (i) Personal Management (ii) Project Cycle Management (iii) Financial Management issues (iv) Logistics Management etc. The TTU will support this initiative in the areas of mentoring for quality training, need assessment, material development, supervision and impact evaluation.

The National Institute of Preventive & Social Medicine (NIPSOM) is responsible for developing public health workforce at the post graduate level, conducting research in public health arena and providing advisory and consultancy services to support Primary Health Care and the health system in Bangladesh. NIPSOM will be strengthened for producing qualified public health work-force to meet the emerging demands.

NIPORT has been implementing multidimensional training program for mid-level managers, trainers, paramedics and frontline workers of the DGFP. NIPORT's training include topics such as Team Training, Management Development Training, Clinical Management Training, Training of Trainers, FWV Training, Comprehensive Orientation, Midwifery Training, Refresher Training, Computer Training, Early Childhood Development Training, etc. At the same period, a number of training curriculums were developed. Considering the present needs, the activities and logistics facilities of NIPORT require strengthening.

Priority interventions to improve in-service training will include:

- Developing/ adapting comprehensive training curriculum and module(s) for training of trainers on relevant subjects and topics.
- Establishing medico-legal and forensic medical services in the remaining district hospitals by providing training to the recruited staff.

- Establishing a Health Management Institute/ National Academy of Health Management and Research center.
- Strengthening NIPORT's facilities for effective in-service training of the FP personnel and the personnel of DGHS (e.g. nurse/midwifery).

### 5.7.3. Nurse / Midwifery Services and Training

Nursing services aim at strengthening public sector nursing and midwifery by creating adequate posts and filling-up the same, to improve the existing mismatch of physicians to nurses, nurses to patients, nurses to bed and nurses to population and midwife to population ratios. However the number of nurses or paramedics in the country is very insufficient and the plan is also unclear for future nursing education to address the inadequacies in number as well as in nursing services. Nursing services is the weakest of all the HPN service providing organizations in the public sector. The Directorate of Nursing Services (DNS) and the Bangladesh Nursing Council (BNC) also suffer from the absence of an effective MIS.

Midwifery skills are not available 24/ 7 days a week, resulting in extremely poor quality services for women seeking care in public facilities. There is an urgent need to create nurse and midwifery posts in the facilities at all levels as well as the creation of post for the midwifery course at the entry level of the nursing colleges in the public sector. Moreover, continuous and extensive in-service training needs to be imparted to improve quality of midwifery and nursing services. For producing quality nurses of international standard, the existing nursing curricula will be reviewed to update the nursing course to international level along with development of their communication skill.

Given the high maternal mortality rates in the country, the structure and competencies of midwifery training is currently being reviewed. Revamped nurse-midwifery training has been restarted with an expected annual production of 5,000 and this will not merely be midwifery but all types of nursing. In order to provide midwifery for the large majority of women who deliver their babies at home, the existing plan for training all the FWAs and the female Health Assistants as Community Skilled Birth Attendants (CSBAs) will be continued. This would provide about one CSBA per 6,000 population or 1,000 families to manage about 50 to 60 normal deliveries and at least one third referrals every year.

The skilled birth attendant (SBA) in Bangladesh context, is defined as the health workers (such as FWAs, Fe HAs) working at the community level who has been educated and trained to proficiency in all the midwifery skills and abilities, defined by the International Confederation of Midwives, needed to manage normal (uncomplicated) pregnancies, childbirth and the immediate postnatal period and in identification and referral of complications with providing them first-line management in women and newborns. They are certified and registered by the Bangladesh Nursing Council (BNC) under BNC Ordinance LXI, 1983.

To meet the need for Skilled Birth Attendants (SBAs) for safe delivery, the key options for consideration are: (1)Revise implementation of the training of CSBAs and review the numbers needed, (2) Revise the whole career structure of nurse midwife training where the current RNM will do a six month certificate course in advanced midwifery, while a new two year course is started to become a registered JNM with possibility to continue later towards a two year course and obtain a degree as RNM, and (3) Restart the training FWVs for 18 months, with additional six months specifically on midwifery.

Bangladesh has the necessary human resources for contributing to the international market. However this will require further expansion, strengthening and standardizing the quality nursing institutions and training.

Priority interventions to improve nurse/midwifery services include:

- Reviewing and implementing agreed upon actions of the above mentioned options.
- Streamlining recruitment and promotion rule of the nursing services and post/ recruit/promote staff as per standard.

- Increasing capacity of the Bangladesh Nursing Council to enable it to monitor all the nursing institutes and colleges in the public as well as in the private sector.

## 5.8. Quality Assurance, Standards and Regulation

Improving quality of services in public health facilities is one of the most important areas in the program since quality is among the main factors determining the utilization of the public health care facilities. The elements of quality that need to be given priority are: patient and service provider satisfaction, environment of the health care facilities, availability of equipment and service providers, service provider's communication skills and waste disposal systems. In the private sector, evidence shows that most physicians prescribe excessive and expensive medicines and often ask for excessive diagnostic tests. Acknowledging its necessity, the MOHFW has formed national committees on Quality: The National Steering Committee (NSC), the National Technical Committee (NTC) and the Quality Assurance Task Group (QATG) under DGHS.

A gradation of the licensed institutes, hospitals and individual practitioners will be developed based on quality through some transparent mechanisms, i.e. accreditation process, a quality assessment by a board, formed with proper representation from the beneficiaries as well as the relevant experts.

Improvement of the quality of hospital services will be mediated through establishment and functioning of quality assurance teams in hospitals. Quality will be ensured and death audits will be introduced, starting as 'appreciative enquiry audits', developing into "near miss" audits to full death audits as part of the QA initiative. After selection of districts for piloting the Total Quality Management (TQM) in hospital services, TQM Committee formation, development of tool kit, an action plan will be finalized before piloting. After successful piloting, TQM will be rolled out gradually country wide.

The following quality criteria will be considered: (i) Choice of services/ accessibility and access (with adequate and appropriate logistics), (ii) Information given to clients, (iii) Technical competence of providers, (iv) Interpersonal relations and responsiveness of the service providers, (v) Mechanisms to ensure continuity of services, e.g., referral and (vi) Appropriate constellation of services.

Priority interventions to improve quality assurance will include:

- Improving quality of diagnostic facilities and services at both public and private hospitals.
- Improving functioning of the National Steering Committee (NSC), National Technical Committee (NTC) and Quality Assurance Task Group (QATG) and strengthen the functional Quality Assurance system.
- Conducting regular client and provider satisfaction surveys in primary, secondary and tertiary level health facilities.
- Updating existing Standard Operational Procedures (SOPs) along with standard clinical and operational protocols to be practiced in all hospitals both public and private.
- Developing a national quality assurance policy and strategy for primary, secondary and tertiary level health care services.

## 5.9. Drug Administration and Regulation

The Directorate General of Drug Administration (DGDA) through the Drug Regulatory Authority (DRA) is the national regulatory authority of pharmaceutical products and vaccines in Bangladesh. The DRA is also the sole authority responsible for controlling and monitoring, and overseeing production and import. However, because of shortage of trained and qualified personnel, the effective execution of these tasks is not that strong. Thus, strengthening the DGDA as the National Regulatory Authority needs to be addressed.

The Drugs (Control) Ordinance of 1982 and the National Drug Policy of 1982 were updated in the National Drug Policy 2005, to make the country a producer and exporter of good quality medicines and to strengthen the DGDA into an effective regulatory authority. The updating of National Drug

Policy 2005 is on process. The recent upgrading of the office into a Directorate General was responding to the provisions of the policy. The DGDA currently has about 65% of its posts vacant. These need to be filled as a priority. Recruitment for the recently created new posts has to be initiated.

To ensure drug safety and pricing in the country will require collaboration between the DGDA and other regulatory agencies/stakeholders in the Health Sector. DGDA will need substantial funds to train the officers and staff of the DGDA including drug testing laboratories in monitoring drug quality. In addition, DGDA will have to establish an effective drug testing laboratory of International standard. The existing laboratories need to be modernized. The irregular retail trade of allopathic drugs and medicines, the functioning of spurious drugs or below standard drug and the dispensing of drugs by unregistered physicians or unauthorized sellers needs to be controlled by deploying more staff at district levels and at possible 'DGDA outlet stations'.

Pharmaceutical companies will be monitored for functioning of a quality control and quality assurance systems and for the presence and practice of WHO recommended standard operating procedures (SOP). GMP guidelines need to be used for manufacturing each product and through post-marketing surveillance by testing randomly collected samples in drug testing laboratories.

Data on production, import, export, procurement, storage, distribution and sale would be compiled, monitored and evaluated to ensure availability of medicines in all health facilities in both public and private sectors.

Rational Drug Use would be ensured by conducting surveys on prescribing, dispensing and patient compliance practices. The DGDA, in consultation with the expert committee will update from time to time the list of essential medicines in line with the current EDL of WHO.

Priority interventions will include:

- Establishing a modern drug / vaccine testing lab to meet international standards at central level. Expand these lab facilities gradually to regional/district levels.
- Establishing Drug Information and Adverse Drug Reactions Monitoring Cell within the DGDA for Rational Use of Drugs.
- Strengthening field monitoring and quality assurance of drugs through staff training.
- Updating the National Drug Policy for ensuring quality drugs in the market.

## 5.10. Procurement and Supply Chain Management

Procurement Performance has shown both strengths and weaknesses. The plan to strengthen and assist the office of the Joint Secretary (Dev) by establishing the 'Procurement and Logistics Management Cell' (PLMC) has been initiated. This cell would be responsible for coordinating and supervising decentralization, training and capacity building efforts, including those required within the key procuring entities under HPNSDP. However, the procurement units of CMSD and DGFP are now capable of handling considerably larger amount of contracts than ever before.

Further improvement is needed in realistic needs assessment for procurement of necessary equipment and medical supplies and requisites (MSR), simplification of bidding process, quality control in preparation of bidding documents and technical specifications, introduction of online procurement system, avoiding long delays in installation and operation of equipment, establish a data base for ensuring store inventory on regular basis and idling of equipment for lack of repair and maintenance, and bring significant change in procurement management systems.

MOHFW has already initiated establishing an effective monitoring through an integrated Online Tracking System (OTS). The online tracking of the procurement status and inventory for goods (medicine, furniture and equipments etc.) in CMSD will be established and maintained. Moreover, an effective coordination mechanism of the CMSD with other stakeholders (LDs) will be put in place under the leadership of DG, DGHS.

Procurement audits will be carried out jointly with the internal audit function for financial management. An appropriate financing option will be explored, so that time and cost of contracts can

be saved. In addition, routine post-review of procurement actions will be undertaken for major procuring entities (CMSD, Logistic unit of DGFP) for at least 20% of the contract packages under post-review category. MOHFW will disseminate all complaints received against a contract package, irrespective of post- and prior-review contract packages, including the disposal of the complaint.

In line with the recommendations of the Procurement Assessment Report steps will be taken to ensure improved performance in procurement and logistics management. Different alternatives will be explored to decentralize the procurement system including identification of potential procuring entity. Under the DGHS, CMSD is the biggest procurement agency and its staffing needs to be further strengthened. As for the DGFP, the Logistics and Supply Unit will be strengthened to ensure availability of commodities, which includes contraceptives, DDS kits, Medical and Surgical Requisites (MSRs), forms, registers and equipment.

In emergencies, resulting from natural disasters, the immediate procurement of pharmaceuticals, vaccines, medical supplies or nutritional supplements is necessary to deliver the goods in the shortest possible time. In such emergencies, procurement follows PPR guidelines for emergency procurement methods through UN Agencies, through shopping.

In order to avoid delays, necessitating WB approval at various points in the procurement process to ensure compliance, it is suggested that thresholds will be increased and regular post-reviews will be conducted. CMSD of DGHS and the Logistic and Supply Unit of DGFP will prepare standard specifications and put these on the web site. Framework contracts might be explored for frequent purchases of similar goods that would reduce the time needed to get the goods delivered, while contractual arrangements for a longer period of time are being put in place, based on the outcome of the tender procedure.

Priority interventions will include:

- Ensuring efficient, timely and transparent procurement and distribution throughout the year to prevent stock-out of contraceptives DDS kits, Medical and Surgical Requisites (MSRs), equipment etc.
- Ensuring an efficient storage, inventory, supply and distribution chain and utilization of procured goods and logistics.
- Facilitating an efficient on line procurement tracking and automated store management systems.
- Exploring options of e-procurement and framework contracts.
- Building up capacity for procurement and strengthen monitoring and establish accountability of the procured goods and logistics.

## 5.11. Physical Facilities and Maintenance

In view of the rising trend in population, it is apprehended that unless the government go for construction of new facilities, upgrading & remodeling of existing facilities would be difficult to provide required HPN services. HED has recently been upgraded from CMMU (Construction and Maintenance Management Unit). The present strength of manpower in different categories as well as available logistics is inadequate as compared to their work load. In handling the expected enhanced work load to ensure client friendly and secured health facilities, the further strengthening of HED with TA support will be taken where necessary.

**Physical Facilities Development:** The designing, contract out, supervision and monitoring of construction and repair of physical facilities for MOHFW is done by Health Engineering Department (HED) and Public Works Department (PWD). Rate of utilization of health facilities at the upazila level varies from place to place. The guiding principles to be followed for construction/upgrading of facilities are: (a) renovation and upgrading of the existing health facilities to keep them user friendly and (b) need based construction of new facilities. New and upgraded facilities will be synchronized with the provision of manpower, logistics and supplies. While designing new facilities, consideration

will be made of demographic and geographic characteristics with special focus on building disaster resilient structures. They will also ensure adequate infection control and waste disposal systems. Design of these facilities will be both user friendly and women friendly with adequate arrangements for female toilets, hand washing, water and sanitation, etc.

**Periodic Maintenance of Infrastructure, Equipment and Vehicles:** A comprehensive maintenance plan would be prepared for the health and family welfare facilities for smooth maintenance, to avoid repetition and cost effectiveness. The plan would have a total repair and maintenance of all existing facilities in phases, inclusive of adequate maintenance budget for effective implementation.

The allocation of funds for maintenance and repair of equipment, machines and vehicles (including ambulances) has not taken root as a management culture. The next sector program will ensure that adequate budget provision is made for post purchase maintenance and repair on an annual basis. It is expected that repair and maintenance status of facilities, electro-medical equipment and vehicles will improve significantly.

Priority interventions will include:

- Mapping out the need for new constructions and that for upgrading of health facilities.
- Designing need based user and women friendly health facilities.
- Preparing a comprehensive plan for repair and maintenance of health facilities, equipment and vehicles along with budget requirement.

## 5.12. Sector Wide Management and Coordination

### 5.12.1. Sector Reforms

The HNPSP 2003-11has included several 'reform areas' in its overall activities. The most important ones are decentralization including hospital autonomy and delegation of financial authority, diversification of service provision, demand side financing, and sector management. There has been some progress in some areas and other reform agenda had only partially been addressed.

The next sector program will address the health sector policy reforms that are more in line with recent thinking and on experience. They represent a mixture of MDG and policy related interventions as described in earlier sections (e.g., mainstreaming nutrition, addressing maternal and neonatal health services simultaneously, PHC through UHS, diversification of service provision, prioritization of urban health service, establishing a sustainable M&E System, setting up NGO and PPP Unit, etc) of improving service delivery and the support systems, which are all of high priority to MOHFW. The indicators measuring their results are part of the regular Result Framework (RFW). Through the RFW (Annex 7.2) related to the goal, the development objective and the strategies of the next sector program, measurable targets have been set to be reached at the end of the program in 2016.

### 5.12.2. Institutional and Multi-sectoral Collaboration

Development of the health sector requires direct involvement, interaction and collaboration with policies and programs of other ministries, agencies and a variety of different role players, viz., (a) government ministries and agencies, (b) private and other non-state health service providers, and (c) professional associations, mass media, community organizations and various other non-governmental actors contributing to health sector's development. The feasibility of such collaboration will be addressed during the next sector program with TA support to institutionalize the roles of various actors.

Within the government, programs of a number of relevant ministries reinforce health outcomes, e.g., Ministry of Local Government, Rural Development & Cooperatives (MOLGRDC), Ministry of Education (MOE), Ministry of Primary and Mass Education (MOPME), Ministry of Food & Disaster Management (MOF&DM), Ministry of Women & Children Affairs (MOWCA), Ministry of Social Welfare (MOSW), Ministry of Agriculture (MOA), Ministry of Fisheries & Livestock (MOFL), Ministry of Information (MOI), Ministry of Commerce (MOC), Ministry of Finance (MOF), Ministry of Law, Justice and Parliamentary Affairs (MOLJPA), etc. An inter-ministerial committee under the

chairmanship of the honorable Minister for Health and Family Welfare would be formed to serve as a forum for coordinating the activities of all ministries.

Besides, participation of various technical organizations/agencies both within and outside MOHFW is vital for the successful implementation of the sector program. Private sector led health service providers and drug producers are also key actors in the implementation of the sector program. They have to shoulder social responsibility in furthering government efforts for developing an efficient and effective health service in Bangladesh.

### 5.12.3. Aid Effectiveness

Both the Government of Bangladesh (GOB) and the Development Partners (DPs) are committed to the principles (ownership, alignment, harmonization, managing for results and mutual accountability) of aid effectiveness as codified in the Paris Declaration. For better aid effectiveness in the next sector program, the principles of the Paris Declaration and the Joint Cooperation Strategy (JCS) will be followed. In deciding on a next health sector instrument, GOB and DPs will take the opportunity to put into place simpler and more effective mechanisms for policy dialogue, sharing of information, management of funds, and monitoring of results consistent with these principles.

The JCS will be institutionalized through GOB – DP Local Consultative Group (LCG) meetings. The LCG plenary will provide a forum for on-going dialogue between the GOB and the DPs on the country's development challenges, national plans and strategies, new development initiatives. A LCG Steering Group will prepare the JCS Action Plan that serves as a tool to define and monitor priority actions to address aid effectiveness challenges in Bangladesh.

Within the first year of the next sector program, MOHFW together with the DPs will develop a Code of Conduct that specifies the responsibilities and obligations of both partners, their way of communication and doing 'business' together during the implementation of the program and bringing in more aid effectiveness.

### 5.12.4. Aid Alignment and Harmonization

Under HNPSP, seven development partners (DP) pooled their funds into a multi donor trust fund (MDTF) administered by the World Bank. In addition, 10 DPs supported the Program through parallel funding mechanisms, meaning that a significant share of donor finance remains "off budget" (approximately 47 per cent in 2007). Some major players, for example GAVI and GFATM, while central to HNPSP's objectives, continued to provide complementary support through vertical instruments that are not at all integrated with government implementation arrangements, thereby further undermining aid effectiveness. Aside from the administrative burden associated with parallel financing, this also means that reporting is not aligned to the HNPSP. Beyond the pool, donors continue to negotiate support separately, outside the common arrangements of the pool, using parallel procedures, and with gaps in reporting to GOB. As a consequence, donors and government have expended an awful amount of energy on discussing the details of HNPSP financing arrangements, as opposed to regular policy dialogue and monitoring.

The current degree of harmonization in Bangladesh remains less than desired by most stakeholders. Donor fragmentation, however, cannot entirely be blamed upon weak government ownership or systems. The donor consortium has endeavored to harmonize DP practices by preparing a paper which identifies four principles: (a) joint, missions and analytical work; (b) a division of labor where lead partners are identified for particular themes; (c) coordinated technical assistance in terms of support to task groups; and (d) common harmonized procedures.

However, MOHFW wishes to move forward with DP support with the hope that gradually the GOB capacity will be strengthened and simultaneously the DPs will be more and more aligned to GOB procedures. It is also expected that the DPs will have their own code of conduct for aid harmonization with respect to their support for the development of the HPN sector in Bangladesh. Eventually a Harmonization Manual could be elaborated that provides the details of how the harmonization and alignment will be implemented in Bangladesh.

### 5.12.5. SWAp Arrangements and DP Coordination

Establishing a functioning system of coordination among health, nutrition and family planning and between other Ministries (notably MOLGRDC) at all levels of service delivery, including DPs and UN agencies, NGOs and the private sector will be required to avoid duplication and diversify service delivery and to enhance performance. MOHFW will continue its effort to strengthen inter-ministerial coordination through the Secretary's Committee Meetings and holding inter-ministerial meetings at a regular interval. Moreover, a separate coordination mechanism will be developed during the next sector program with the MOLGRDC for improving the urban health service in Bangladesh.

The LCG sub-group on Health will be the meeting point where the senior management structures of the MOHFW (Honorable Minister, Secretary and his senior staff) meet with the representatives of the DP in the sector (being the HPN chair and some of its members). The LCG Working Groups replaces the previous HNPSP Coordination Committee. MOHFW and the DPs should work together to make the LCG sub-group more effective.

The 'HNP Forum' (chaired by Secretary, MOHFW and composed of representatives of other relevant ministries, civil society organizations (CSO), DPs along with MOHFW officials), meets quarterly to present its performance over the previous period, either based on joint reviews (APR or MTR) or based on an internal review of its work (based on APIR). This process will continue during the next sector program.

Various joint task groups and technical committees operate under the sector program. A coordinator (technical) from MOHFW and from the DPs of each task group will be asked to report back to his/her 'constituency' to allow a broad sharing of information at both sides. The most important Task Groups are: MNCH, Nutrition, Public Health, M&E, HRH, HFRG, Procurement, Financial Management and Gender, Equity and Voice and QM. These arrangements will continue to work during the next sector program and additional task groups may also be formed with new membership when new issues and challenges arise.

An external and independent review of the sector program will be conducted annually (APR) and at mid-term (MTR). The review will be undertaken by independent international and national consultants, during a period that will allow its conclusions and recommendations to be included in the annual revision of the Operational Plan by the various LDs. The review will be followed by a 'policy dialogue' and the development of an agreed joint action plan (Aide Memoire) by the MOHFW and DPs that is subsequently used for the new annual work plan along with the budget (ADP) relating to the OPs. TOR and the selection of consultants will be undertaken jointly.

The HNP Consortium will provide for inter-DP coordination, strategic agreements among DPs of the sector program and policy / budget related issues. At the same time it allows the DPs to take up any issue with the GOB through the Consortium chair. Formal work-related relations between the DPs and the MOHFW will continue to be addressed through the HNP Consortium.

## 5.13. Financial Management (FM)

The two sector programs HPSP and HNPSP have contributed to commendable results over a period of past ten years. The two programs have shaped and strengthened government's health systems and supported its implementation, technically and financially. There have been developments in budgeting procedures, planning of OP wise resource allocations, capacity and capability building including the medium-term budgeting framework (MTBF), fund disbursements and financial monitoring reporting systems. Financial management (FM) systems have also rationalized and simplified external health financing, making it more flexible, aligned and predictable than in the past. Despite developments in some areas, FM still remains a critical area in the SWAp implementation process, which needs to be addressed during implementation of the next sector program.

### 5.13.1. Funding Modalities

The establishment of a large "pooled fund", financed by the development partners has certainly contributed to improved working relationships between the government and its development partners. Experience has been acquired with the funding modalities under HNPSP that can now serve to

improve any flaws that existed. Others will provide parallel financing within the remit of HPNSDP, to be reflected in the PIP and the relevant OPs.

In Annex 7.3, the current HNPSP funding modality has been presented. It will allow the reader to see the various issues that need to be taken into account when presenting the new funding modality that will build on what has been working well and that will suggest alternatives for what was working less well.

The current system of separate reporting and tracking of pool funds practice decreases government ownership in the program and increases both transaction costs and time resulting in slow implementation progress, which needs to be changed in the next sector program. Pool funds disbursement for the Program will be made by the WB on the basis of receipt of the FMRs with reconciliation of funds disbursed in each case. Both MOHFW and WB will need to work together to make the process quicker and shorter and to accelerate disbursement for smooth program implementation.

Currently the government is heavily dependent on IDA for clearing the procurement documents above the threshold of US$ 300,000 which needs to be raised considerably to save transaction costs and shorten document processing and procurement time. A mapping of current GOB procurement practices would be done in order to establish the effectiveness of the system in terms of making efficient and transparent procurements. If procurement system to a large extent achieves good practices, in future GOB systems could be entirely used to process transactions.

The possibility of using framework contracts will also be explored by the MOHFW in order to minimize procedural delay in procurement. Once a framework agreement is reached, this allows the government to use the supplier till the agreement time expires. This will reduce both procurement time and administrative cost as the MOHFW will not have to go through the procurement procedure again and again during the framework contract period.

During Pre-appraisal and Appraisal periods the aid modality options for the HPNSDP were examined by the TA Teams and five possible gradual steps (options) to a trajectory of complete treasury model to be administered by the GOB were identified. MOHFW and the DPs thoroughly reviewed the suggested aid modality options and opted for Option – 1, which is a modified version of the current funding modality system. However, a few DPs are in favor of further discussions on aid modality issues.

The Option – 1 as a funding modality has been chosen to make the system more efficient and increase harmonization in line with the Paris Declaration. The modified version (Option – 1) will encompass joint analytical work, joint financing arrangement (JFA) between DPs and GOB, the establishment of a Pooled Funding Committee including GOB representatives, open eligible expenditure criteria, modified performance-based financing arrangement and procurement pre-review with threshold revisited and streamlining the process.

The modified funding modality for the next sector program provides all stakeholders (GOB, MOHFW, pool and non-pool partners) with the opportunity to review and analyze past experiences, look at strengths and weaknesses of the changed practices and decide what further changes could or should be made to realize even better results. This will help all stakeholders to make (jointly) a better informed decision.

### 5.13.2. Fund Management

During the period of HPSP and HNPSP, the WB has assumed the responsibility to manage the pool fund on behalf of the DPs. A Memorandum of Understanding (MOU) to that effect has been signed by the partners that were in the pool fund. It has been a demanding job, coping with many uncertainties in the beginning about the financial management capacity within the MOHFW, the decision to continue funding even if the audit reports were not always positive and with DPs that sometimes changed their interventions and as a consequence their pledges and commitments for the next phase of disbursements. Next to these operational problems, the staff of the WB at the time had to respond to many detailed questions about the financial reports they submitted to the HNP Donor

consortium, where both pool and non-pool funders meet regularly. The WB had to balance its own responsibilities for the implementation of the program with its responsibilities to manage the funds in the name of all pool funding agencies. This dual position has brought some inherent tensions for all concerned.

As the new sector program will start in July 2011, it has been decided that the current arrangement of continuation of fund management by the WB through the Multi Donor Trust Fund (MDTF) will remain and at the same time further discussion will continue to find out alternative options of fund management. It has also been decided that to the extent possible, the DPs will enter into a JFA which will serve as a coordination framework for consultation among the signatories for monitoring and decision making, joint review of performance, common procedures on financial management including disbursement, accounting, procurement, reporting and audits. A Pooled Fund Committee consisting of pooled DPs and the GOB will be constituted for management of pooled funds during implementation of the next sector program. Moreover, the HNP Consortium Chair will coordinate the finalization of an Action Plan, in consultation with MOHFW and MOF, to identify the benchmarks for systems strengthening, capacity building and regulatory reforms necessary to disburse aid funds against results.

## 5.14. Technical Assistance (TA)

In addition to the general mechanisms of partnership arrangements, the HPN sector requires Technical Assistance (TA) from national and international consultants to support the MOHFW with challenges that most often relate to technical issues and/or innovations, but not to support the workload of MOHFW. Such support can be short-term (for a limited period of a few weeks / months) or long-term, being periods of one year or more. A comprehensive guideline will be developed for TA utilization. The principles to be followed by MOHFW before deciding on the need of TA include:

- The need for TA will be based on a specific TOR with clear justification for the required expertise. Areas of expertise that qualify for TA support will be of technical nature or relate to innovations that the MOHFW intends to undertake.
- Work that will bring in expertise which is not available within MOHFW or that is difficult to be done by the MOHFW staff due to lack of expertise, would qualify for (inter) national TA. Part of the TA assignment should include the transfer of Consultant's knowledge, expertise and experience to colleagues in the MOHFW, assigned to work.
- The unit or Line Director to which the TA has to report will be clearly stated, so that management of TA is done effectively.
- Selection of the required TA would include (i) specific technical expertise and experience, (ii) individual and social qualities to relate and inspire co-workers and (iii) knowledge and exposure to the health sector of Bangladesh.

In order to make the recruitment of consultants impartial and transparent, MOHFW will consider outsourcing this function, wherever appropriate along with using the options for selecting individual consultants on a sole sourcing basis, under strict guidelines and control mechanisms.

Based on past experiences, it was deemed reasonable to have a focal point for all types of technical support and cooperation planned by the DPs to enable better coordination, management, follow up and build accountability of both TA provider and recipient. It was also agreed by all concerned that DFID will act as the focal point for technical cooperation (TC) for the next sector program. However, some DPs plan to carry out long term technical cooperation through engaging directly while others will do so through contracted agencies. Some will finance the agencies individually while others would like to pool the TA funds and channel through an identified entity engaged by DFID. Besides, the Government will also field some TA through HPNSDP budget to support and strengthen various aspects of program management. A Technical Assistance Cooperation Committee (TACC), consisting of the DPs and MOHFW, will need to be formed to take forward the tasks related to TA provision for HPNSDP and to monitor effective implementation.

# CHAPTER VI: ESTIMATED BUDGET OF HPNSDP 2011 – 16

## 6.1. Introduction

Currently the combined public and private sources of health financing are insufficient to achieve full coverage of health services. On an average, about 3.2 per cent of GDP is spent on health, population and nutrition (HPN) sector in Bangladesh, of which about 1 percent of GDP is represented by the public sector. This share is quite low in terms of ensuring sustainable development of the sector. Although there is scope for improving utilization of available funds and achieving greater equity, the HPN sector demands higher allocations. The share of HPN allocation in the national budget therefore needs to increase year by year. This also calls for incremental funding from the Development Partners (DPs), who have been providing support to the development of the HPN sector in Bangladesh.

## 6.2. Estimated Budget and Expenditure of HNPSP

The Bangladesh Health, Nutrition and Population Sector Program (HNPSP) outlines activities from 2003-11 with a total estimated budget of Tk. 37,384.11 crore (US$ 5,417.98 million). Out of this Tk. 20,817.64 crore (US$ 3,017.04 million) is non development budget (55.7%) and Tk. 16,566.47 crore (US$ 2,400.93 million) is development budget (44.3%). 38 % of the total development budget is GOB contribution (Tk. 6,299.11 crore or US$ 912.91 million) and 62% is DP contribution (Tk. 10,267.34 core or US$ 1,488.02 million), to be spent through 38 Ops. Table 1A depicts the estimated cost and expenditure of the HNPSP.

Considering 100 % utilization of 2010-11 ADP allocation, the total development budget expenditure for HNPSP will stand at Tk. 13,541.00 crore in June 2011. This implies that the utilization rate of the development budget during the period of HNPSP will stand at 82 %. The rate of utilization is even lower for DP contribution (79.4%), as estimated expenditure is Tk. 8,156.03 crore (US$ 1182.03 million) against the commitment of Tk. 10,267.34 crore (US$ 1488.02 million) during the same period.

The main reasons for low utilization of funds are (i) non-availability of resources from DP's end and consequent reduction in GOB's matching fund as per the estimate, (ii) delay in procurement due to the complex procedural steps and (iii) reduction in absorption of funds due to frequent changes of the LDs. The absorption capacity varied significantly by OPs during HNPSP implementation. The allocated fund during HNPSP is fully utilized under only four OPs. Fund utilization rate was less than 70 % in 10 OPs and 50 % in 5 OPs[7]. However, the expenditure trend of the non development or revenue budget shows that the rate of utilization is higher (ranging from 95 to 100 per cent) than that of the development budget and will stand at 97 % assuming 100 % utilization of revenue budget of 2010-11. This provides evidence that the MOHFW's absorption capacity has increased during the SWAp implementation period over the last ten years.

## 6.3. Budget Request for HPNSDP (2011-16)

A total of Tk. 41,519.28 crore has been requested by the current 38 Line Directors (LDs) as budget for the next sector program and is presented OP-wise in Table 2A in the Annex. It seems that an incremental budgeting process with substantial additional amount for the coming years has been followed by the LDs. The budget demand for the next HPN sector program compared to the estimated expenditure of HNPSP shows an average ratio of 3.02, and varies significantly between OPs. For some OPs the budget request for five years (2011-16) is even ten to thirty times higher than the estimated expenditure of eight years (2003-11).

## 6.4. Background of Budget Estimation

According to the National Health Accounts, total health expenditure (THE) in Bangladesh was Tk. 16,089.9 crore in 2007[8]. Assuming the growth rate of the total health expenditure to be 16.33 % (the

[7] The average fund utilization rate will decrease from 82 % at the end of the program if all the OPs cannot spend the entire allocation for the year 2010-11.

8 Bangladesh National Health Accounts, 1997-2007.

average of the growth rate of 2004-07), the estimated THE for 2011-16 stands at Tk. 266,741.61 crore.

On the other hand, the MDG needs assessment and costing study shows that at the rate of US$ 19 per capita (US$ 4.38 for child health, US$ 1.72 for maternal health, US$ 3.14 for HIV/AIDS, Malaria and TB, and US$ 10.56 for health systems), a total of Tk. 145,915.80 crore is required to achieve the health related MDGs (2009-2015) [9]. The data disaggregated by year shows that the total resources needed for 2011-15 is Tk. 117,746.2 crore. Assuming that the share of the public spending of the total health expenditure in the country will remain same (26%), the required public spending stands at Tk. 30,614.01 crore for achieving MDG 4, 5 and 6, which only includes child health, maternal health, HIV/AIDS, malaria and tuberculosis, by 2015. Therefore, the financing gap between the required and the actual spent on health is considerably high.

Budgeting of the next sector program for 2011-16 has been initiated considering the above phenomenon[10]. Available data from various sources (MOF, MOHFW, etc), budget requests from the LDs, Government's document/ strategies, trend analysis of budget allocations and absorption capacity of previous years were used to estimate an indicative budget for the next health sector program. Three different scenarios, high, middle and low have been derived, using some assumptions. The results of the projections are presented in Table 3A.

The High Scenario of Tk. 41,519.77 crore (US$ 6,017.35 million) is based on the budget request provided by the respective LDs. It shows that the requested budget for 2011-16 is 2.5 times higher than the estimated cost of HNPSP (2003-11). The Middle Scenario, based on the projection of Medium-Term Budgetary Framework (MTBF), stands at Tk. 31,848.54 crore (US$ 4,615.73 million), and is nearly double the development budget of HNPSP (2003-11). The Low Scenario is based on the OP-wise projected budget using MTBF projections and the actual capacity to utilize funds during HNPSP[11]. According to the Low scenario the estimated indicative budget is Tk. 26,031.43 crore (US$ 3,772.67 million) for the next sector program.

The projected budget for each OP has been estimated using the percentage share of the development budget of HNPSP. Though the total estimated budget according to High Scenario is higher than that of the Middle Scenario, the OP-wise distribution of the two scenarios does not reflect the same trend for some OPs as the OP-wise distribution of the estimated budget of the two scenarios are independent of each other. Moreover, in case of a few OPs the estimated budget as per Low Scenario is higher than that of Middle Scenario.

These three scenarios of the projected development budget of MOHFW for HPNSDP were widely disseminated and significant feedback was received from the stakeholders. The MOHFW decided to go by the Low Scenario budget estimate for HPNSDP considering the comments, and the substantial difference between the requested budget by the various LDs, the available budget indicated in the MTBF by MOF and absorption capacity of the implementing agencies and revised the OP-wise budget distribution based on (i) the trend of estimated expenditure (ii) the budget requests by the LDs and (iii) the main 'drivers' of the new program (e.g. CC, PHC through UHS, etc), along with allocating more resources in the priority intervention areas.

## 6.5. Resource Envelope for HPNSDP

MTBF projection shows that the estimated non-development budget for 2010-11 is Tk. 4,676.00 crore, projection for 2011-12 is Tk. 4,994.12 crore and for 2012-13 is Tk. 5,413.52 crore. Using the average growth rate of 7.6% of the non-development budget in the above mentioned years, a projection has been made for the non-development budget for 2013-14 (Tk. 5,824.95 crore), 2014-15

9 Millennium Development Goals Needs Assessment & Costing 2009-2015 Bangladesh, GED, Planning Commission, GOB.

10 Review of earlier studies and experiences show that input-wise costing using targets of the health sector and unit costs leads to cost figures which are much higher than the Government's capacity to generate fund for the HPN sector. Therefore attempts are made to estimate an indicative budget for the next sector program, both total and OP-wise.

11 As mentioned earlier the fund utilization rate is calculated using the data on estimated cost and estimated expenditure, which is the total of actual expenditure up to June 2010 and the ADP allocation for 2010-2011. The estimated cost and expenditure from 2003-2011 is presented in Table 1A.

(Tk. 6,267.64 crore), and 2015-16 (Tk. 6,743.98 crore). The total estimated non-development budget for 2011-16 thus stands at Tk. 29,244.23 crore (US$ 4,238.29 million)[12]. The MOHFW has decided to set the development budget ceiling according to the Low Scenario (Tk. 26,031.00 crore). Therefore, **the total estimated budget for the MOHFW is Tk. 55,275.66 crore (US$ 8,010.96 million) for the next sector program**, inclusive of the development and non development budget requirement (Table 1).

The MTBF projection of the GOB development budget considers not only the budget spent under the OPs but also some parallel projects outside the OPs. Excluding all the projections outside the OPs, **Tk. 23,000.00 crore (US$ 3333.33 million) has been set as the estimated development budget requirement of HPNSDP to be spent through the OPs** assuming the rest (Tk. 3,031.00 crore) will be spent through other ADP projects of MOHFW.

As mentioned earlier, the yearly non-development budgets of MOHFW have been set according to the MTBF projection. However, the yearly development budget of MOHFW has been estimated by multiplying the average absorption capacity (82%) and the yearly projected amount by MTBF. The projected trend of the non development and development budget shows that the share of estimated non development budget has gradually decreased from 59 % in 2011 to 48 % in 2016 while the share of the development budget has steadily increased from 41 % to 52 % for the same period. The average share of the non development budget (53 %) is slightly higher than the average share of the development budget (47 %).

**Table 1: Estimated Budget (non dev. and dev.) of MOHFW for 2011-16 (In Crore Tk.)**

| **Budget by Type** | **2011-12** | **2012-13** | **2013-14** | **2014-15** | **2015-16** | **2011-16** |
|---|---|---|---|---|---|---|
| Non development budget | 4,994.13 | 5,413.52 | 5,824.95 | 6,267.64 | 6,743.98 | 29,244.23 |
| Non Development Budget % of total | 59% | 57% | 54% | 51% | 48% | 53% |
| Development budget | 3,467.10 | 4,143.54 | 5,013.69 | 6,066.56 | 7,340.54 | 26,031.43 |
| Development budget as % of total | 41% | 43% | 46% | 49% | 52% | 47% |
| Total budget of MOHFW | 8,461.23 | 9,557.06 | 10,838.64 | 12,334.21 | 14,084.52 | 55,275.66 |
| **Total budget of MOHFW (in million US$)** | **1,226.26** | **1,385.08** | **1,570.81** | **1,787.56** | **2,041.23** | **8,010.96** |

## 6.6. Estimated Development Budget Requirement by the OPs

The MOHFW has decided to reduce the number of OPs in the HPNSDP to 32. The ongoing 38 OPs have been rearranged in to 30 OPs and one new OP, the Community Based Health Care, has been proposed. The list of the old 38 OPs and the new 32 OPs is presented in Table 4A. The activities of the next sector program will be broadly similar in nature to the ongoing one with addition of new elements based on current needs. Hence the suggested total budget has been arranged by 32 OPs including the amount required for the new OP (Table 2).

The OP-wise distribution of the development budget of HPNSDP has been derived through the following steps. Firstly, it is assumed that the yearly average estimated budget for the next program will at least increase by 100 % than the yearly average expenditure of the current program considering the incremental demand due to population growth, inflation and inclusion of new interventions along with activities. In some cases the increase is assumed to be 150% and even more due to drastic increase in budget request of few OPs compared to previous expenditure with a view to give new thrust and increase coverage countrywide. Therefore, total estimated budget for each OP is calculated from the yearly average estimated budget and is derived from the yearly average expenditure of

12 MOHFW currently prepares the development and non development budget separately. The main economic categories of non development budget expenditure are as follows:

1. Non-Development Revenue Expenditure includes: Pay and Allowances; Goods and Services; Subsidies and Current Transfers; Block Allocations

2. Non-Development Capital Expenditure: Procurement; Acquisition of Assets and Works; Construction and civil works; Capital Block and miscellaneous expenditure

HNPSP using some assumptions. Secondly, in order to derive the OP-wise distribution of development budget of HPNSDP based on budget requests, the budget for each OP is reduced to 49 % to match the estimated budget of Tk. 23,000 crore. Finally, the budget for each OP is estimated taking 50% from the distribution based on expenditure trend and 50% from the distribution based on budget request. The strength of this approach is that it considers both previous expenditure trend and current budget requests reflecting the future need (Table 2).

According to this OP-wise distribution suggested in Table 2 below, the estimated budget is highest for Physical Facilities Development (21%) followed by Maternal, Neonatal and Child Health Care (14%), Community Based Health Care (8%) and Hospital Services Management and Safe Blood Transfusion (8%). National Nutrition Service and Family Planning Field Services Delivery received 7% each and Clinical Contraception Services Delivery received 6% of the estimated budget (Table 2).

**Table 2: Estimated Budget for HPNSDP (In Crore Tk.)**

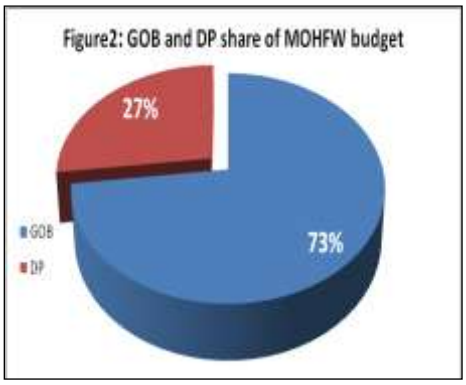
| Sl. no. | Name of Operational Plan (OP) | Suggested Budget | Percentage Share of the total |
|---|---|---|---|
| 1 | Maternal, Neonatal and Child Health Care | 3,136.99 | 14% |
| 2 | Essential Services Delivery | 500 | 2% |
| 3 | Community Based Health Care | 1,727.91 | 8% |
| 4 | TB and Leprosy Control | 322.84 | 1% |
| 5 | National AIDS and STD Program | 533.75 | 2% |
| 6 | Communicable Diseases Control | 641.25 | 3% |
| 7 | Non-Communicable Diseases Control | 562.11 | 2% |
| 8 | National Eye Care | 20 | 0% |
| 9 | Hospital Services Management and Safe Blood Transfusion | 1,943.87 | 8% |
| 10 | Alternate Medical Care | 90 | 0% |
| 11 | In-Service Training | 299.12 | 1% |
| 12 | Pre-Service Education | 495 | 2% |
| 13 | Planning, Monitoring and Research (DGHS) | 37 | 0% |
| 14 | Health Information Systems and E-Health | 664.05 | 3% |
| 15 | Health Education and Promotion | 200 | 1% |
| 16 | Procurement, Logistics and Supplies Management, DGHS | 437.74 | 2% |
| 17 | National Nutrition Services (NNS) | 1,621.10 | 7% |
| 18 | Maternal, Reproductive and Adolescent Health | 896.04 | 4% |
| 19 | Clinical Contraception Service Delivery | 1,403.94 | 6% |

| Sl. no. | Name of Operational Plan (OP) | Suggested Budget | Percentage Share of the total |
|---|---|---|---|
| 20 | Family Planning Field Service Delivery | 1,638.36 | 7% |
| 21 | Planning, Monitoring and Evaluation of Family Planning | 10 | 0% |
| 22 | Management Information Systems of Family Planning | 50 | 0% |
| 23 | Information, Education and Communication (IEC) | 120 | 1% |
| 24 | Procurement, Storage and Supply Management -DGFP | 75.31 | 0% |
| 25 | Training, Research and Development for Population Services, NIPORT | 120.5 | 1% |
| 26 | Nursing Education and Services | 300 | 1% |
| 27 | Strengthening of Drug Administration and Management | 27.32 | 0% |
| 28 | Physical Facilities Development | 4,800.25 | 21% |
| 29 | Human Resources Management | 152.37 | 1% |
| 30 | Sector-Wide Program Management and Monitoring | 72 | 0% |
| 31 | Health Economics and Financing | 34.87 | 0% |
| 32 | Improved Financial Management | 67.27 | 0% |
| | **Grand Total** | **23,000.00** | 100% |

The HPNSDP calls for incremental investment during the next five years with a view to implement the strategies and translate the development objective into actions. Construction of new facilities for expanding facility based services, up-gradation of existing facilities and repair, renovation and maintenance works of the ten entities within MOHFW comprise of the major cost components of the Physical Facilities Development OP and has the highest estimated budget. Considering the current low coverage of maternal health care (e.g. ANC, PNC, institutional delivery, etc.) and the current status of curative child health care in Bangladesh, the MOHFW has put more emphasis on MNCH related activities through allocating more resources for the concerned OP. Coverage of DSF has been included in the Maternal, Neonatal and Child Health Care of DGHS and Maternal, Reproductive and Adolescent health of DGFP. Moreover, revitalization of Community Health Care Initiative in Bangladesh is one of the priority interventions of the GOB, reflected in the suggested budget. The CC based PHC service provision will require huge investment and this initiative will also help increase service utilization by the poor at the grass root level. Nutrition services will be expanded throughout the country (current coverage is 132 upazilas) and therefore estimated budget of this OP has doubled compared to HNPSP. Safe blood transfusion along with quality assurance has been added to Hospital Services Management OP and consequently the estimated budget of this OP has been raised rationally. MOHFW has decided to expand the coverage of the Family Planning Field Services Delivery and Clinical Contraception Service Delivery to urban areas as well for achieving the targets for TFR and CPR under HPNSDP. In addition, more resources will be required to improve the support systems, e.g., establishing M&E, improving HIS, strengthening procurement, etc. All these interventions adequately explain the necessity for higher investment in the HPN sector during the next five years.

## 6.7. Expected GOB and DP Share: the Resource Gap

The total development budget of Tk. 23,000 crore (US$ 3333.33 million) is to be spent through the OPs during the next five years starting July 2011. As mentioned earlier, due to fund constraint the GOB is currently in a position to contribute a maximum of 35% (Tk. 8,050.00 crore equivalent to US$ 1,166.67 million) of the resources needed for implementing the HPNSDP while the rest 65% (Tk. 14,950.00 crore equivalent to US $ 2,166.67 million) is considered to be the funding gap, and needs to be ensured from external sources. There has been significant contribution of the DPs in the development programs of the HPN sector of Bangladesh. Therefore, **the expected contribution from the DPs is Tk. 14,950 crore (US$ 2,166.67 million).** However, combining the development and non development budget of the MOHFW, the GOB share stands at 72.95 % and the DP share is expected to cover 27.05 % of MOHFW's budgetary requirement for implementing HPNSDP during 2011-16 (as illustrated in Figure 2).



# CHAPTER VII: ANNEXES

## Annex 7.1. Action Plan for Mainstreaming Nutrition Services

| Activity | Service delivery | | Responsibility | |
|---|---|---|---|---|
| | Existing | Proposed | Current | Proposed |
| **a) Child Nutrition** | | | | |
| Exclusive breast feeding | ANC, PNC, BCC, Safe Delivery, ABCN | ANC, PNC, BCC, Safe Delivery, IMCI, CC, | DGHS, DGFP, NNP | DGHS, DGFP |
| Complementary Feeding | -do- | -do- | -do- | -do- |
| Supplementary Feeding | -do- | -do- | -do- | -do- |
| Growth Monitoring and Promotion (GMP) | ABCN | IMCI (facility & community based), EPI, CC | DGHS,NNP | DGHS |
| Vitamin A supplementation | EPI (<1 yr) EPI/NVAC (12-59M) | EPI (<1 yr) EPI/NVAC (12-59M), IMCI | DGHS, IPHN | DGHS |
| Iron supplementation (Micronutrient powder) | ABCN, ICDP | Community-IMCI, CC | DGHS,DGFP | DGHS,DGFP |
| Zinc supplementation with ORS | Community & F-IMCI | Community & F–IMCI, CC | -do- | -do- |
| Other Micronutrients ( Vit D, Calcium etc.) | Nil | -do- | -do- | -do- |
| De-worming | Filariasis/NVAC | Filariasis/NVAC | DGHS | DGHS |
| Immunization | EPI | EPI | DGHS | DGHS |
| BCC (Personal hygiene, hand wash, school health, other BCC) | BCC (HEB) | BCC (HEB) and sector programs | DGHS, DGFP | DGHS, DGFP |
| Therapeutic management of severe acute malnutrition (facility and community) | Pilot intervention is ongoing in selective districts through NGOs | Community & F-IMCI, ESD, CC | DGHS, DGFP | DGHS, DGFP |
| **b) Maternal and Newborn Nutrition** | | | | |
| Iron-Folic Acid supplementation for pregnant and lactating women | ANC, PNC, ABCN | ANC, PNC, CC | DGHS, DGFP,NNP | DGHS, DGFP |
| Early initiation of breastfeeding | ANC, ENC, PNC, SBA, CSBA, IMCI | ANC, ENC, PNC, SBA, CSBA, IMCI, CC | DGHS, DGFP | DGHS, DGFP |
| Personal hygiene | BCC | BCC (HEB) and sector programs | DGHS, DGFP | DGHS, DGFP |
| Vitamin A –post partum | RH, MCRH, PNC, ABCN | RH, MCRH, PNC, CC, | DGHS, DGFP,NNP | DGHS, DGFP |
| Identification and management of Low Birth Weight (LBW) | PNC, ENC, IMCI, ABCN | PNC, ENC, IMCI, CC, | DGHS, DGFP,NNP | DGHS, DGFP |
| Weight monitoring of pregnant women | ANC, ABCN | ANC, CC | DGHS, DGFP, NNP | DGHS, DGFP, |
| Food intake (quantity and quality) | BCC, ABCN | BCC, ANC | DGHS, DGFP,NNP | DGHS, DGFP |
| BCC | BCC | BCC (HEB) and sector programs | DGHS, DGFP | DGHS, DGFP |
| **c) Adolescent Nutrition** | | | | |
| Anemia ( Iron and Folic Acid) | ABCN, ICDP | School Health, CC, sector adolescent forum, ICDP | DGHS, DGFP,NNP | DGHS, DGFP |

| Activity | Service delivery | | Responsibility | |
|---|---|---|---|---|
| | Existing | Proposed | Current | Proposed |
| Strengthening nutrition component of school health and nutrition | School Health | School Health | DGHS | DGHS |
| Personal hygiene | BCC | BCC (HEB) and sector programs | DGHS, DGFP | DGHS, DGFP |
| De-worming | ABCN, Filariasis, School Health, MCRH | ICDP, School Health, CC, Filariasis, MCRH, | DGHS, DGFP | DGHS, DGFP |
| BCC (Nutrition education and counseling) | BCC,ABCN | BCC (HEB) and sector programs | DGHS, DGFP,NNP | DGHS, DGFP |
| **d) General Population** | | | | |
| Food Fortification (iodized salt, edible oil with vit. A etc) | Ministry of Industries, MOHFW | Ministry of Industries (project implementation), MOHFW (Coordination, policy formulation, monitoring) | DGHS, MOHFW | DGHS, MOHFW |
| Food hygiene and safety | IPHN/BSTI | IPHN | DGHS, MOHFW | DGHS |
| Dietary guidelines | IPHN, INFS, BNNC | IPHN | BNNC | BNNC |
| Inter-ministerial coordination with MOFDM, MOA, MOI, MOFL, MOE, MOWCA, MOLGRDC, MOSW, MOI, etc. | MOHFW | MOHFW | BNNC, MOHFW | BNNC, MOHFW |
| Legislation & policy formulation | MOHFW | MOHFW | IPHN,MOHFW | MOHFW |

**Annex 7.2. The Result Framework (RFW) of HPNSDP 2011-16**

| RESULT | INDICATOR | MEANS OF VERIFICATION & TIMING | BASELINE | TARGET 2016 |
|---|---|---|---|---|
| **Goal: Ensure quality and equitable health care for all citizens of Bangladesh** | Infant mortality rate (IMR) | BDHS, every 3 yrs | 52, BDHS 2007 | 31 |
| | Under 5 mortality rate | BDHS every 3 yrs | 65, BDHS 2007 | 48 |
| | Neonatal mortality rate | BDHS, every 3 yrs | 37, BDHS 2007 | 21 |
| | Maternal mortality ratio | BMMS, every 5 yrs | 194, BMMS 2010 | ≤143 |
| | Total fertility rate (TFR) | BDHS, every 3 yrs | 2.7, BDHS 2007 | 2.00 |
| | Prevalence of stunting among children under 5 years of age | BDHS, every 3 yrs | 43.2%, BDHS 2007 | 38% |
| | Prevalence of underweight among children under 5 years of age | BDHS, every 3 yrs | 41.0%, BDHS 2007 | 33% |
| | Prevalence of HIV in MARP | Sero-Surveillance Survey (SS), every 2 years | <1%, SS 2007 | <1% |
| **Program Development Objective:**<br>Increase availability and utilization of user-centered, effective, efficient, equitable, affordable and accessible quality HPN services.<br>**Program Strategic Objective:**<br>To improve access to and utilization of essential health, population and nutrition services, particularly by the poor. | | | | |

| RESULT | INDICATOR | MEANS OF VERIFICATION & TIMING | BASELINE | TARGET 2016 |
|---|---|---|---|---|
| **Component 1: Service delivery improved** | | | | |
| **Result 1.1 Increase utilization of essential HPN services:**<br>• **maternal, neonatal, and child health**<br>• **family planning and reproductive health**<br>• **nutrition services**<br>• **communicable diseases** | % of delivery by skilled birth attendant | BDHS, every 3 yrs | 26%, UESD 2010<br>18%, BDHS 2007 | 50% |
| | Antenatal care coverage (at least 4 visits) | BDHS, every 3 yrs | 19.9%, UESD 2010<br>20.6% BDHS 2007 | 50% |
| | Postnatal care within 48 hours (at least 1 visit) | BDHS, every 3 yrs | 20.9%, UESD 2010<br>18.5% BDHS 2007 | 50% |
| | Contraceptive prevalence rate (CPR) | BDHS, every 3 yrs | 61.7%, UESD 2010<br>55.8%, BDHS 2007 | 72% |
| | Unmet need for FP | BDHS, every 3 yrs | 17.1%, BDHS 2007 | 9.0% |
| | Measles Immunization Coverage by 12 months | CES, annual | 82.4%, CES 2009 | 90% |
| | % of children (0-59 months) with pneumonia receiving antibiotics | BDHS, every 3 yrs | 38.0%, UESD 2010<br>37.1%[13], BDHS 2007 | 50% |
| | % of children (6-59 months) receiving Vitamin A supplementation in the last 6 months | BDHS, every 3 yrs | 82.6%, UESD 2010<br>88.3%, BDHS 2007 | 90% |
| | TB case detection rate | NT Program, annual | 74%, NTP 2009 | 75% |
| **Result 1.2 Improve equity in essential HPN service utilization (MDGs 1, 4, 5 and 6)** | Proportion of births in health facilities by wealth quintiles | BDHS, every 3 yrs | Q1:Q5=8.0:59.5, (UESD 2010)<br>Q1:Q5[14]=4.4:43.4, BDHS 2007 | Q1:Q5 = <1:4 |
| | Use of modern contraceptives in low performing areas | BDHS, every 3 yrs | Syl: 35.7%, Ctg: 46.8%, (UESD 2010)<br>Syl: 24.7%, Ctg: 38.2%, BDHS 2007 | Sylhet & Chittagong: 50% |
| | # of upazilas with women targeted by improved[15] voucher scheme for having institutional deliveries | DSF Monitoring Reports, annual | 31 (+9 universal) | 70[16] |
| **Result 1.3 Improved awareness of healthy behavior (MDG 1, 4, 5)** | Rate of exclusive breastfeeding in infants up to 6 months | BDHS, every 3 yrs | 43%, BDHS 2007 | 50% |
| | % of children 6-23 months fed with appropriate Infant and Young Child Feeding (IYCF) practices | BDHS, every 3 yrs | 41.5%, BDHS 2007 | 52% |

[13] Proxy used as % of children with pneumonia taken to medical doctor/health facility, to be estimated in BDHS 2011
[14] Q1: Bottom 20% and Q5: Top 20% of wealth quintiles to represent socioeconomic status of households
[15] Note for definition of improved: DSF upazilas that are "means-tested," i.e. women need to meet specific criteria to be eligible for the voucher program
[16] Target provisionally set as 70, and would be revised after MOHFW's review on DSF

| RESULT | INDICATOR | MEANS OF VERIFICATION & TIMING | BASELINE | TARGET 2016 |
|---|---|---|---|---|
| **Result 1.4 Improved PHC-CC systems** | # of Community Clinics (CC) with increasing number of service contacts over time | CC Project/MIS/MOHFW | NA[17] | 13,500 |
| | % of upgraded[18] union-level facilities able to provide basic EmOC services | Health Facility Survey (BHFS), every 2yrs | 15.5%[19] | 50% |
| **Component 2: Strengthened Health Systems** | | | | |
| **Result 2.1 Strengthened planning and budgeting procedures** | % of MOHFW budget allocated to Upazila level or below | Public expenditure review, annual | 52%, PER 2006/7 | 60% |
| | % of annual work plans with budgets submitted by LDs by defined time period (July/Aug)[20] | Planning Wing, annual | NA[21] | 100% (achieved by 2013) |
| **Result 2.2 Strengthened monitoring and evaluation systems** | MIS reports on service delivery published and disseminated[22] annually | MIS of all agencies, annual | NA[23] | 100% |
| | Performance report of OPs reviewed with policy makers, MOHFW, Directorates and DPs, six monthly and annually | Planning Wing, six monthly (Jul-Dec->Feb), (Jul-Jun -> Aug) | Not Available | 100% (achieved by 2013) |
| **Result 2.3 Improved human resources – planning, development and management** | Proportion of service provider positions functionally vacant at Upazila/District level and below, by category | DGHS/DGFP MIS, annual BHFS, every 2yrs | Physicians: 45.7% Nurses: 29.9% FWV/SACMO/MA:16.9%, BHFS 2009 | Physicians: 22.8% Nurses: 15% FWV/SACMO/MA:8 .5%[24] |
| | # of additional providers trained in midwifery at Upazila health facilities | HRD/MOHFW, annual | NA | 3,000 |
| | No. of comprehensive EmOC facilities with functional 24/7 services covering all districts | MIS/EOC BHFS, every 2yrs | 120[25] | 204[26] |
| **Result 2.4 Strengthened quality assurance and supervision systems** | Case fatality rate among admitted children with pneumonia in Upazila health complex | DGHS MIS | 8%[27], Health Bulletin 2009 | 6.2[28] |

[17] Set as Not Available as service registers are not yet to the CCs
[18] In 2006, MOHFW decided to upgrade 1,495 UH&FWCs to provide basic EmOC [Source: Mridha et al. (2009) Public-sector Maternal Health Programmes and Services for Rural Bangladesh, J Health Population Nutrition 27(2):124-138]
[19] % of UnH&FWC (upgraded) able to provide vacuum and forceps delivery
[20] Refers to Single Work Plan
[21] Baseline set **Not Applicable** as this was not practiced in HNPSP
[22] Defined as distributed to, and discussed with relevant stakeholders
[23] Naseline set as **Not Applicable** as the current practice by MISs is to publication on time and distribution (no stakeholder discussion)
[24] Target set as reduction by 50%
[25] Approximated figure – to be updated
[26] DGHS MIS Voice of MIS Feb 2009
[27] Calculated from sex distribution of causes of death in each age cluster of children who attended outpatient and emergency departments of IMCI facilities

| RESULT | INDICATOR | MEANS OF VERIFICATION & TIMING | BASELINE | TARGET 2016 |
|---|---|---|---|---|
| **Result 2.5 Sustainable and responsive procurement and logistic system** | % of health facilities, by type, without stock-outs of essential medicines at a given point in time | BHFS, every 2yrs | 66.1%[29], BHFS 2009 | 75% |
| | % of facilities without stock-outs of contraceptives at a given point in time | LMIS, annual<br>BHFS, every 2yrs | 58.1%[30], BHFS 2009 | 70% |
| **Result 2.6 Improved infrastructure and maintenance** | % of facilities (excluding CCs) having separate, improved toilets for female clients | BHFS, every 2yrs | 51.0%, BHFS 2009 | 75% |
| **Result 2.7 Sector management and legal framework** | Regulatory framework for accreditation of health facilities including hospitals (both in the public and private sectors) reviewed and updated[31] | MOHFW | 1982 Regulatory Act | Reviewed (by 2012) |
| **Result 2.8 Decentralization through LLP procedures** | # of Districts/Upazilas having functional LLP procedures | Respective agencies, annual | NA | Piloting completed and reviewed for scaling up |
| **Result 2.9 SWAp and improved DP coordination (deliver on the Paris Declaration**) | # of non-pool DPs submitting quarterly expenditure reports | Planning wing | Irregular | 100% |
| **Result 2.10 Strengthened Financial Management Systems (funding and reporting)** | % of project aid fund (e.g. development budget) disbursed annually and quarterly | FMAU | 79.4%[32], FMAU 2009/10 | 100% (by 2013) |
| | % of OPs with spending > 80% of ADP allocation (annually) | FMAU/Planning Wing | 44.7[33], FMAU 2003-11 | 100%[34] (by 2013) |
| | % of serious audit objections settled within the last 12 months | FMAU | 7%, FMAU 2007/8[35] | >80% |

[28] Calculated as the reduction of the case fatality rate after the implementation of the WHO's standard acute respiratory infection (ARI) case management guidelines found to be 23% [Source: Theodoratou et al (2010) "The effect of case management on childhood pneumonia mortality in developing countries." *International Journal of Epidemiology* 39: i155–i171]

[29] Notes for definition: at least 75% of union level essential drug kit (10 drugs) available in the facilities at district level and below

[30] Notes for definition: four family planning supplied (condom, oral pill, DMPA, IUD) available in the facilities at district level and below

[31] Notes for definition: Start with a framework for facilitating accreditation of public hospitals and then extend to private hospitals

[32] Baseline taken from HPNSDP Strategic Document, p.57

[33] Baseline taken from HPNSDP Strategic Document, p.71-72

[34] Target set as 100% to ensure efficient fund utilization

[35] Baseline used from APIR 2009

## Annex 7.3. Funding Modalities under HNPSP

***Disbursement Arrangement for HNPSP:*** At present a number of Development Partners (DPs) are providing support to Government of Bangladesh (GOB) under two major categories i.e. (i) pooled funds[36]; and (ii) non-pooled funds. Pooled funds are made part of the overall development budget of MOHFW and are reflected in the annual development program (ADP). Pooled DPs deposit money through International Development Agency (IDA)[37] into the 'HNPSP Forex Account', held and maintained by GOB at the central bank. Amount deposited by DPs in the forex account is equal to estimated six months expenditure, based on the various OPs to be funded by pooled funds. GOB's regular financial and accounting procedures are used to make expenditures out of the pooled fund. Non-pooled funds disbursement is negotiated between GOB and each DP individually and incorporated into the bilateral financing agreements between the two parties. Non-pool funds also form part of the overall SWAp budget of MOHFW and are reflected in the ADP. As these funds are not channeled through GOB's regular financial system, funds received from the non-pool DPs are termed as direct project aid (DPA).

From the 'Forex Account', foreign exchange is transferred to the Consolidated Fund (CF) of GOB on the advice of the Controller General of Accounts (CGA) of Bangladesh, as reimbursement of the money spent from the GOB funds, known as Reimbursable Project Aid (RPA). For development expenditure, MOHFW releases GOB allocations up to the 2nd quarter and RPA up to 1st quarter, without making any reference to MOF. For the release of 3rd quarter of GOB allocation and subsequent of RPA, concurrence from MOF is required, which is dependent on the MOHFW providing expenditure reports of the previous quarters. Similarly, the WB does not replenish RPA funds to the forex account without receiving expenditure reports of the HNPSP (consisting of all 38 OPs). The MOF equally does not release funds for the 4th quarter, unless information regarding the previously released funds for the first three quarters is provided.

***Reporting Requirements:*** MOHFW sends a Financial Monitoring Report (FMR)[38] of actual expenditure, documents in favor of the expenditure, agreement etc., and other information (as required by IDA). MOHFW prepares quarterly financial statements accounting for all receipts and expenditures in the preceding quarter, reconciling the accounts for the quarter, and estimating cash requirements for the next six months. Annual consolidated financial statements are also prepared, reflecting the planned activities and budget allocations for the OPs. The Line Directors (LDs) send the statement of actual and acceptable expenditures, relevant documents in favor of the expenditure to the Financial Management and Accounting Unit (FMAU) in each quarter. On receipt of these statements FMAU consolidates the expenditures and finalizes the total expenditure after having examined the eligibility of the expenditures on basis of the operational plan/credit agreement for onward submission to IDA.

***Internal Controls and Internal Audit:*** General Financial Rules (GFRs) and the financial management handbook for the health sector serve as the framework for internal controls. These are followed for making expenditures under the HNPSP. There is no in-house internal audit function within the MOHFW, which is contracted out to audit firms for carrying out internal audit of the sector. IDA oversees the selection process of the firm to be contracted for internal audit.

***External Audit:*** External audit as agreed between GOB and the DPs is conducted by the Comptroller and Auditor General (C&AG) Bangladesh, which is the regular external audit system of the government. The audit report contains a separate opinion as to whether the financial statements submitted during the fiscal year, together with the procedures and internal controls involved in their

[36] Pooled money is Reimbursable Project Aid (RPA). Money is transferred to a consolidated fund of the Ministry of Finance (MOF), once it has been spent by GOB.

[37] IDA is a pooled DP amongst other DPs but it also plays the role of management (financial) agency for HNPSP. All DPs providing support through pooled funds have agreed IDA as administrator of these funds under trust fund arrangements. World Bank is the IDA for HNPSP.

[38] GOB and the DPs have agreed to accept a single set of FMRs, largely based on the financial statements currently prepared by MOHFW.

preparation, can be relied upon to support the transactions and balances of the Forex and other accounts, and the contributions of GOB and the DPs.

**Reporting and Disbursement:** Under the current HNPSP fund flow arrangement, MOHFW has to consolidate all accounts of the cost centers and report separately to the WB against the expenditure from the pooled fund. The current method therefore is a reimbursable cost mechanism in which the WB only releases funds to GOB, once the expenditures are made and reported through a separate reporting system to the IDA, for the entire HNPSP (all 38 OPs). Requirement to report pool funds separately slows down progress of funds utilization, as reports from more than 2,000 cost centers have to be reconciled and compiled. Missing reports from even few cost centers or LDs is considered as incomplete for the purpose of onward submission to IDA, thus receiving funds for the subsequent period becomes time consuming, resulting in slow disbursements and less progress in implementation.

The requirement also affects adversely government ownership of the program. When activities are reported separately government tends to associate them with external funding and once the funding is finished, government may cease that particular activity. This reporting arrangement has major implications on transactions costs for MOHFW and MOF. Next to the transaction costs, it seems that the reliability of the reporting system is insufficient as evidenced by the fact that the Comptroller and Auditor General has given an adverse opinion on the consolidated financial statements presented. This is, among others, because the reconciliation between the information coming from IBAS system and from the cost centers could not be done.

Finally the procedure of requesting special reports that require another reporting and accounting system (than the one used for all GOB, IBAS) is likely to reduce assurance on possible misuse of the funds – the latter because it is still an opportunity for double charging i.e. the MOHFW may be charging their accounts from the cost centers for the same expenditure as paid by the CGA using the regular GOB system.

**Procurement:** IDA is heavily involved in individual procurement transactions[39], which is against the spirit of SWAp. Under current arrangements, procurement above the threshold of US$ 300,000 has to be referred to the IDA for clearance. Analysis in the Mid-Term Review (MTR) report shows that pool fund spending lagged behind spending by GOB despite availability of sufficient funds in the pool and timely expenditures being reported[40]. Reasons given are the complex procedures regulating procurement in the WB.

The LDs have to follow through both GOB public procurement regulations and the WB procurement procedures in order to process a procurement request to the WB, resulting in long processing time and delayed procurement. This also raises transaction cost for MOHFW. Recently, the Public Procurement Act has been amended, resulting in reluctance among DPs to follow GOB procurement procedures (considering high fiduciary risks).

**Concerns with the Current Funding Modality:** The current HNPSP made an important headway in aligning aid (pooled funds) with government processes and procedures to a considerable extent. However, the current HNPSP aid flow mechanism raises concerns in terms of smooth fund disbursement and prudent fiscal management.

The current funding modalities, being part of the Treasury systems, may help to speed up the implementation of the program, if some improvements / changes are brought into the practices of financial reporting and procurement.

[39] Bangladesh HNPSP, APR, Volume II. Independent Review Team, 10th May, 2009.

[40] Bangladesh HNPSP, MTR, Volume II. Independent Review Team, 31st March, 2008.

## Annex 7.4. Estimated Expenditure of HNPSP vis-à-vis Budget of HPNSDP

### Table 1A: Estimated Costs and Expenditures of HNPSP by 38 OPs (In Crore Tk.)

| Sl. No. | Name of the Operational Plan(OP) | Estimated cost PIP(2003-11) | | | | Estimated Expenditure (2003-11) | | | % fund utilized |
|---|---|---|---|---|---|---|---|---|---|
| | | GOB | PA | Total | % of Total | GOB | PA | Total | |
| 1 | Essential service delivery | 478.91 | 2373.54 | 2852.45 | 17.22 | 368.09 | 2038.88 | 2406.97 | 84.38 |
| 2 | Communicable Disease Control | 164.02 | 477.37 | 641.39 | 3.87 | 76.16 | 230.69 | 306.85 | 47.84 |
| 3 | TB & Leprosy Control | 33.81 | 540.60 | 574.41 | 3.47 | 18.40 | 468.20 | 486.60 | 84.71 |
| 4 | Health education & promotion | 45.53 | 59.96 | 105.49 | 0.64 | 43.82 | 53.34 | 97.16 | 92.1 |
| 5 | Improved Hospital Services Management | 449.08 | 787.22 | 1236.30 | 7.46 | 224.06 | 655.51 | 879.57 | 71.14 |
| 6 | Alternative Medical care | 53.14 | 7.50 | 60.64 | 0.37 | 49.80 | 7.06 | 56.86 | 93.77 |
| 7 | Non-communicable Disease Control & Other Public Health | 37.35 | 152.17 | 189.52 | 1.14 | 11.92 | 106.69 | 118.61 | 62.58 |
| 8 | National AIDS/STD Program and Safe Blood Transfusion | 14.56 | 552.67 | 567.23 | 3.42 | 12.40 | 418.61 | 431.01 | 75.99 |
| 9 | In-service Training | 85.56 | 195.04 | 280.60 | 1.69 | 68.80 | 149.15 | 217.95 | 77.67 |
| 10 | Pre-service education | 132.02 | 81.96 | 213.98 | 1.29 | 109.08 | 182.93 | 292.01 | 136.47 |
| 11 | Management for Procurement, Logistics & Supplies | 312.34 | 8.71 | 321.05 | 1.94 | 457.82 | 3.47 | 460.29 | 143.37 |
| 12 | Research & Development (Health) | 1.43 | 24.24 | 25.67 | 0.15 | 1.07 | 17.18 | 18.25 | 71.09 |
| 13 | MIS-Health, Services & Personnel | 18.72 | 60.75 | 79.47 | 0.48 | 16.72 | 50.06 | 66.78 | 84.03 |
| 14 | Quality Assurance | 1.11 | 6.63 | 7.74 | 0.05 | 0.97 | 5.25 | 6.22 | 80.36 |
| 15 | Sector-wide Program Management (Health) | 3.81 | 14.78 | 18.59 | 0.11 | 1.57 | 8.01 | 9.58 | 51.53 |
| 16 | Human Resource Management (Health) | 2.32 | 4.12 | 6.44 | 0.04 | 1.81 | 3.39 | 5.20 | 80.75 |
| 17 | Improved Financial Management (Health) | 1.38 | 1.64 | 3.02 | 0.02 | 0.83 | 1.45 | 2.28 | 75.5 |
| 18 | Micro-nutrient Supplementation | 27.56 | 77.36 | 104.92 | 0.63 | 16.47 | 77.80 | 94.27 | 89.85 |
| 19 | National Eye Care | 9.46 | 10.92 | 20.38 | 0.12 | 8.22 | 7.53 | 15.75 | 77.28 |
| 20 | Nursing Education & Services | 32.98 | 62.15 | 95.13 | 0.57 | 26.68 | 46.45 | 73.13 | 76.87 |
| 21 | Strengthening of Drug Administration management | 6.19 | 4.22 | 10.41 | 0.06 | 10.81 | 13.23 | 24.04 | 230.93 |
| 22 | Clinical Contraception Services Delivery | 328.60 | 278.55 | 607.15 | 3.66 | 479.94 | 212.63 | 584.15 | 96.21 |
| 23 | Family Planning Field Services Delivery | 341.99 | 1650.03 | 1992.02 | 12.02 | 268.48 | 1431.20 | 1699.68 | 85.32 |
| 24 | Maternal, Child & Reproductive Health Services Delivery | 153.23 | 537.71 | 690.94 | 4.17 | 104.59 | 382.89 | 487.48 | 70.55 |
| 25 | Information, Education & Communication (FP) | 40.53 | 71.01 | 111.54 | 0.67 | 30.15 | 62.83 | 92.98 | 83.36 |
| 26 | MIS- Services & Personnel | 13.14 | 15.00 | 28.14 | 0.17 | 9.44 | 4.04 | 13.48 | 47.9 |
| 27 | Procurement, Storage & Supplies Management | 103.50 | 5.45 | 108.95 | 0.66 | 56.55 | 2.29 | 58.84 | 54.01 |
| 28 | Sector-wide Mgmt-FP | 1.22 | 2.45 | 3.67 | 0.02 | 1.91 | 3.78 | 5.69 | 155.04 |
| 29 | Human Resource Mgmt - FP | 2.50 | 22.98 | 25.48 | 0.15 | 2.34 | 17.79 | 20.13 | 79 |
| 30 | Improved Financial Management - FP | 1.93 | 1.48 | 3.41 | 0.02 | 1.90 | 1.03 | 2.93 | 85.92 |
| 31 | Training, Research & Development (NIPORT) | 14.80 | 106.65 | 121.45 | 0.73 | 6.76 | 81.66 | 88.42 | 72.8 |
| 32 | National Nutrition Program | 143.43 | 1107.08 | 1250.51 | 7.55 | 86.24 | 799.12 | 885.36 | 70.8 |

| Sl. No. | Name of the Operational Plan(OP) | Estimated cost PIP(2003-11) | | | | Estimated Expenditure (2003-11) | | | % fund utilized |
|---|---|---|---|---|---|---|---|---|---|
| | | GOB | PA | Total | % of Total | GOB | PA | Total | |
| 33 | Physical Facilities Development (c,r & m) | 3227.62 | 520.55 | 3748.17 | 22.62 | 2960.57 | 333.06 | 3293.63 | 87.87 |
| 34 | Sector-wide Mgmt-MOHFW | 1.67 | 29.47 | 31.14 | 0.19 | 0.83 | 10.45 | 11.28 | 36.22 |
| 35 | Human Resource Management - MOHFW | 1.84 | 8.29 | 10.13 | 0.06 | 1.55 | 2.99 | 4.54 | 44.82 |
| 36 | Improved Financial Management - MOHFW | 4.08 | 21.17 | 25.25 | 0.15 | 3.00 | 10.20 | 13.20 | 52.28 |
| 37 | Health Economics Unit | 4.83 | 20.30 | 25.13 | 0.15 | 4.11 | 18.24 | 22.35 | 88.94 |
| 38 | Policy reforms | 2.93 | 365.63 | 368.56 | 2.22 | 1.20 | 187.01 | 188.21 | 51.07 |
| | **Total** | **6299.12** | **10267.35** | **16566.47** | **100.00** | **5384.89** | **8156.03** | **13540.92** | **81.73** |

**Table 2A: Comparison of Estimated Expenditure (2003-11) and Budget Request (2011-16)**

| Sl. no. | Name of OP | Estimated expenditure 2003-11 | Yearly average estimated expenditure (2003-11) | Budget request by the LDs (2011-16) | Yearly average demand (2011-16) | Ratio of Expenditure (HNPSP) to Demand request |
|---|---|---|---|---|---|---|
| 1 | Essential service delivery | 2406.97 | 300.87 | 5130.83 | 1026.17 | 2.13 |
| 2 | Communicable Disease Control | 306.85 | 38.36 | 1697.51 | 339.50 | 5.53 |
| 3 | TB & Leprosy Control | 486.6 | 60.83 | 378.87 | 75.77 | 0.78 |
| 4 | Health education & promotion | 97.16 | 12.15 | 551.3 | 110.26 | 5.67 |
| 5 | Improved Hospital Services Management | 910.04 | 113.76 | 2964.7 | 592.94 | 3.26 |
| 6 | Alternative Medical care | 56.86 | 7.11 | 244 | 48.80 | 4.29 |
| 7 | Non-communicable Disease Control & Other Public Health Interventions | 118.61 | 14.83 | 1703.71 | 340.74 | 14.36 |
| 8 | National AIDS/STD Program and Safe Blood Transfusion | 431.01 | 53.88 | 1074.07 | 214.81 | 2.49 |
| 9 | In-service Training | 217.95 | 27.24 | 610 | 122.00 | 2.80 |
| 10 | Pre-service education | 292.01 | 36.50 | 1225 | 245.00 | 4.20 |
| 11 | Management for Procurement, Logistics & Supplies (CMSD) | 411.09 | 51.39 | 660 | 132.00 | 1.61 |
| 12 | Research & Development (Health) | 18.25 | 2.28 | 33.35 | 6.67 | 1.83 |
| 13 | MIS-Health, Services & Procurement | 66.78 | 8.35 | 2001.06 | 400.21 | 29.96 |
| 14 | Quality Assurance | 6.22 | 0.78 | 9.55 | 1.91 | 1.54 |
| 15 | Sector-wide Program Management (Health) | 9.58 | 1.20 | 26.07 | 5.21 | 2.72 |
| 16 | Human Resource Management (Health) | 5.2 | 0.65 | 13.14 | 2.63 | 2.53 |
| 17 | Improved Financial Management (Health) | 2.28 | 0.29 | 2.66 | 0.53 | 1.17 |
| 18 | Micro-nutrient Supplementation | 94.27 | 11.78 | 192 | 38.40 | 2.04 |
| 19 | National Eye Care | 15.75 | 1.97 | 25.1 | 5.02 | 1.59 |
| 20 | Nursing Education & Services | 73.13 | 9.14 | 1021.81 | 204.36 | 13.97 |
| 21 | Strengthening of Drug Administration management | 2.82 | 0.35 | 62.56 | 12.51 | 22.18 |
| 22 | Clinical Contraception Services Delivery | 623.29 | 77.91 | 2199.25 | 439.85 | 3.53 |
| 23 | Family Planning Field Services Delivery | 1699.68 | 212.46 | 2339.85 | 467.97 | 1.38 |
| 24 | Maternal, Child & Reproductive Health Services Delivery | 487.48 | 60.94 | 1523.98 | 304.80 | 3.13 |
| 25 | Information, Education & Communication (FP) | 92.98 | 11.62 | 236.88 | 47.38 | 2.55 |
| 26 | MIS- Services & Personnel | 13.48 | 1.69 | 31.75 | 6.35 | 2.36 |
| 27 | Procurement, Storage & Supplies Management | 58.84 | 7.36 | 157.96 | 31.59 | 2.68 |
| 28 | Sector-wide Management-FP | 5.69 | 0.71 | 19.07 | 3.81 | 3.35 |
| 29 | Human Resource Management - FP | 20.13 | 2.52 | 104.5 | 20.90 | 5.19 |
| 30 | Improved Financial Management - FP | 2.93 | 0.37 | 7.47 | 1.49 | 2.55 |
| 31 | Training, Research & Development (NIPORT) | 88.42 | 11.05 | 200 | 40.00 | 2.26 |

| Sl. no. | Name of OP | Estimated expenditure 2003-11 | Yearly average estimated expenditure (2003-11) | Budget request by the LDs (2011-16) | Yearly average demand (2011-16) | Ratio of Expenditure (HNPSP) to Demand request |
|---|---|---|---|---|---|---|
| 32 | National Nutrition Program micro should added | 885.36 | 110.67 | 4479.72 | 895.94 | 5.06 |
| 33 | Physical Facilities Development (c,r & m) | 3293.63 | 411.70 | 9363 | 1872.60 | 2.84 |
| 34 | Sector-wide Management-MOHFW | 11.28 | 1.41 | 49.64 | 9.93 | 4.40 |
| 35 | Human Resource Management - MOHFW | 4.54 | 0.57 | 17.45 | 3.49 | 3.84 |
| 36 | Improved Financial Management - MOHFW | 13.2 | 1.65 | 37.5 | 7.50 | 2.84 |
| 37 | Health Economics Unit | 22.35 | 2.79 | 173.93 | 34.79 | 7.78 |
| 38 | Policy reforms | 188.21 | 23.53 | 950 | 190.00 | 5.05 |
| | **Grand Total** | **13540.92** | **1692.62** | **41519.28** | **8303.86** | **3.07** |

**Table 3A: Estimated Cost for the HPNSDP (2011-16)**

| Scenarios | Total | | Yearly average | | Ration of projected budget to estimated cost of HNPSP |
|---|---|---|---|---|---|
| | 2011-16 (in crore Tk.) | 2011-16 (in million US$) | 2011-16 (in crore Tk.) | 2011-16 (in million US$) | |
| **High** | 41,519.77 | 6,017.35 | 8,303.95 | 1,203.47 | 2.50 |
| **Middle** | 31,848.54 | 4,615.72 | 6,369.71 | 923.15 | 1.92 |
| **Low** | 26,031.43 | 3,772.67 | 5,206.28 | 754.53 | 1.57 |

## Table 4A: The list of old 38 OPs and new 32 OPs

| Sl. No. | | Name of New Operational Plan | Name of Old Operational Plan | Comments |
|---|---|---|---|---|
| 1 | DGHS | Essential Services Delivery | 1. Essential service delivery | Previously one OP (MNCH includes DSF) |
| 2 | DGHS | Maternal, Neonatal and Child Health Care | | |
| 3 | DGHS | Community Based Health Care | - | New OP |
| 4 | DGHS | TB And Leprosy Control | 2. TB & Leprosy Control | |
| 5 | DGHS | National AIDS & STD Program | 3. National AIDS & STD Program | The new OP excludes safe blood transfusions |
| 6 | DGHS | Communicable Diseases Control | 4. Communicable Disease Control | |
| 7 | DGHS | Non-Communicable Diseases Control | 5. Non-communicable Disease Control & Other Public Health Interventions | |
| 8 | DGHS | National Eye Care | 6. National Eye Care | |
| 9 | DGHS | Hospital Services Management and Safe Blood Transfusion | 7. Improved Hospital Services Management<br>8. Quality Assurance (Health) | The new OP includes safe blood transfusions |
| 10 | DGHS | Alternative Medical Care | 9. Alternative Medical care | |
| 11 | DGHS | In-Service Training | 10. In-service Training | |
| 12 | DGHS | Pre-Service Education | 11. Pre-service education | |
| 13 | DGHS | Planning, Monitoring and Research | 12. Research & Development (Health) | |

| Sl. No. | | Name of New Operational Plan | Name of Old Operational Plan | Comments |
|---|---|---|---|---|
| 14 | DGHS | Health Information Systems and E-Health | 13. MIS-Health, Services & Personnel | E-health is included in new OP |
| 15 | DGHS | Health Education and Promotion | 14. Health education & promotion | |
| 16 | DGHS | Procurement, Logistics and Supplies Management | 15. Management for Procurement, Logistics & Supplies | |
| 17 | DGHS | National Nutrition Services (NNS) | 16.Micro-nutrient Supplementation<br>17. National Nutrition Program | Two merged in to one |
| 18 | DGFP | Maternal, Reproductive and Adolescent Health | 18. Maternal, Child & Reproductive Health Services Delivery (FP) | |
| 19 | DGFP | Clinical Contraception Services Delivery | 19. Clinical Contraception Services Delivery | |
| 20 | DGFP | Family Planning Field Services Delivery | 20. Family Planning Field Services Delivery | |
| 21 | DGFP | Planning ,Monitoring and Evaluation of Family Planning | 21. Sector-wide Management-FP | |
| 22 | DGFP | Management Information Systems | 22. MIS- Services & Personnel - FP | |
| 23 | DGFP | Information, Education and Communication | 23. Information, Education & Communication (FP) | |
| 24 | DGFP | Procurement, Storage and Supply Management | 24. Procurement, Storage & Supplies Management | |
| 25 | Other agency | Training, Research and Development for Population Service (NIPORT) | 25. Training, Research & Development (NIPORT) | |
| 26 | Other agency | Nursing Education and Services | 26. Nursing Education and Services | |
| 27 | Other agency | Strengthening of Drug Administration and Management | 27. Strengthening of Drug Administration management | |
| 28 | MOHFW | Physical Facilities Development | 28. Physical Facilities Development (c,r & m) | |
| 29 | MOHFW | Human Resource Management | 29,30 and 31 HRM of DGHS,DGFP, MOHFW | Three into one |
| 30 | MOHFW | Improved Financial Management | 32. Improved Financial Management (Health)<br>33. Improved Financial Management - FP<br>34.Improved Financial Management - MOHFW | Three merged in to one |
| 31 | MOHFW | Sector-Wide Program Management and Monitoring | 35. Sector-wide Management (Health),<br>36.Sector-wideManagement-FP<br>37. Sector-wide Management-MOHFW | Three merged in to one(Policy reforms excluding DSF) |
| 32 | MOHFW | Health Economics and Financing | 38. Health Economics Unit | |