

# CHAPTER 5: HUMAN RESOURCES DEVELOPMENT STRATEGY

## OVERVIEW

Formation of human capital for sustaining economic growth and poverty alleviation has been a pivotal developmental instrument in Bangladesh since independence. This goal was affirmed in the First Five Year Plan and in the successive strategy documents. Successive education sector plans and strategies focused on enhancing access and quality of education along with emphasis on equitable access and better utilization of scarce resources. Improving education quality was perceived as the most critical challenge for meeting the skills and knowledge requirements of the national economy. Interlinked programs in nutrition, maternal health, sanitation, and preventive health practices, enabled the poor to gain access to the human capital formation process and empowered them for seeking curriculum relevance to labor market needs, self-employment generation, and export of skilled manpower.

Bangladesh realizes that development of human resources is its golden key for entry into a knowledge-based economy and also for gaining access to the competitive global market of talents and merit. Meritocracy is ascending rapidly. Talents are increasingly being sought from the global market places. All developing nations are moving fast to stamp their feet on the global competitiveness. No country is insular from these competitive forces. Neither they would grow and develop in isolation.

On the other hand, such drive to globalization by competing nations, offers unique challenges and opportunities to Bangladesh for harnessing its trained and equipped human resources as the principal drivers of growth and institutional reforms. Each of the developing countries is striving to market their human resources globally to meet the knowledge based economies on the global front. Bangladesh, with its abundance of untapped human resources, is well placed to gain from this trend.

Education is a fundamental human right. So are the rights for meeting basic needs of health and nutrition. At the same time, education, along with health and, as interlinked interventions, is strategic for developing the untapped human resources to facilitate the transformation of the Bangladeshi agrarian economy to an increasingly urban industrial economy. It also equips the country to transit to the citizenry of the globe.

Available evidence suggests that along with income growth and lower poverty, Bangladesh has made impressive progress in improving its human development indicators including life expectancy, infant and child mortality, adult literacy, and primary and secondary school enrollments. Yet there is a large unfinished agenda, especially regarding the quality of education

and availability of skills, which are particularly essential for increasing the rate of growth and creating high income jobs.

In the area of gender dimensions of human development, Bangladesh has also made impressive progress in gender equality over the last two decades, with key improvements in women's and girls' literacy<sup>12</sup>, women's life expectancy<sup>13</sup>, political participation and access to credit, the achievement of gender parity in primary and secondary schooling, significant reduction in the fertility rate, and the paid employment of millions of women and girls, especially in garment factories. All these are mutually reinforcing and are having a significant impact on the social transformation of gender relations in Bangladesh.

In spite of such impressive progress, major gender gaps and challenges remain in many crucial areas, including higher rates and severity of poverty among women<sup>14</sup> as opposed to men, lower access to economic resources and assets, high rates of early marriage, dowry demands, gender-based violence and persistent wage discrimination. All these led to lack of adequate reproductive health and nutrition services, a high maternal mortality rate, very low female access to tertiary education and remunerative employment, and the public safety of women and girls. These gaps and differences are evidence of the continuing low value placed on girls and women. In this context, the Government has recognized that eliminating inequalities in the areas of education, health, nutrition etc. is essential to achieving the MDG targets.

## **EDUCATION AND TRAINING**

The role of education in facilitating social and economic progress is well recognized. It opens up opportunities leading to both individual and group entitlements. Education, in its broadest sense of development of youth, is the most crucial input for empowering people with skills and knowledge and giving them access to productive employment in future. Improvements in education are not only expected to enhance efficiency but also augment the overall quality of life. Education acts as the engine of growth for economic and social development of a nation. Human resources development is at the core of Bangladesh's development efforts and access to quality education is critical to poverty reduction and economic development.

### **Education in the Global Perspective**

In 2010, the world population aged 15 and over had an average 7.8 years of schooling, increasing steadily from 3.2 years in 1950 and 5.3 years in 1980. The rise in average years of schooling from 1950 to 2010 was from 6.2 to 11.0 years in high-income countries and from 2.1 to 7.1 years in low-income countries. Thus in 2010 the gap between rich and poor countries in average years

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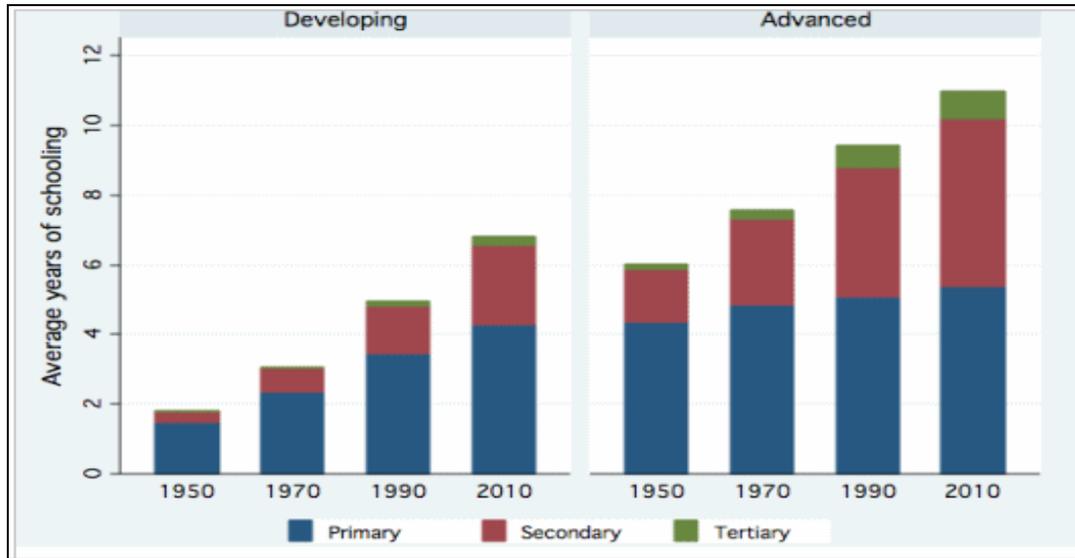
<sup>12</sup> The female adult literacy rate, although still lagging significantly behind the male rate, increased from 27% in 1997 to 48% in 2007, compared with the male rate at 58.7% in 2007. *Human Development Report Statistics*.

<sup>13</sup> Women's life expectancy increased from 58 years in 1997 to 66.7 in 2007, compared with life expectancy for men of 64.7 years in 2007 (HDR online statistics), which is more in line with global biological standards.

<sup>14</sup> *Steps Towards Change: National Strategy for Accelerated Poverty Reduction II, 2009-11*, p.8-9.

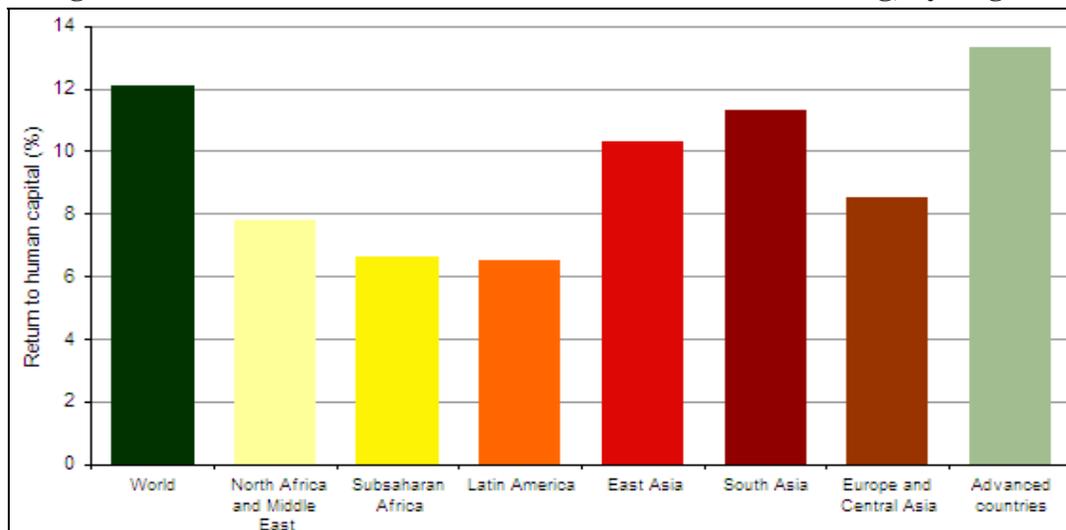
of schooling remained at 4 years, having narrowed by less than 1 year since 1960 (see Figure 5.1). In 2010 the level and distribution of educational attainment in developing countries are comparable to those of the advanced countries in the late 1960s.

**Figure 5.1: Average Years of Schooling by Education Level (Population over Age 15)**



Schooling has a significantly positive effect on output. Estimates of rates of return to education vary across regions (Figure 5.2). The estimates for the group of advanced countries, East Asia and the Pacific, and South Asia are the highest at 13.3%. In contrast, the estimated rates of return are only 6.6% in Sub-Saharan Africa and 6.5% in Latin America.

**Figure 5.2: Rates of Return to an Additional Year of Schooling, by Region**



The results show that the rate of return to schooling varies across levels of education. The estimated rate of return is higher at the secondary (10.0%) and tertiary (17.9%) levels than at the primary level, which differs insignificantly from zero. The results imply that, on average, the wage differential between a secondary-school and a primary-school graduate is around 77% and that between a college and a primary-school graduate is around 240%.

Studies of rates of return to schooling in Bangladesh confirm these findings both in terms of average return to schooling as well as the non-linearity of the returns (rising disproportionately at higher levels). The evidence from Bangladesh also suggests higher return to female education as compared with the male<sup>15</sup>.

### **Review of Past Achievements**

Education is at the key to all development efforts. The Government of Bangladesh has always been committed to significant improvements in the education sector; development plans with education being given the highest priority in the public sector investments. Education sector allocations are currently about 2.3 percent of GDP and 14 percent of total government expenditure. This spending priority has served Bangladesh well as reflected in improved education indicators.

The management of the education system falls under two ministries - the Ministry of Primary and Mass Education (MoPME, responsible for primary education and mass literacy) and the Ministry of Education (MoE, responsible for secondary, vocational and tertiary education). Overall there are more than 17 million students at the primary level, and over 8.0 million at the secondary level. Enrolments at the tertiary level are relatively small but growing very rapidly. At the time of independence of Bangladesh, there were only 10 universities. After independence, the scenario has changed radically. Today there are 87 universities in the country, of which 33 are public and 54 are private universities. There are 1778 degree colleges under the National University which also caters to the needs of the higher education in Bangladesh.

Bangladesh has made significant progress, especially in terms of increasing access to education and gender parity, both at primary and secondary levels. Net primary enrollment rates rose from 61 percent in 1991 to 91.9 percent in 2008, 93.5 percent in 2009, while a corresponding increase in enrollment rates at the secondary level from 28 percent to 43 percent in 2008 and 49.1 in 2009. Gender parity in access to primary and secondary education has also been achieved. These achievements are particularly spectacular when compared to countries in the South Asian region and other countries at similar levels of per-capita income. The introduction of the Female Secondary School Stipend Program (FSSSP) in 1994 has had a tremendous impact on girls'

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<sup>15</sup> See for example: Mohammad Asadullah Niaz "Returns to education in Bangladesh", Working Paper No.130, QEH Working Paper Series, October 2005.

education, with girls now actually outnumbering boys at primary (50.3:49.7) and secondary (54:46) levels<sup>16</sup>. As a result, the Government is revising its scholarship program to make subsidies more equitable to both girls and boys.

Major advances in girls' education have had many positive and wide-ranging effects, including increased employment opportunities, higher age at marriage, and greater say in the choice of their spouse and in decision-making generally. Women's education and access to information have been found to be key to increased use of maternal health services and improved health outcomes, as well as reduced fertility and improved family nutrition.

The Government is strongly committed to alleviating the existing problems in respect of management and quality through reforms across the education system. In order to address issues at the secondary and higher levels, the MoE has developed a medium-term framework for the secondary education sub-sector, focusing on quality improvements, policy measures and specific actions needed to reform the system. The development of this medium-term framework has benefited from an extensive range of consultations and workshops with stakeholders at the central, district, and Upazila levels. The main objective of reforms being proposed is to address systemic governance issues aimed at raising the quality and cost-effectiveness of service delivery, and to improve equity of access in secondary education.

MoE is aiming at moving towards a devolved system of governance within the current administrative structure. In this system the central government will be responsible for formulating policies, financing, setting quality standards, monitoring and evaluation etc., while lower levels of government will be responsible for administering the system. MoE is empowering officials at the district and Upazila levels to take greater responsibility in monitoring school performance and to ensure public disclosure of information (e.g., SSC passing rates, teacher absenteeism, class sizes, etc.) related to school quality.

To ensure appropriate financial controls, MoF is implementing a Strengthening of Public Expenditure Management Program (SPEMP). This is intended to increase accountability and transparency in the use of resources. A twenty-year (2006-2026) strategic plan for higher education has been formulated for the overall development of the university sub-sector; projects are being carried out under the purview of the strategic planning.

### **Current and Future Challenges**

In Bangladesh, the school transition rate has fallen drastically from primary (grades 1 to 5) to secondary (grades 6 to 10). In 2008 about 50.7 percent of pupils completing grade 5 made a transition to the first year of secondary school. Enrollment in the secondary phase was only 7.4 million (43 percent of eligible children). Additionally, completion rate at the secondary level is

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<sup>16</sup> MDG Progress Report 2009

also declining. As a result, enrollment in higher secondary education is low and declining. Regarding equity, the gap between the rich and the poor generally widens with the years of education. For example, the gross enrollment gap between the poorest and the richest quintiles is 22 percentage points at the primary level and 90 percentage points at higher secondary in 2005<sup>17</sup>. These data suggests that the country faces a major challenge in addressing and achieving equity, quality, and efficiency of the delivery of secondary education across the nation. The wastage in education is very high due to internal inefficiencies such as high dropout, grade repetition, and poor quality of learning at school level.

### **The Access, Dropout and Equity Issues**

The Government recognizes that there are still many challenges that must be met in enhancing access in all levels in the secondary and higher education sector. The national secondary enrollment rate is 45%, which means that 55% of all secondary school age children in Bangladesh are for one reason or another inhibited from making a transition to secondary school. Large numbers of girls drop out of school, resulting in significant gender gaps in both primary and secondary school completion, and low entry into tertiary education (32% girls). Large gaps in educational attainment between rich and poor continue to present major challenges, as do children living in remote locations, ethnic minorities and the disabled.

The principal reasons for these are the following:

- *Quality of primary education:* The biggest problem is the lingering poor quality of primary education. Achievement and competency levels of most children are very low. This doubly disadvantages girls since they already face overwhelming gender discrimination in other areas.
- *Poverty and child labor:* In recent times poverty has been increasingly inhibiting children from going for higher education. Children from the poor families have fewer chances for access into schools especially in the secondary level, as a majority of them are engaged in different types of work and struggling for survival.
- *Gender discrimination:* Many families still keep their girls from out of school simply because they do not believe a girl needs or should have an education. Many girls are married at very young ages, eliminating any chance they had to receive an education beyond the primary level. Especially in rural areas, girls are also frequently kept in the home to work and take care of younger siblings, exacerbating the problems of access they already face. The same holds true, although to a lesser degree, in urban areas. In both urban and rural areas, the problem is worst for girls of poor families. A recently growing constraint is the perceived insecurity and sexual harassment of adolescent girls.

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<sup>17</sup> Source: Poverty Assessment for Bangladesh, Bangladesh Development Series Paper No. 26, World Bank, Dhaka, October 2008

## **The Quality Issues**

The low quality of education is a serious problem Bangladesh faces in the secondary and tertiary education sector. The principle reasons for this are:

- Low physical facilities
- Inappropriateness of curricula and pedagogy
- Low capacity of the teachers
- Lack of standards

The SFYP will make a concerted effort to address these concerns.

## **Strategy for Education in the SFYP**

### **SFYP Education Targets**

The political pledge of the Government reflected in Vision 2021 and Education Policy 2010 provides the framework for determining objectives, priorities and strategies for the education sector in the sixth plan.

Achievement of universal primary education, extending this stage to grade 8; elimination of illiteracy; removing the education gap between the poor and rich, creating a new generation equipped with technical skills and scientific knowledge; better remunerations for teachers; and overall improvement of quality and equity in education are key education goals of Vision 2021. Other related targets pertinent to education are building Digital Bangladesh, empowering local government as the engine for delivering services and carrying out development activities, ensuring equal status for women in all spheres of society and state, and creating gainful employment for the labor force.

### **SFYP Education Strategies**

Reversing the low school completion rates at all levels is the most critical educational challenge facing the SFYP. A related challenge is to reduce the gap between the rich and poor, particularly at the post-primary levels. The critical needs and important issues related to Secondary and Higher Education in the country shall be addressed in the SFYP on a two pronged basis: a quantitative goal and a qualitative goal, to be pursued in an integrated manner.

**The quantitative goal:** The main objective is to increase the rate of school age children going to schools by focusing on both new enrollment and completion rates. The major actions to be taken to improve Secondary and Higher Education are:

- Improve infrastructure by constructing/upgrading classrooms and labs, teacher and student hostels, water and sanitation facilities, and playground to facilitate admission of more students and provide a better learning environment.
- Ensure sufficient number of teachers at all levels including for preprimary
- Recruitment and training of female teachers at all levels to fulfill the existing quotas.
- Provide stipend and other financial support to the poor and especially to the female students to encourage enrollment, retention and completion.
- Provide teaching and learning aids, facilities to increase the pupil's interest over education and to modernize the education environment.
- Provide computers to make the students competent with the modern world of ICT and to make them fit for the present day job market.
- Establish technical schools at Upazila levels.
- Establish science and technology universities at greater district levels.

**The qualitative goal:** The objective here is to improve the standard of education at secondary and higher levels. The major strategic interventions will be:

- Modernization of curricula, texts, pedagogy and examination techniques. Give more importance to science subjects and mathematics at the secondary level.
- Introduction of ICT and technical education at all secondary levels, while encouraging equal participation of girls in technical education.
- Improvement of capacity for teachers to promote quality teaching. Provide computer trained teachers and subject based teachers especially for science and mathematics.
- Modernization of Madrasa education with changes of the society and reduce the gap of existing facilities for secondary education between general education and Madrasa education.
- Quality enhancement at university education through improvement of pedagogy and educational environment.
- Strengthening gender and region based monitoring, analysis and reporting.
- Based on sex-disaggregated data collection, introduce follow-up mechanism to identify pockets of disparity (such as girls' participation from ethnic minority groups, rural girls' school attendance, or female teachers in rural areas) and accordingly develop capacity to adjust policies and strategies based on information received.

### **Education Policy Framework in the SFYP**

The new education policy formulated in 2010 draws on the imperatives of educational development of a young nation articulated in the Kudrat-e-Khuda Commission Report of 1974 and aims to provide the guidelines to translate the vision for educational development into reality. Implementation of the policy has already started and the Government has initiated actions in a number of areas.

In primary and secondary education, the reforms include:

- Monitoring of progress with the implementation of the Primary Education (Compulsory) Law of 1990.
- More than 98% of secondary schools are non-government. But Government pays 100% of the teacher and staff salary of these institutions.
- Sustained increase in government allocation in education sector from the 1990s.
- Providing subsidies to create demand for education in favor of the poor and girls.
- Initiating the decentralization of primary and secondary education management structure.
- Establishment of an autonomous Non-Governmental Teachers Registration and Certification Authority in order to recruit qualified and trained teachers in secondary level institutions.
- Initiating a large project for the improvement of teaching quality at the secondary level institutions.
- Introduction of ICT in secondary and higher secondary level
- Establishment of a separate entity named Independent Textbook Evaluation Committee (ITEC) for designing transparent criteria under which individual textbook manuscripts will be evaluated.
- Strengthening National Curriculum and Textbook Board.

For Madrasa education, the following reforms are underway:

- Modernization of madrasa curriculum.
- Introduction of technical and vocational trades in madrasa education
- Introduction of science curriculum to make the students productive in the job market.
- Improvement of infrastructural facilities.

In technical education, the following actions are being taken:

- Increase the enrolment in technical education from the existing 6% to 25% within the next 15 years
- Introduction of technical and vocational courses in secondary, higher secondary and madrasa levels.
- Introduction of SSC vocational courses.
- Introduction of double shift in the existing technical schools, colleges and polytechnic institutes.

- Undertaking a skills development project.
- Skills development projects will be continued.
- Establishment of one technical school at every Upazila.

In higher education, the following initiatives are being implemented:

- Expansion of science and technology education through establishment of science and technology university one each at greater districts.
- Steps to free the higher education institutes from terrorism, politicization and session backlogs.
- Improvement of quality and relevance of the teaching and learning environment in higher education institutes.
- A quality enhancement project for higher education.
- An Accreditation Council is being established which would function as a watchdog over the private universities in order to monitor the teaching standard of universities.

The SFYP will focus on proper implementation of these reforms. Additional reforms to be pursued include:

- School based assessment (SBA) in secondary level education.
- Reform of existing examination systems in secondary level education.
- Privatization of Textbook Writing and Publication.
- Re-organization of Managing Committees/Governing Bodies of the non-government educational institutions.
- Formation of Oversight Committee for Supervision of Teaching at Classrooms.
- Sanction of MPOs on the basis of performance of educational institutions.
- Strengthening of Teachers' Training.
- Delivery of Textbooks to the Students on Time.
- Development and Modernization of Secondary, Technical and Madrasa Curricula.
- Retirement and Welfare Fund for Non-Government Teachers.
- Distribution of 20,500 computers in secondary level educational institutions including Madrasas.
- Training of secondary level teachers' in computer applications.
- Decentralization of Directorate of Secondary and Higher Education.
- Restructuring of Personnel of Boards of Intermediate and Secondary Education (Dhaka, Rajshahi, Chittagong, Jessore, Barisal, Comilla, and Sylhet) and NCTB.
- Introduction of technical and vocational courses in the madrasa and general education
- Introduction of science and technology curriculum in madrasa and general education
- Establishment of an education trust fund.

## **Better Service Delivery through Improvements in Governance and Management**

Governance and management improvements are critical for strengthening public education service delivery. The critical governance issues include:

- Weak human resource management.
- Centralization of education administration.
- Inadequate coordination.

Actions will be taken in the SFYP to address these constraints. The focus of reforms will be to ensure merit based recruitment and career development, emphasize the job learning as well as outside training, strengthen incentives to retain talented staff, and avoid unnecessary postings and transfers. There will be total decentralization of primary education management with a stronger role for the school managing committees and a greater involvement of the community in school management. At the secondary level, power, responsibility and authority will be given to division, district and Upazila. This policy will be supported by strengthening managing bodies of these institutions and ensuring the timely release of allocated budgetary resources. Concerted efforts will be made to improve coordination among the multitudes of public education management institutions. This includes exploring the possibility of merging the MoE and MoPME, establishing an inter-ministerial sub-committee chaired by the Prime Minister to look holistically at the education and skills issues, and ensuring better communication and exchange with the various education ministries and institutions.

## **Improving Education Financing**

Total national education expenditure, especially public budget allocation, has to increase substantially in the medium term to meet national goals and priorities regarding expansion and quality improvement in education. Available estimates indicate that achieving universal elementary education up to eighth grade and participation of 50 percent of the eligible age-group in secondary education by 2015 will require public allocation to education to be raised to 4 percent of GDP. Quality improvement, desperately needed at all levels of education, will require additional resources. This will require a very substantial increase in the allocation of budget for education in the next five to six years.

Several important features of education financing in Bangladesh need attention. These are:

- A low-cost and low-yield system.
- Significant household contribution and opportunity for complementarities.
- High incentive expenditures in primary and secondary education.
- Lack of equity in educational financing.

Addressing these financing issues will be important to achieve the Plan targets, especially in light of likely budgetary constraints. While efforts will be made to allocate an increasing share of budgetary resources to education, innovative ways will need to be found to improve the quality of spending and better cost recovery from higher education systems. The equity and financing constraints will be better reconciled by carefully examining options for raising cost recovery from higher education while providing scholarships to needy students. The various stipend programs will be carefully reviewed to ensure better targeting.

### **Public-Private Partnership in Education**

Private institutions play a major role in the delivery of education in Bangladesh. Private participation and Government-NGO collaboration have served the cause of education well. It is also necessary to recognize the complementary relationship of formal and non-formal primary education, make the latter a part of the national strategy for improving access and quality in primary education, and incorporate its flexibility and community involvement in formal education.

The SFYP will continue the efforts to promote the role of private sector in education, support the delivery of non-formal education by NGOs through financing and other means, and explore Public-Private Partnership (PPP) both for mobilizing resources and for improving the performance of educational programs. Several issues of private education service delivery have emerged that needs better management. These concern standards, accreditation, protecting public interests in financial matters and ensuring equity. Regulatory framework guiding private education will be strengthened to address these concerns within the overall objective of encouraging greater private supply.

### **Strategy for Training in SFYP**

#### **Issues and Challenges**

Based on a recent Labor Force Survey (2005-6), the working age population in Bangladesh is about 54 million (age 15 years and over). About half of this population, have not been subjected to any formal education, either at the primary level or lower, and women mostly fall within this category. A little over half of the work force has an educational level beyond primary education.

As noted in chapter 2, most workers in Bangladesh are employed in the informal sector, with agriculture as the major sector of employment. The informal sector provides some 78 percent of total employment, of which 48 percent is in agriculture. Overseas employment of poorly skilled workers has also become a significant source of employment. Every year, about 500,000 Bangladeshis migrate abroad. Some 10 million people of Bangladeshi origin are living and working abroad presently.

The primary responsibility for overseeing the pre-employment training rests with two agencies: the Directorate of Technical Education (DTE) and the Bangladesh Technical Education Board (BTEB). The vocational and technical education (VTE) programs regulated by the Technical Education Board attached to the Ministry of Education offers courses of one to four years duration after the junior secondary level (grade eight). The courses are offered by vocational training institutes, polytechnics, commercial institutes, technical training centers and specialized institutes. Private sector institutions are increasing, especially in the IT sector and in response to opportunity for work abroad as skilled and semi-skilled workers.

Certificate level courses (post-class 8) in various trades and skills are offered in approximately 100 public sector institutions (under Ministry of Education, Ministry of Labor and Employment and Ministry of Expatriates' Welfare and Overseas Employment) and some 1,500 non-government institutions, other than secondary schools with vocational courses. The introduction of vocational courses as part of SSC and HSC and business course at the HSC level by the Directorate of Technical Education, (so far in approximately 1200 institutions at SSC level and 500 at both SSC and HSC levels) has helped to raise the share of post-primary student enrolment in VTE somewhat. But it is still only around 2 percent of enrollment after grade 8. In 2005, about 130,000 students were enrolled in these courses. This number was double the enrolment in the same categories in 1997-98.

Diploma level courses (post-grade 10) were offered in some 600 institutions, the large majority of them in the private sector, including the higher secondary schools or colleges. The Ministry of Expatriates' Welfare and Overseas Employment offers skill training in the Institute of Marine Technology, Narayanganj and in 11 Technical Training Centers (TTC). Another 30 TTC and 5 Institute of Marine Technology are being established in the different region of the country. The Ministry of Labour and Employment also offers skill training in the existing 26 TTCs. The trades offered in TTC's, after junior secondary general education, are taught through two yearly modules. The first module qualifies the trainee for the National Skill Standard III (Semi-skilled worker) and the second module meets the requirements for National Skill Standard II (skilled worker). The Centers also can offer tailor-made basic trade courses of 360 hours' duration in various trades for students of schools and Madrasas or other interested groups. The Department of Youth Development in the Ministry of Youth and Sports run training of 1 to 6 months' duration on various trades with the aim of helping trainees engage in self-employment or paid employment. A 3-month long residential training course on livestock, poultry, and fish culture is offered in 47 training centers in 47 districts. Training of 6 month-duration on computer, electronics, electric house wiring, and refrigeration and air conditioning is offered in some of the centers. The Department also provides training for women on dress-making and block and batik printing in all districts. In addition short-duration mobile training courses are offered at the Upazila level. Ministry of Women's and Children's Affairs provides short courses for women in such areas as poultry, dairy, livestock, food processing, plumbing, and electronics, which have local demand. Other providers of these kinds of courses are the Ministry of Social Welfare, the

Directorate of Ansar and the Village Development Party (VDP) under the Home Ministry and the Bangladesh Small and Cottage industries Corporation.

Despite these multitude efforts, the availability of trained labor remains a problem. Additionally, there is a mismatch between available jobs and required skills. The difference in remuneration for skilled and unskilled workers has narrowed, which is an indication that the training content and quality are not valued highly in the market. Those with training often remain unemployed or cannot find employment in their area of training – an evidence of mismatch and poor quality of training. The employers complain that the products from the vocational system are not meeting their needs. Instead, the system continues to produce graduates for old and marginal trades, which have no market demand, while skill needs for newer trades remain unmet. The training available for women is generally very stereo-typed with possibility of low return.

### **Training Strategies and Policies**

The Government policies and goals are to increase substantially the proportion of post-primary students enrolling in VTE. The equity effect of this expansion is dependent on three interconnected questions: (a) the extent the clientele of the programs is the disadvantaged and poor segments of the population, (b) how effective the programs are in imparting sellable skills, and (c) whether there is an impact of the training programs on increasing employment opportunities and raising income of the poor.

The impact of public sector VTE on poverty alleviation is undermined in two ways. It mainly serves the urban young males who have completed at least the eighth grade. The rural poor, who do not survive progression to grade 9, are mostly ruled out. The failure to diversify its clientele and to make the programs more flexible, adaptable and responsive to market needs and geared to the informal economy suggests that the VTE is failing to help the poor improve their employment and income opportunities.

To address these concerns the Government has established the National Skill Development Council (NSDC) as the apex body for policy formulation on skill development with representation from the government, employers, workers and civil society. A draft of a national skill development policy has been prepared in 2009 under the auspices of the Council. This policy attempts to address the issues raised above and proposes to strengthen the Bangladesh Technical Education Board as a quality assurance mechanism. The new Skill Development Council will also consider the following strategic approaches during the Sixth Plan:

- Re-thinking the role of public sector skill training in developing a strategy to expand and modernize VTE to meet market demands and extend greater benefits to the poor and women
- Improving the link between training and job markets.
- Improving the positive effect on poverty reduction by targeting new clientele.
- Improving efficiency and quality of programs by stressing standardization of certification.

## **Informal skill development**

Informal and traditional apprenticeship and on-the-job experience are the means for creating most of the skills that keep the bulk of the economy and production of the country running. A master craftsman, himself inheriting the skill from his father or another "master," training his assistants in exchange for free labour or a reduced wage, produces such skills as welding, turning, bricklaying, carpentry, furniture making, electrical maintenance, plumbing, bicycle repair, motor repair and so on. Not enough is known about the system and its strength and weaknesses. An attempt to bring the system under official regulation may not be a good idea. However, the Plan will suggest the need to maintain an overview of the system and consider how the more formal training programs of the government and the private sector can complement and supplement the informal system and enhance the effectiveness of the total nationwide skill generation capacity.

## **HEALTH, POPULATION AND NUTRITION**

Health is now universally regarded as an important index of human development. Poor health is both the cause and effect of poverty, illiteracy and ignorance. Policies of human development not only raise the income of the people but also improve other components of their standard of living, such as life expectancy, health, literacy, knowledge and control over their destiny. Health is both a major pathway to human development as well as an end product of it. Health and development converge and contribute to each other.

The goal of the health, population and nutrition (HPN) sector is to achieve sustainable improvement in health, nutrition, and reproductive health, including family planning, for the people, particularly of vulnerable groups, including women, children, the elderly, and the poor.

The HPN sector lays emphasis on reducing severe malnutrition, high mortality, and fertility, promoting healthy life styles, and reducing risk factors to human health from environmental, economic, social and behavioral causes with a sharp focus on improving the health of the poor. More specifically, with regard to MDG in the health sector, the main emphasis is on the human dimension of poverty, i.e. deprivation in health, deprivation in nutrition including water and sanitation, as well as related gender gaps.

The major MDG targets include the following: (i) reducing infant and under-five mortality by 65% and eliminating gender disparity in child mortality; (ii) reducing the proportion of malnourished children by 50% and eliminating gender disparity in child malnutrition; (iii) reducing MMR by 75% and ensuring availability of reproductive health services to all; and (iv) reducing the burden of TB and other diseases.

The country has achieved greater progress than most low-income countries on a range of health indicators: i) increase in life expectancy from 44 years to 67 between 1970 to 2007; ii) decline in

infant mortality from 92 per 1,000 live births to 41 between 1991 and 2008; and iii) under five child mortality fell from 146 per 1,000 to 54 between 1991 and 2008. By world standards, HIV prevalence remains low (less than 1% percent of the adult population).

While the country is on track to meet several of these MDGs, progress in national human development has been uneven. Neonatal mortality in Bangladesh accounts for two-thirds of infant deaths and for over one half of all under-5 deaths<sup>18</sup>. Malnutrition rates, on the other hand, are among the highest in the world. 34 percent of all women suffer chronic energy deficiency, 47 percent are in the poorest wealth quintile. Iron deficiency anemia afflicts one half of girls and women of reproductive age<sup>19</sup>. Accordingly to a 2009 report by IFPRI, Bangladesh has one of the highest prevalence of underweight children, at over 40 percent.

In developing countries like Bangladesh, there are a number of factors that affect people's health status. There are demand side factor such as income, assets, and social practices resulting from ethnicity and religion, lifestyle; and supply side factors such as the health care system, health expenditure, etc. There are also environmental factors and gender inequality related factors that influence health status. These factors include, among others i) poverty, food security, food pricing and malnutrition; ii) environmental pollution and degradation; iii) reproductive health problems; iv) social development, especially literacy rates; and v) public health care delivery system.

Evidence from Bangladesh and elsewhere suggest that the pattern of diseases experienced by the poor differs significantly from that of the rich. There are primarily two broad categories of diseases, that of poverty and that of affluence. Poverty leads to malnutrition and resultant diseases, which are common in the developing countries. Lack of food security is another major problem that leads to malnutrition. Other factors related to malnutrition are production and availability of food-grains, level of nutrition knowledge, level of illiteracy and ignorance, poor consumption patterns and lack of diet diversity, distribution of income and food, level of employment, unsafe drinking water and poor sanitation facilities and poor access to and inadequate availability of health services. Good nutrition entails meeting both the dietary energy needs and nutrients for functioning but also increases the immunity to diseases and infections. The poor tend to live in unhygienic environmental conditions and are at high risk of infections and diseases.

The poor are trapped in the vicious cycle of malnutrition, low birth weight babies, malnourished adolescents, and malnourished pregnant mothers. Groups that are most vulnerable to malnutrition are infants, pre-school children, especially girls, pregnant and lactating mothers, landless laborers, urban slum dwellers and tribal communities. While there has been important progress in reducing gender differences in children's malnutrition, the poor nutritional status of

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<sup>18</sup> UNICEF Fact Sheet on Maternal and Neonatal Health in Bangladesh, UNICEF, Dhaka, 2009

<sup>19</sup> *Whispers to Voices*, World Bank, Washington DC. 2008

their mothers is a key factor in infants' low birth weight, affecting as much as 45 percent of babies, and leading to high rates of underweight and stunting.

Most health problems of women are related to their reproductive system or are caused by their reproductive function. Other health problems, such as that of malnourishment or environmental pollution, etc, get aggravated due to their reproductive function. Starting from anemia to complications of the gynecological system, women are constantly under health stress. Women's health problems are broadly affected by two factors, biological (natural) and socio-economic and cultural (human-made), besides individual attributes and availability of health and nutritional services. Even access of women to health and nutritional services is partly determined by socio-cultural factors. Each of these factors influences female health in varying proportions over the life cycle. But, more than others, socio-cultural factors determine the major part of a woman's physical and mental health status. Thus, improvement in women's health requires change in socio-cultural dimensions of a society and overall improvement in women's situation.

### **Past Performance**

Bangladesh has been implementing Sector Wide Approach (SWAp) in HPN sector since 1998. The first SWAp (HPSP) was implemented during 1998-2003. The second HNPSA for 2003-2011 is ongoing and the new SWAp will be in place without interruption of the current one. Since Bangladesh was the first country in the world to implement SWAp, much of the learning was by doing. The major policy shift in development from project approach to program approach suffered from initial teething problems, partly due to limitation in capacity. Lack of continuity of leadership also constrained progress in terms of expected reforms in the HPN sector. With the SWAp process, there are still opportunities for improving HPN services by avoiding duplication, reducing wastage and grabbing missed opportunities. It is recognized that effective outputs in HPN sector depends upon coordination among health, population and Nutrition.

Despite these institutional shortcomings, significant progress has been achieved in a number of HPN areas as evidenced by the findings of successive Bangladesh Demographic and Health Surveys (BDHS) shown in Table 5.1. Nevertheless, a large unfinished agenda remains. Lack of

**Table 5.1: Progress in Health, Population and Nutrition, 1993-2007**

Indicators	1993-94	2007
<b>Total fertility rate</b>	3.4	2.7
<b>Percentage of children underweight for age</b>	56.3	41
<b>Percentage of children underweight for height</b>	17.7	17.4
<b>Percentage of children stunted</b>	54.6	43.2
<b>Neonatal mortality rate per 1000 live births</b>	52	37
<b>Infant mortality rate per 1000 live births</b>	87	52
<b>Percentage of children vaccinated</b>	58.9	81.9
<b>Percentage of ante-natal check-ups by trained workers</b>	29	51.7
<b>Percentage of deliveries by trained person</b>	9.52	18

*Source: Bangladesh Demographic and Health Survey 2007.*

progress in reducing stunting raises concerns about the adequacy of child nutrition. Similarly, the infant mortality rate remains high, while the percentage of mothers with access to trained birth delivery workers is still very small.

## **Issues and Challenges**

Despite some achievements in the health and population sector, the strategies to achieve universal health coverage to remove rural-urban, rich-poor, and other form of inequities, and to create provisions for essential services for vast majority of the population, especially rural poor, continue to remain as the major challenge for the health sector. More specifically, issues such as poverty related infectious diseases, mothers suffering from nutritional deficiency, children having some degree of malnutrition, pregnant women not receiving delivery assistance by trained providers, poor maternal and child health and nutrition, unmet need for family planning and rise in STD infections constitute major current challenges.

***Inadequate implementation of the HNPS Initiative:*** The Government's flagship HNPS initiative suffered from a number of problems that limited to effectiveness of the program. These include:

- Although HNPS has been able to mobilize sufficient amount of resources, overall public spending on health has remained low due to various implementation problems including lack of inter-ministerial coordination, procurement problems, and capacity constraints.
- HNPS did have pro-poor essential service package (ESP) but lacked an effective M&E system to monitor health-related inequalities.
- Public resource allocation is based on historical norms for facilities, number of beds and staffing, rather than on indicators of individual and household health needs, taking into account the extent of poverty.
- The ESP was mainly directed towards rural areas leaving a major gap in primary health care coverage of poor in the urban areas
- Attempts at institutional unification and coordination under HNPS did not work and led to perceived loss of momentum in family planning and fertility reduction.
- With some important exceptions, service quality has not improved significantly in either the public or the private sector.
- Insufficient attention has been paid to the supply-side barriers faced by the poor; unofficial fees, erratic drug supplies, absenteeism and unwelcoming behavior of providers.
- HNPS could not achieve better gender equity in health sector plans and programs because the implementation of policies and plans was limited by weak institutional capacity.
- Whilst HNPS was formulated and initially planned using extensive consultative processes, it did not involve users and other key stakeholders fully in program implementation.
- The Essential Services Package (ESP) included a narrowly defined component of 'Limited Curative Care' which ignored more complicated diseases. As a result, there was inadequate

policy and technical guidance for curative care at the primary level health and family planning facilities.

- Whilst HNPSF introduced some important budget reforms, the revenue and development budgets were planned and managed separately, often causing serious mismatch.
- Although decentralization was an important feature in HNPSF, in reality centralized procurement of logistics for all programs resulted in delays in providing supplies and logistics. This prevented the newly constructed health facilities from functioning properly.

***Inadequate Progress on the Gender Dimension:*** Findings from various studies indicate that women and girl children are more vulnerable to death and disease compared to their male counterparts. Gender-based violence is an additional cause of injury and health complications, both physical and mental.

The disadvantages faced by girls start from early childhood which continues throughout their entire life span. With regard to access to food, nutrition and health care women and girls are much more disadvantaged compared to men and boys. The situation is more precarious for women in the reproductive age group and the status of reproductive health of the Bangladeshi women is poorer than that found in many developing countries in South Asia. Every year millions of women in Bangladesh experience life threatening high risk, chronic or other serious health problems related to pregnancy or childbirth. About 20,000 women of reproductive age group die each year in Bangladesh due to maternal causes. Many of these deaths associated with pregnancy and childbirth are however needless and avoidable. Pregnancy related mortality and morbidity can be prevented with attainable, simple and cost effective interventions. Making motherhood safe requires action on three fronts simultaneously: (a) reducing the numbers of high-risk and unwanted pregnancies, (b) reducing the numbers of obstetric complications, and (c) reducing fatality rates among women with complications.

### **The Government's Vision for Health**

Within the broader context of Millennium Development Goals (MDG), the Government's vision for health, nutrition and population sector is as follows:

*“The Government seeks to create conditions whereby the people of Bangladesh have the opportunity to reach and maintain the highest attainable level of health. It is a vision that recognizes health as a fundamental human right and, therefore, the need to promote health and to alleviate ill health and suffering in the spirit of social justice. This vision derives from a value framework that is based on the core values of access, equity, gender equality and ethical conduct.”*

By 2021, the Government envisions a Bangladesh of middle income country, where poverty will be drastically reduced; where our citizens will be able to meet every basic need and where development will be on a fast track, with ever increasing rates of growth. Within this broader

context, the vision for the health sector is to create conditions whereby the people of Bangladesh have the opportunity to reach and maintain the highest attainable level of health.

The HPN targets for the SFYP are listed in Table 5.2. These are ambitious but achievable targets provided timely actions are taken to properly implement the associated policy and institutional reforms, building on the experience of the two Sector Wide Approach Programmes.

**Table 5.2 Health, Population and Nutrition Targets for the SFYP**

	<b>Indicators</b>	<b>Base value with Year</b>	<b>FY2015</b>
	<b>Impact/Outcome</b>		
1	Life- Expectancy	66.6 (SVRS 2007 )	70
2	Population Growth Rate	1.40 (SVRS 2007)	1.3
3	Maternal Mortality Ratio (MMR) (per 100,000 live births)	194 (BMMS 2010)	143
4	Neonatal Mortality Rate (per 1000 live births)	37 (BDHS 2007 )	27
5	Infant Mortality Rate (per 1000 live births)	52 (BDHS 2007)	31
6	Under 5 mortality Rate (per 1000 live births)	65 (BDHS 2007 )	50
7	Malaria mortality-(per 100000 population)	4.4	2.2
8	Maintain low prevalence of HIV	<1%	<1%
9	Prevalence of Night blindness among pregnant women	2.90%	1%
10	Underweight of Under 5 children (6-59 months)	41% (BDHS 2007)	33%
11	Stunting of Under- 5 children 16-59 months)	43% (BDHS 2007)	25%
12	Total Fertility Rate (TFR)	2.7 (BDHS 2007)	2.2
	<b>Output</b>		
13	Contraceptive Prevalence Rate (CPR)	55.8% (BDHS 2007)	74%
14	Modern Method of Contraceptives	47.5 (BDHS 2007)	63%
15	Discontinuation rate of FP methods	56.5% (BDHS 2007)	20%
16	Unmet need for Family Planning	17.1% (BDHS 2007)	7.60%
17	Contraceptives use rate of married adolescent	37.6% (BDHS 2007)	50%
18	Permanent & Long acting FP (of CPR)	7.3% (BDHS 2007)	20%
19	TB case detection rate	73% (NTP 2008)	75%
20	TB cure rate from	92% (NTP 2008)	95%
21	Provide effective malaria prevention to 100% population at risk	5 districts	5 districts
22	Proportion of h/h own at least 1 Insecticide Treated Net (ITN)	64%	80%
23	Under 5 children sleep under (ITN)	70%	80%
24	Births attended by skilled health personnel	26.5% (UESD 2010)	50%
25	Facility level delivery	15% (BDHS 2007)	40%
26	ANC coverage (4 visits)	20.6% (BDHS 2007)	50%
27	PNC coverage (Mother)	21.3% (BDHS 2007)	50%
28	PNC coverage (children)	21.9% (BDHS 2007)	50%
29	Met need for EOC services	22.43% (BDHS 2007)	80%
30	TT coverage (children protected at birth from Tetanus)	93% (CES, 2008)	95%
31	Valid coverage of full Immunized children	75.2% (CES, 2008)	90%
32	Immunization of 1- year old children against Measles	83% (CES, 2008)	90%
33	VAC coverage (6 m-6 y)	98%- 100%	98%- 100%
34	Postnatal VAC supplementation	29%	80%
35	Severe anemia (Children)	64%	50%
36	Severe anemia (Pregnant women)	46%	40%
37	Exclusive breast feeding of children (less than 6 months)	42%	80%

## Health Sector Strategy in the SFYP

### (a) *Public Service Delivery Strategy*

**Community Clinic:** A major element of better healthcare delivery to the rural communities is to re-commission the community clinics, established during the earlier tenure of the present government, based on the principle of one community clinic for every 6,000 rural persons. This program has already started along with the mobilization of appropriate human resources, drugs and equipment. Community clinics are expected to deliver one stop integrated health, population and nutrition services to the respective communities and will be first point of contact of the rural community with the public sector health services. In addition to thorough repair of 10,723 community clinics established earlier, another 2,777 are planned for construction, of which 700 at coastal belt will be double storied for the provision of using as shelter in case of emergencies. With the re-vitalization of the community clinic management groups, community participation in community clinics will be ensured and this is expected to be the model of community driven primary health care delivery. Community clinics are expected to serve as a foundation for a strengthened, improved and effective Upazila health system catering to the needs of the rural population. The community clinics along with satellite clinics and outreach centres will also give attention to ensure access to gender inclusive services in hard to reach area (coastal, hilly, haor).

**Upazila health system:** Functioning of the Upazila health complexes, union health and family welfare centers/sub-centers will be strengthened and further consolidated through adequate human resources, drugs and other medical aids. The provision of essential services package (ESP) delivery through Upazila health system will be strengthened and popularized. Up-gradation of 31 beds Upazila health complex to 50 beds with the provision of more specialist service (like orthopedics, ophthalmology, cardiology, pediatrics and ear-nose-throat) will continue. The current commitment of spending at least 60 per cent of total budgetary allocation of the health, nutrition and population sectors at Upazila and below level will continue to be pursued to improve the quality of primary health care and make it accessible and acceptable to the people. The Government's effort towards decentralization of budget and management will be strengthened.

**Maternal and newborn health:** Capacity will be improved to provide care of adequate quality particularly for the poor for normal childbirth (basic essential obstetrics care) through trained (community) skilled birth attendants, community clinics, union health and family welfare centers, Upazila health complexes and facilities at and above districts including maternal and child welfare centers, and for the prevention and management of complications (comprehensive essential obstetrics care) by expanding services in more Upazila health complexes and ensuring the same through all maternal and child welfare centers and district hospitals and facilities above. A midwifery plan according to international standard will be formulated with participation from non-public sectors. Existing family welfare visitors training institutes (FWVTI) will start family

welfare training courses as pre-service and will also provide (community) skilled birth attendants (C-SBA) training. Through developing guidelines FWV and C-SBA training will also be open for non-public sectors to provide. Possibilities will also be explored to utilize nurse-midwives for providing maternity services. These initiatives are expected to produce significant numbers of skilled service providers to care for normal childbirths. Efforts will be strengthened for more Upazila health complexes to provide comprehensive and emergency essential obstetrical care by training and placement of requisite human resources and providing required instruments and supplies. Introduction of women friendly procedures and facilities at all public health centers and hospitals with intensified BCC activities intends to address gender related inequalities in access to and utilization of health service delivery. Attention will also be given to community mobilization, which includes men to address not only the socio-cultural factors but also to increase women's access to maternity care.

***Child health:*** Integrated management of childhood illness will be further expanded, particularly of community component to cover the entire country. Alternate strategies will be explored to train informal and semi/un-qualified providers. Efforts will be made to include more children suffering from diarrhea to have appropriate oral rehydration (already achieved 85%). Similarly efforts will be undertaken to increase the proportion of children suffering from acute respiratory illness who went to a trained providers. Number of the vaccines in the routine immunization program will be further expanded. Existing excellent quality surveillance will be maintained for well and prompt investigations of outbreaks. Special activities will be undertaken for maintenance of zero polio status, measles catch-up and neonatal tetanus campaigns.

***Reproductive health:*** The life-cycle approach will be undertaken to address the need of women for general reproductive health and to ensure reproductive health in phases. The vast network of state facilities will be further strengthened for appropriate women, adolescents and reproductive health. The demand for services will be created through strengthened health production involving community and different stakeholders.

***Urban health:*** The services offered by secondary and tertiary hospitals will, depending on bed capacity, be standardized along with human resource needs and table of equipment linked to the services. Appropriate human resources development and management structure will be developed for the existing hospitals. New branches of sub-specialization will be created in all medical college hospitals, so that patients do not need to rush to the capital city. Hospital autonomy will be introduced initially for the tertiary level specialized hospitals and gradually extended to medical college and district hospitals. Management Committees at hospitals will be strengthened for better monitoring and vigilance team for hospitals will be further strengthened and its jurisdiction will be expanded. Government will establish new specialized hospitals under its private public partnership initiative. Accountability and quality of care will be ensured and death audit will be introduced as part of such initiative.

The existing practices of providing urban primary health care (UPHC) services through contracted NGOs for the city corporations and selected municipalities under the LG Division will continue to be pursued. In addition, MOHFW will continue to provide PHC services in urban areas not covered by the UPHC project. Similarly, it will also continue to provide secondary and tertiary level health care in urban areas and try to improve both coverage and quality in response to demand. A priority objective for improving urban health services will be to facilitate access and effective use of available essential ESP delivery services by urban poor and slum dwellers. To this end, an urban health strategy in collaboration with the local government ministry will be developed with a view to streamlining urban primary health care services and establishing strong institutional linkage and ensuring primary health care, family planning, reproductive health and nutrition services for the urban poor.

**Referral system:** As far as possible, outdoor treatment will be encouraged. All medical college and tertiary hospitals will 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. Support of tele-medicine and e-health will be used to make specialist services available to all people irrespective of their geographical locations at low cost.

**Communicable diseases:** The existing programs will be further expanded and strengthened to intensify prevention and control of communicable diseases, such as, acute respiratory infection, diarrhea, dengue, etc. The strategy will emphasize early detection and treatment, partnership with communities to create awareness about the risk of spread, and addressing the sources of disease through proper preventive measures where possible.

**Non-communicable diseases:** Reduction of morbidity and premature mortality due to non-communicable diseases (NCDs) will require appropriate actions at all levels from primary prevention to treatment and rehabilitation in an integrated manner. The Government will, in partnership with local government administration and private sector create greater awareness of, and provide services for the control of unhealthy diet and lifestyle related major NCDs such as cardio-vascular diseases, cancer, diabetes, mental illness, etc. It will also take steps to combat common NCDs, such as, hypertension, asthma, blindness, etc., which particularly afflict the poor. Existing preventive and curative measures with respect to all NCDs will further be expanded and strengthened to increase access to all for health care services.

**HIV/AIDS:** Interventions with high-risk groups will continue with enhanced monitoring and supervision. Capacity of the national AIDS/STD program (NASP) will be strengthened - both in management and technical aspects. A new comprehensive national strategic plan for HIV / AIDS prevention and control will also be formulated.

### ***(b) Strategy for Strengthening Health Inputs***

***Promotion of public awareness:*** A major strategy to ensure better health would be to promote public health through better public awareness of health hazards. The existing institution will be strengthened and partnership will be built with mass media for providing health education to the population on a continuing basis regarding methods of preventing communicable and non-communicable diseases, caring practice for children, adolescents, physically and mentally challenged and the old aged, and creating awareness on nutrition, personal hygiene, use of safe water and proper sanitation. Steps will also be taken to reach basic health and reproductive health information through school curricula and to utilize NGOs and different religious centers to influence health behavior of the people. Moreover, activities of existing school health clinics will be reviewed and based on lessons learnt, school health program will be scaled up through a strategy developed in collaboration with the various educational institutions.

***Provision of drugs:*** Initiatives have been taken to revise existing drug policies to ensure easy access to essential drugs at fair prices and to provide quality drugs, and also to bring self-sufficiency in the production of medicines of international standard along with promotion of their export. Directorate of Drug Administration is planned to strengthen, expand and modernize its regulatory capacities. Increased attention will be given to popularize rational use of drugs by educating both the prescribers and users on appropriate prescription practices and use of appropriate drugs with dosages. Both the existing drug testing laboratories at Dhaka and Chittagong are planned for modernization. In addition, another drug testing laboratory of international standard is planned to be established. Up-gradation of DDA to DGDA has already been made.

***Food quality:*** Definitive food standards will be established to serve as benchmark for evaluating and maintaining standards. Initiatives will be undertaken for reviewing all existing food safety laws and upgrading laboratories with clear assignment of responsibilities for different entities within public and private sectors. The Government will examine the need for an authority for food (independently or integrate with existing drug administration) to take necessary follow-up action with the aim of removing threat to health of the citizens from substandard and/or adulterated food. By removing food deficit, nutrition needs of 85 percent of the population will be ensured.

***Medical education:*** Measures will be taken for production of appropriate skill-mixed workforce (super-specialist physicians and surgeons, specialist physicians and surgeons, general duty doctors, specialist nurses, general duty nurses, mid-wives, nutritionist, dieticians, paramedics, technologists, electro-medical engineers/ technicians etc.) in both the public and private sectors. Private sector participation in medical education has expanded over the past few years. Maintaining the quality of medical education has since become crucial. The MOHFW will reexamine the current accreditation arrangements for pre-service educational institutions of both public and non-public health professionals and consider the need for a uniform accreditation

body to coordinate and regulate all types of medical education. Enhancing nutrition modules and providing nutrition updates in the medical curriculum should be considered on a priority basis to address health and nutrition issues from a preventive and sustainable basis. Bangabandhu Sheikh Mujib Medical University will be made as center of excellence.

***Telemedicine and e-HPN:*** In order to contribute to the vision of digital Bangladesh, HPN sector will connect all its facilities and installations with computerized network. Data /information will be continuously used for making management decisions, policy formulation, program design, monitoring and evaluation. Moreover audio-video conferencing and mobile phone services will be used to provide need based services to the people. The HPN system will be thoroughly oriented and trained for digitalization. Moreover all the training institutes under MOHFW will include computer training in all of its courses. Public hospitals and MCWCs will be gradually brought under functional e-health as smooth operational and management tool.

***Strengthening research and training:*** Research will emphasize on priority areas of biomedical, public health, family planning, epidemiological, HPN systems and policy, social and behavioral, and operational issues. The capacity of various research institutions and individuals will be augmented to achieve the above stated goals. Bangladesh Medical Research Council (BMRC) and National Institute of Population Research and Training (NIPORT) will be strengthened after reviewing its mandate and structure for assuming strategic stewardship and governance roles for HPN related research. NIPORT's training institutes will be strengthened to produce more pre-service FWV. As a priority activity of MoHFW, Nursing Training Institutes (NTIs), Colleges and District Hospitals will be strengthened for midwives and Community SBA training. For continuous development of health professionals, a National Health Management Academy and research center will be established.

***Surveillance of diseases:*** The existing disease surveillance system will be reviewed for its updating to incorporate NCDs along with CDs and keeping in view the international health regulation system. Disease information monitoring and management system will be strengthened not only to issue public alert and increase availability of adequate information concerning the incidence and prevalence of diseases at regional and national levels, but also to establish a network with the global disease information system. Maps of all major diseases, on the basis of their incidence and prevalence, will be constructed for each district.

***Alternate medical care:*** Homeopathy, ayurvedic and unani are included in alternate medical care (AMC). Necessary actions will be taken for improvement of the standard of alternate medicine, increase the demand for quality care and thereby reduce unsound practices. Capacity building of the AMC providers and proper monitoring and evaluation of the AMC providers will be undertaken. AMC education and AMC provision in public sector facilities will be further expanded.

### ***(c) Strengthening Public Service Delivery Capacity***

***Improved management:*** The Ministry of Health and Family Welfare (MOHFW) will serve as the key focal point for delivery of public health service. It will continue to pursue sector-wide approach in its development planning and implementation of HPN program. All the officials in key positions like line directors, program managers and deputy program managers will be trained in above areas with follow-up support on the job. Trained people in key positions need to be retained to get the benefit of investment. In this regard, MOHFW, in addition to practice retention seriously by itself, will engage with other ministries like establishment, planning and finance for compliance of retention of trained human resources in key positions.

In order to enhance the implementation capacity of the public health system, attention will be given to the geographical distribution of available Human Resource and their appropriate utilization. Coordination among planning, hospitals and administration wings with physical facilities construction agencies will be ensured for timely securing of equipment (by placing orders at appropriate advance time) and placement of human resources (by initiating post creation move at appropriate advance time) as soon as the construction of facilities have been finished so that these can be made functional immediately. Fund release procedures will be streamlined so that funds can be released on time. More delegation of financial and administrative power, procurement, repair and maintenance will be explored and exercised to strengthen district and below level service delivery facilities.

***Better incentives for staff:*** Steps will be devised for improving the quality of existing workforce in both formal and informal sectors. The public sector HRD strategy will, among other things, involve establishing career plans for specific lines of specialization, based on competence and experience, and clear principles for promotions, posting and transfers. Priority will be given to the pre-service education, recruitment and training of additional nurses, midwives, technicians and C-SBAs to meet existing shortage and improve service delivery. Personnel management procedures will be reviewed and updated as required. The updates will include introduction of incentives for service providers working in remote and hard-to-reach areas and modifications of the transfer-posting practices for field level managers. Performance management (supervision and annual performance evaluations) of individual staff will be strengthened through individual performance management. This will include application of merit-based incentives as well as disciplinary measures in response to absenteeism or misuse of public-sector resources for private gain.

***Better governance:*** Good governance in the health sector will be strengthened through prudent staff deployment, preventing all sorts of mal practices and creating a more customer friendly health service delivery system in the public facilities in partnership with all stakeholders. The stewardship capacity of public sector will be improved for monitoring quality of care and safety of patients in both public and private sectors.

The on-going collaborations between the state and the non-state actors in strengthening family planning, nutrition, EPI, TB and leprosy, HIV / AIDS etc. activities have been found encouraging through active involvement of the communities. Therefore, these initiatives will be scaled up as necessary and lessons from these experiences will be replicated in other areas of concern. The community-based organizations will be involved in monitoring the quality and coverage of services.

The Citizen's Charter for health service delivery has been put in practice in the public hospitals and health complexes. Practicing of the said charter will be monitored and strict adherence to its implementation will be ensured.

With the recent renewed commitment of strengthening the local government administration and institutions at different levels, opportunities have cropped up for exploring devolution of health programs and utilization of fund through different levels of local government institutions. The SFYP recognizes the importance of such devolution and will take necessary administrative arrangements to devolve functions to Divisional and District levels. Adaptation of such approach will enable need based allocation of resources and close supervision through the locally elected representatives.

Management committees along with government service associations, and professional organizations like Bangladesh Medical Association (BMA), Bangladesh Private Practitioners Association (BPPA), etc., as key stakeholders can play a more effective role in achieving good governance and ensuring transparency and accountability in health sector. The stakeholders, including non-state actors, media and civil societies will be involved in formulating policies and included in managing committees of hospitals. They will also be consulted on major issues of health sector's development in order to increase participation, transparency and accountability.

#### ***(d) Ensuring Gender Equality***

Efforts will focus on (i) ensuring rights of women for a better physical and mental health at all stages of their life cycle, (ii) strengthening PHC for women with emphasis on reducing MMR and IMR, (iii) strengthening reproductive rights and reproductive health of women at all stages of population planning and implementation, (iv) addressing nutritional needs of women, specially of lactating mothers and the adolescents girls, (v) preventing women from HIV/AIDS and STD through awareness raising, and (vi) creating women-friendly physical facilities at all public health complexes and improving access to health services for women and girls. Moreover, efforts will continue to (i) communicate the importance of ANC, delivery care and PNC to all household heads at the grass root level, (ii) give special training to service providers at the community and higher levels on gender equity and (iii) include topics on the health needs of both males and females and their impact on gender disparities in school curricula. Further steps will be undertaken for improving gender equality in HPN in close cooperation of Ministry of Women

and Children's Affairs. The existing Gender Equality Strategy of the MOHFW will also be reviewed and revised appropriately.

***(e) Budget and Financing***

The share of budgetary allocation to the HPN sectors needs to increase over the Plan period. Efforts will be made to increase this share from the current 7% to 12% by 2015. A significant part of the increased budget will be devoted to improving supply of drugs in public hospitals, especially for providing PHC services, with provision for strict monitoring of its utilization. There is substantial involvement of external funding in the health sector, e.g., project aid funds, global funds, social business funds, etc. The government will welcome increase in such funding in a harmonized way and well aligned with the national system.

Existing system of affordable health care services will be further expanded and consolidated ensuring proper safety net for the poor. Facilities providing health care outside the public sector (but receiving government fund) will ensure that at least 30 per cent of their all types of services are kept for free treatment for those who cannot pay. Necessary fund will be mobilized through user fees, government allotment, social organizations, private contributions, corporate social responsibility, community financing schemes, and social insurance.

***(f) Private Sector Role***

HPN sector's financing by the government alone is insufficient to ensure improved health care for all in Bangladesh. Expansion of private sector investment will help to bridge the gap in needed resources for extending and improving the services. The private health care sector constitutes an important part of health care delivery system. Through a wide network of health care facilities providing services in different systems of medicine, this sector caters to the growing demand for health care in both urban and rural areas. In the private sector, providers can be grouped into three main categories: first, the organized private sector which includes qualified practitioners of different systems of medicine; second, the not-for-profit NGOs; and third, the private informal sector which consists of providers not having any formal qualifications, such as untrained allopaths, homeopaths and kobiraj etc. known as Alternative Private Providers (APPs).

The SFYP will continue to promote private sector role through policies to encourage greater private investment in healthcare as well as by entering into public-private-partnerships (PPP). Regulations will be strengthened to ensure quality, standards and accountability of private service providers. The PPPs will be an accessible, relevant, viable and beneficial service delivery option. The government's focus will shift from managing the inputs to managing the outcomes, i.e. becoming a contract manager rather than a resource manager. There will be coherence and consistency in government policy and legislation when introducing legislation and policies pertaining to PPPs. Steps will be taken to ensure that the PPPs result in accessible, affordable and safe health services that meet acceptable quality standards leading to improved efficiency and accountability to the public. The PPPs will be sufficiently rewarding in relation to

the private investment required and the risks undertaken.

***(g) Strengthening Partnership with NGOs***

In health care delivery, many NGOs have displayed innovativeness and cost-effectiveness. Developing partnership between the Government, NGOs and the community can bring fruitful results. The collaborations between the MOHFW and NGOs in strengthening family planning, EPI, TB and leprosy activities have been effective through active involvement of the communities. Community health workers can also motivate communities to better utilize government health services. These workers through increasing contacts with the local population could expand the coverage of health and family planning services while reducing the dependence on government employees. Therefore, such contacts should continue to play an important role in the provision of services to under-served and disadvantaged sections of the community.

Recently, the Government has been increasing NGO involvement in providing primary and community-based health care and nutrition services. There has been noteworthy collaboration with NGOs, in BINP, social marketing of contraceptives and urban primary health care. These initiatives will be further scaled up and lessons from these experiences will be replicated in other areas. The community-based organizations will be involved in monitoring the quality and coverage of services.

**Population Planning and Family Welfare**

Lowering the rate of growth of the population is a major challenge for Bangladesh during the Sixth Plan. Achieving faster reduction of population growth will require attaining replacement level fertility as well as addressing the effects of population momentum. Even if replacement level fertility is achieved in the near future, the population of Bangladesh will continue to grow due to the effects of population momentum as the proportion of women in the reproductive age group will continue to grow until the population stabilizes. However, the eventual size of the stable population hinges on the time of attaining replacement level.

The age composition of the population undergoes changes with the progress in demographic transition (Table 5.3). The proportion of population under age 15 has declined from 46.7% in 1981 to 39.4% in 2001 due to reduction in fertility. On the other hand, the proportion of population in the economically active age group has marked an increase from 47.7% in 1981 to 54.4% in 2001, while there is a slight increase in the proportion of older population (>60).

**Table 5.3: Distribution of Population by Age Group**

Census	Age Groups		
	0-14	15-59	60+
1981	46.7	47.8	5.5
1991	45.1	49.5	5.4
2001	39.1	54.7	6.2

*Source: BBS, Population Census, various years*

The changes in the age distribution of the population have many socio-economic implications. First, the age-dependency ratio of the population has declined from 109 in 1981 to 83 in 2001. Second, it has resulted in an increase in the young and working age population which can create a virtual cycle of growth, known as demographic dividend. Third, the higher size of women in the reproductive age group will mean that the population will continue to grow until population stabilization takes place, say by the year 2050. The level of fertility will remain high at the initial stage due to tempo effect caused by the downward shift in mean age at childbearing. Hence, the effect of momentum can be reduced by delaying the first birth as well as widening birth spacing.

### Recent trends in fertility

An examination of trend of fertility by looking at the estimates of total fertility rate (TFR) over the past three decades shows that it declined by 57 per cent during the period 1975-2004, at the rate of 1.8 per cent per year (Table 5.4). The pace of decline was steeper during the 1980s and early 1990s and since then it remained stalled until 1999. But the decline started again in 2001 and continued till 2006.

**Table 5.4: Trends in Current Fertility Rates**

Age group	Survey and approximate time period						
	1995 BFS	1993-1994 BDHS	1999-2000 BDHS	2004 BDHS	2007 BDHS	1975-2007	1999-2000- 2007
	1971- 1975	1991-1993	1994-1996	2001- 2003	2004-2006		
15-19	109	140	144	135	126	15.6%	-12.5%
20-24	289	196	188	192	173	-40.1%	-8.0%
25-29	291	158	165	135	127	-56.4%	-23.0%
30-34	250	105	99	83	70	-72.0%	-29.3%
35-39	185	56	44	41	34	-81.6%	-22.7%
40-44	107	19	18	16	10	-90.7%	-44.4%
45-49	35	14	3	3	1	-97.1%	-66.7%
<b>TFR 15-49</b>	<b>6.3</b>	<b>3.4</b>	<b>3.3</b>	<b>3.0</b>	<b>2.7</b>	<b>-57.1%</b>	<b>-18.2%</b>

*Source: BDHS, various years*

A comparison between age-specific fertility rates of 1975 and 2007 indicates that compared to 1975 age-specific fertility rates in 2007 fell steeply in all age-groups and particularly among older age groups, with the exception of the 15-19 age group which increased by 16%. The age pattern of fertility has shifted towards early childbearing and fertility of older women has reduced sharply over the years.

An examination of the decline in cumulative fertility by age cohort for selected survey years shows a consistent pattern of declining trend in fertility, which fell from a mean number of ever born children of 3.8 in 1975 to 2.3 in 2007, a decline of 40 per cent. The cumulative fertility declined in all age groups including 15-19 age groups. The reduction of fertility is steeper with the increase in age of women, it declined by nearly three children in the 35-39 age groups. A comparison of completed cohort fertility (4.9) with current fertility (2.7) demonstrates that fertility level has fallen substantially during the recent past.

### **Strategy for Population Management in the SFYP**

Recognizing the significance of the population problem, the Government has initiated updating of the population policy to reflect recent realities and ensure effective delivery of population control and reproductive health services. Population as number one problem will be re-emphasized with undertaking of appropriate multi-sectoral programs to address the problem. It is expected that the Total Fertility Rate (TFR) will be reduced to 2.2 in 2015 from current 2.7 (2007). To address the "Population momentum effect", measures will be undertaken to increase retention of girls in secondary schools and provide employment opportunities to young women, thereby causing a delay in marriage and childbearing.

The re-commissioned community clinics will address the challenges in the population sector with renewed thrust. Target-oriented population planning programs will be strengthened to achieve the goal. The large geographic variations in fertility and related factors and in use of contraception indicate the need for differential strategies both for information and motivational efforts and for service delivery. For example, in Sylhet and Chittagong age at marriage is higher than the national average, but fertility was also higher indicating a need to focus on lowering fertility within marriage. And high 'unmet need' (17.1%) indicates that service delivery in these districts will need to be strengthened. District specific strategies will be undertaken to address local constraints such as, poor access to services during certain parts of the year.

Dropout will be reduced through door step service delivery, supportive supervision and motivational works with information on side effect. Service delivery will be enhanced to the hard to reach areas, hilly and riverine areas as well as low performing areas. Quality services delivery will be ensured to the target groups by segmenting the client on the basis of sexual, educational, geographical location, socioeconomic status, age of parity and particularly the ultra poor and illiterate clients. Besides these, proper counseling and motivation will be continued to increase the age of marriage and child bearing and also to cover the unmet needs of the couples with Government-NGO collaboration along with local leaders' involvement.

The major impact on fertility reduction could be achieved by increasing age at marriage and by bringing the couples into contraceptive uses those have unmet needs for family planning services. These will push up both age at first birth and CPR and thereby again trigger a tempo effect to bring fertility down. Bangladesh has great scope to reduce early marriage, where at present 50 percent of teenage girls (15-19 years) are married compared to other developing countries. Moreover 17.1% couples have unmet-needs for FP services of which 6.6% for spacing purposes and 10.5% for limiting their births. They are the potential couples to adopt longer acting and permanent FP methods. If all of those women having unmet need to space or limit their births, are to use FP methods, the CPR would rise to 74 percent.

Contraceptives along with FP services will continue to be made widely available and further expanded to the poor and the marginalized population in both rural and urban areas and different regions and to meet the un-met need. Procurement and logistics supply management will be strengthened to avoid stock-out of contraceptives. Alternate methods of public sector distribution of contraceptive commodities will be explored. Efforts are underway to popularize the slogan of having one child per couple. The existing FP program will be expanded and strengthened involving both men and women, and will be popularized through an intensive motivational campaign under the BCC program.

Method-mix proportion of all modern contraceptive methods will be made with special emphasis on Long Acting Permanent Method (LAPM). It is expected that with higher use of such LAPM as VSC, IUD, and Implant pregnancies will be substantially reduced.

### **Nutrition Issues and Management in the SFYP**

Despite several natural calamities and high food prices, Bangladesh has achieved a slow but sustained reduction in prevalence of underweight. However, the lack of progress with reducing the incidence of stunting remains a serious problem. A third of women are undernourished, and a large proportion become pregnant when they are anemic and malnourished. This has an impact on intrauterine development, pregnancy outcomes and unacceptably high rates of infants born with low birth weight. Micronutrient deficiencies notably vitamin A deficiency, iodine deficiency disorders and iron deficiency anemia are major concerns, impacting cognitive development in child and pregnancy outcomes. Poor infant and young child feeding also impact on children's health. Poor diet diversification with cereals contributing 73% of total dietary calories as against ideal 60% undermines delivery on nutrition outcomes. The poor health of mother due to poor nutrition is also of serious concern.

To effectively address the nutrition concerns, interdependent interventions across diverse sectors such as agriculture, health, water and sanitation, education and food and disaster management need to be strengthened. A strategic orientation to nutrition planning is provided under the nutrition dimension of the National Food Policy-NFP (2006) and the National Food Policy Plan of Action –NFP PoA (2008-2015) that comprehensively address food security and nutrition to achieving adequate and stable supply of safe and nutritious food, increased purchasing power and access to food and adequate nutrition for all individuals, especially women and children.

The institutional home for nutrition will be placed with the IPHN of DGHS and nutrition programme of the MoHW will be mainstreamed within the DGHS and DGFP. Regular nutritional services will be provided through a new Operational Plan in the name of National Nutritional Services (NNS). Responsibilities of relevant sectors and the selected institutions will be expanded and capacity will be developed accordingly. Roles and responsibilities of other stakeholders for nutrition will also be specified together with arrangements of appropriate coordination and synergistic action. Capacities of Upazila health complexes and district hospitals will be strengthened to adequately manage severely malnourished cases. Existing cabinet committees and co-ordination structures that address food security/nutrition within the Ministry of Food and Disaster Management including the Ministry of Health and Family Welfare among others could serve as action points for policy guidance and strengthening inter/intra ministerial linkages. Collaboration with the Ministry of LGRD&C and the Ministry of Food and Disaster Management is essential to address nutrition and food safety issues within urban contexts.

Food security and nutrition surveillance will be integrated within national systems of BBS. Effective nutrition surveillance will be developed. The national strategy for infant and young child feeding will be implemented. Iron-folic acid supplementation among pregnant and lactating women and adolescent girls will be undertaken through health and family planning facilities. Existing half-yearly Vitamin A capsules distribution for children will be continued. Also post partum Vitamin A distribution to improve vitamin A status of neonates through breast milk will be scaled up. Monitoring of universal iodization of edible salt will be strengthened to ensure quality through adequacy of potassium iodide in salt. Zinc for treatment of diarrhea will be adequately promoted. With the coverage of IMCI, zinc tablets are expected to provide free to children with diarrhea.

Health and family planning workers (health assistants, family welfare assistants, assistant health inspectors, family planning inspectors, family welfare visitors, medical assistants/sub-assistant community medical officers) and agriculture extensions will be appropriately trained in nutrition education, so that nutrition services can be main-streamed in health and family planning services through community clinics, union health and family welfare centers/sub-centers, Upazila health complexes and agriculture extension services. A comprehensive approach to the issue of nutrition will be ensured so that water and sanitation, dietary intake, EPI and health education can be addressed in a supplementary and complementary manner. Capacity building in nutrition of Upazila health and agriculture workers, school teachers and women farmers will be undertaken through the NNS Operational Plan of IPHN. Dissemination of consistent health and nutrition messages in the community especially women community will be strengthened. Integrated home gardening and school gardening with nutrition education will be promoted through the agriculture extension services and community clinics. Preparation of low cost nutritious recipes, processing and preservation of micronutrient rich foods and income generation activities will be emphasized through existing community based arrangements.