

Skills Development A Priority Agenda for Accelerated Growth



Finance Division, Ministry of Finance Government of the People's Republic of Bangladesh June 2016



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ACRONYMS

AEOSIB Association of Export Oriented Shipbuilding Industries of

Bangladesh

ATI Agricultural Training Institute

BACI Bangladesh Association of Construction Industry

BACCO Bangladesh Association of Call Centers and Outsourcing
 BAIRA Bangladesh Association of International Recruiting Agencies
 BASIS Bangladesh Association of Software and Information Services

BBS Bangladesh Bureau of Statistics

BIM Bangladesh Institute of Management

BGMEA Bangladesh Garment Manufacturers and Exporters Association BKMEA Bangladesh Knitwear Manufacturers & Exporters Association

BTMA Bangladesh Textile Mills Association

BMET Bureau of Manpower, Employment and Training

BRDB Bangladesh Rural Development Board

B-SEP Bangladesh Skills for Employment and Productivity

BIMT Bangladesh Institute of Marine Technology

BITAC Bangladesh Industrial and Technical Assistance Center BSCIC Bangladesh Small and Cottage Industries Corporation

BTEB Bangladesh Technical Education Board

BEIOA Bangladesh Engineering Industry Owners Association

BNC Bangladesh Nursing Council

BRDTI Bangladesh Rural Development Training Institute
BPATC Bangabandhu Poverty Alleviation Training Complex

CoE Center of Excellence

CRS Constant Returns to Scale
CBT Competency Based Training

DAE Department of Agricultural Extension
DLS Department of Livestock Services

DEMO District Employment and Manpower Office

DOT Directorate of Textiles

DTE Directorate of Technical Education

ECNSDC Executive Committee for National Skills Development Council

GDP Gross Domestic Product

HRH Human Resources for Health

ICT Information and Communication Technology

ISC Industry Skills Council

ILO International Labour Organization

LFMEAB Leathergoods & Footwear Manufacturers & Exporters

Association of Bangladesh

LGED Local Government Engineering Department

MPO Monthly Pay Order

MTBF Medium-Term Budget Framework

NAPD National Academy for Planning and Development

NAPE National Academy for Primary Education

NHRDF National Human Resource Development Fund NHTTI National Hotel and Tourism Training Institute

NIMCO National Institute of Mass Communication

NPO National Productivity Organization
 NSDA National Skills Development Authority
 NSDC National Skills Development Council
 NSDP National Skills Development Policy

NTVOF National Technical and Vocational Qualifications Framework

PIB Press Institute of Bangladesh

RMG Ready Made Garments

RPL Recognition of Prior Learning RTC Regional Training Centers

SCITI Small and Cottage Industries Training Institute

SDCMU Skills Development Coordination and Monitoring Unit

SEIP Skills for Employment Investment Program

SEP-B Skills and Employment Programme in Bangladesh

SWAp Sector Wide Approach

TSC Technical School and College TTC Technical Training Center

TTTC Technical Teachers' Training College

TVET Technical and Vocational Education & Training

TVI Textile Vocational Institute
VTI Veterinary Training Institute

VTTI Vocational Teacher Training Institute

Foreword

Bangladesh is currently moving towards a middle income country from its present status of a 'lower middle income country'. This is very much in line with the goal set in the 'Vision 2021'. The success of Government's efforts and simultaneous emphasis on top-down policy implementation complemented by robust bottom-up development is manifested in attractive GDP growth that has remained steady at over 6% for a number of years and moves upward to 7.05% with the per capita income expected to rise to USD 1,466 in the current fiscal year. Despite the bashing of global economic meltdown in 2007-08 and other external shocks i.e. oil price instability, natural disasters and civil wars in the Middle-East, the upward trend of our economic growth persisted through the last decade. One of the main cushions that protected Bangladesh economy from the external shocks was the remittance inflow in the period of 2005-2010. Of the remittance-earners the majority were representing the less-skilled and semi-skilled workforce of the country.

This is a heartwarming story for me as I was involved with development of this economy since its birth as a "basket case", as publicized by President Nixon's the then Security Advisor Henry Kissinger. Bangladesh in time of its separation from the distant West Pakistan was potentially a country of prosperous future. However, the brutal Liberation war and Pakistan's 'scorched earth' policy left it in a state of desolation. The able guidance of the Father of the Nation Bangabandhu Sheikh Mujibur Rahman in a period of just three and half years resurrected the country to a healthy growth path. This was, however, interrupted for 16 long years by illegal and forceful capture of power by a section of the armed forces and fundamentalists core of opposition to the democratic and secular welfare state.

The contribution of Industrial Sector in GDP growth is 30.4 percent (BBS, 2014) which is low compared to other developing countries, and dominated by the RMG sector. The growth of the industrial sector was stalled mainly by the scarcity of skilled manpower. The current skill supply approaches do not meet the skills demand because of inadequate throughput and a mismatch between skills supply and its demand. The current productivity of workers does not meet the industries' demand and the workers are also not adept with new technological innovations. The industries' focus on skills training is rather fragmented and poorly coordinated, and may meet certain vocational standard which is inadequate for many sectoral real

demands. The country, however, has already graduated to a Lower Middle Income rank in 2014.

In my tenure, each year I have tried to bring about a contemporary issue with other budget disclosures before Parliament that very well contributes to the economy. This year with no exception, Finance Division took keen interest on Skills Development. In this book, "Skills Development: A Priority Agenda for Accelerated Growth", Finance Division attempted to present a detailed picture of skills ecosystem in Bangladesh; how skills training may underpin the economic growth by transforming the new entrant labour force into a skilled workforce who are ready to take up the challenge with increased productivity both in domestic industries and in abroad. The report also reveals the skills gap that exists at various industrial levels. I hope it will demonstrate a strong pathway to bring about changes in the gamut of Skills Development.

Government has undertaken various initiatives towards skills development that include: the formation of a "National Skills Development Council (NSDC)" chaired by the Honorable Prime Minister and an Executive Committee for "National Skills Development Council (EC-NSDC)", approval and implementation of the "National Skills Development Policy (NSDP)" and so on. A "National Human Resource Development Fund (NHRDF)" is already in the process to carry forward skills movement ahead. A perpetual body to look after overall skills education named "National Skills Development Authority (NSDA)" is also underway. I strongly believe these initiatives will surely move Bangladesh to the high trajectory of economic development anticipated by the increased productivity of a skilled workforce.

I sincerely express my heartfelt gratitude to all the officials of Finance Division and 23 line ministries, who are the trail-blazers in skills development initiatives, for putting their sincerest efforts in publishing this document which is first of its kind. I hope this document will not only enrich us with the insights on skills movement but also give a ready reference to the planners, think-tanks and stakeholders in the future.

(Abul Maal Abdul Muhith)

Minister

Ministry of Finance

1. Introduction

Bangladesh has stepped on a new development paradigm through its innovative approach to socio-economic development in the last seven years. Implementation of reform agenda, policy continuation and market liberalization by the Government has made the continuation of steady growth possible. The results of the Government's efforts and simultaneous emphasis on the top-down policy implementation complemented by robust bottom up development have been manifested in the attractive GDP growth that has remained steady at over 6% for a number of years and moves upward to 7.05% while the per capita income expected to rise to USD 1,466 in the current fiscal year. The country already graduated into a Lower Middle Income Country in 2014.

Bangladesh has given special priority to the best use of demographic advantage of its young population to be taken for the next couple of decades. The Government, therefore, emphasizes the need for skilling of young population and up-skilling of the existing workforce through a number of skills development initiatives. It is recognized that businesses, particularly the industry and service sectors, will require a huge number of skilled workers in order to sustain economic growth as well as drastically reduce the poverty. Skills development invariably contributes to economic growth and competitiveness by enhancing the productivity of individuals, private enterprises and the nation as a whole. Skills development, however, makes up a vital ingredient in increasing productivity and is one of several important factors for productivity growth. Skills and knowledge are now viewed by the Government as the key driving forces that will enable the country to achieve Middle Income Status by 2021.

Many positive developments have been occurring that streamline skills development system in the last few years. The results achieved so far have included the formation of a National Skills Development Council (NSDC) chaired by the Honorable Prime Minister, formation of Executive Committee for National Skills Development Council (EC-NSDC), approval of the National Skills Development Policy (NSDP), implementation of six skills development projects (SEIP, STEP, ILO-TVET Reform Project, SDP, B-SEP and SEP-B), formation of twelve Industry Skills Councils,

participation of private sectors in skills training, announcement for the establishment of National Human Resource Development Fund (NHRDF) and National Skills Development Authority (NSDA).

Bangladesh is now having a large young population. The total labor force of Bangladesh was 61.4 million in 2015, a 24.24% increase from 49.5 million in 2005-06. An estimated 58.7 million people aged over 15 are employed of which 17 million are female, a 47% increase from 11.3 million in 2005-06. About 43.9% of the employed population work in agriculture, 36.5% in service sector and 19.6% in industries (BBS 2015). The country gains an average of approximately 2 million new entrants in work force annually. Out of two million of the new entrants, only 5% receive formal training before entering in to the labour market. It was estimated that 58.7 million working people comprise many occupations such as managers, professionals, technicians & associate professionals, clerical support workers, service and sales workers, skilled agricultural, forestry and fisheries workers, crafts and related trade workers, plant and machine operators, assemblers and other elementary occupations (BBS 2015).

An estimated 4.5 million people had participated in a formal training before they entered into labour market. The Government has taken a number of initiatives to enhance the capacity of the new entrants through skills training so that a portion of two million new entrants receive training before going to the job market. This will, in turn, enable the country to transform its population into productive human resources. The Government believes that fast growth, competitiveness and social stability largely depend on the transformation of the working age population into productive human resources. The Government has made it a priority to transform the population of the country into a competent and skilled workforce through an innovative approach of skills development initiatives and their implementation.

This document contains an analysis of the current skills scenario of Bangladesh, impact of skills development on the overall productivity of the economy and skills development road map of the present Government for future growth expectations.

1.1 Skills Development and Economic Growth

The drivers of growth, particularly productivity growth, are numerous and complex. Over the past 25 years, importance of growth has been rediscovered and the current analysis is mirroring much on the measurement of human capital and its contribution to economic growth of a country. Human capital, one of the major drivers of economic growth, can help develop an economy through knowledge, skills sets and motivation that people have, which provide economic value. It is also realized that the quality of work can be improved by investing in people's education and training. In other words, to boost up productivity, skills of the people is critical.

Cobb-Douglas Production Function which was used and estimated by Cobb and Douglas (1928) showing relationship between output and factor productivity takes the following form:

$$Y = AL^{\alpha}K^{\beta} \qquad (1)$$

where Y, L and K are output, labour and capital respectively, and A is Factor Productivity, a and β are output elasticities of labor and capital.

In modern studies, based on the Cobb-Douglas Production Function, Solo-type of neoclassical growth model is widely used. The aggregate production function relates the maximum amount of output that can be produced given the quantities of factors of production to a variable usually referred to as total factor productivity. In addition to capital, labour, and productivity growth, this general specification of aggregate production function has been used with various other determinants of growth in different studies. Human capital is one of such determinants which has been widely used, such as Mankiw et al (1992) augmented the Solo model by including accumulation of human capital as well as physical capital in their study. They included a proxy for human-capital accumulation as an additional explanatory variable in their cross-country regression. The production function can be written in the extended form as follows:

$$Y=Af(L, K, Z)....$$
 (2)

or $Y = AL^{a1}K^{a2}Z^{a3}$

Where,

Y=the level of output

K=stock of physical capital

L=labor force

Z=the vector including other factors affecting growth such as human capital

A= the total factor productivity which is generally assumed to grow at a constant exogenous rate;

a₁, a₂ and a₃ are the output elasticities of labour, capital and other factors such as human capital used in production respectively.

Applying this production function, studies of many researchers show that growth is directly and significantly related to the skills of the population. These skills can be measured. Weber et al (Fawcett and Cameroon, 2005) find that high skills have a positive effect on productivity, whilst low skills tend to have a negative effect. Evidence to support this, labor productivity growth in the UK in recent years has been faster than France and Germany, and keeping pace with the US; however, the actual level of labor productivity remains below each of those countries (UKCES 2010). The low level of productivity relative to those countries is often attributed, at least in part, to the lower skills in the UK workforce.

Case studies supporting Arrow (Fawcett et al 2005)-style 'learning by doing' models also suggest that where workers perform the same tasks frequently, the skills they acquire by doing so raise their productivity levels significantly. Mankiw et al (1992) used human capital (skills) that captured levels of educational attainment at secondary schooling as an input in the same way as 'physical capital'. Applying this approach of capturing the effect of a better-skilled workforce the evidence suggests that the elasticity of output with respect to skills is one third, equal to that of physical capital (Fawcett et al).

Further, various studies have shown that training has a positive effect on productivity. Dearden et al (UKCES 2010) show that a 5% increase in workforce participation in

training led to a 4% gain in productivity and a 1.5% increase in wages, a net benefit to employers. Productivity gains net of wage increases are often used in measuring the benefits of training and skills on productivity since companies are willing to pay higher wages for workers who are more productive. Groot (UKCES 2010) found that productivity growth after training increased 16%, whilst wage growth was 3.3% and that the difference in productivity between trained and un-trained workers was 8%. This is further backed up by Ballot who finds that productivity gains from training are 3 to 3.5 times greater than wage growth (Leitch, 2006).

Reviewing different research results and also the relationship of different determinants with growth, particularly human capital, it can be said that in the case of measuring impact of skills (training) on productivity in Bangladesh considering expenditure on training as proxy of skills or human capital, similar pattern of relationship would be found. Initiatives on skills development are crucial for increasing productivity. Skills Development Projects through which trainings are provided to workforce of targeted group prioritizing disadvantaged group will contribute towards reaping the benefits from demographic dividend and thus boosting up economic growth of Bangladesh. It points out the urgency of adopting skill development projects such as SEIP project which includes entry level job skills along with up-skilling of the existing workforce.

The relationship between human capital and economic growth can also be measured by how much is invested in people's health, education and training. Realizing that the knowledge people gained through education helps develop skills which, in turn, contributes to economic growth. Many governments accord high priority to investment in higher education which is offered sometimes to people at no cost. In the case of Bangladesh skill training linked to higher level education like other countries particularly, Asian countries, can be followed.

In this context, it can be concluded that other things remaining the same, higher GDP growth of a country can be ensured either by making additional investment or by increasing labor productivity or by both. The labor productivity is certainly dependent on imparting appropriate skills training to the workforce including midlevel supervisors and higher-level managers. This necessitates setting up a skill

related higher educational institute such as a Skills University to boost up the overall skills level of our people.

1.2 Strategic Policies and Plans of the Government

The Government has major policies and plans with prescriptions and implications for skills development and training. These policies envisage the expansion, diversification, extension, participation of industry sector associations for quality assurance and development of skills development programs for elevating socioeconomic condition of the people of the country. The Government has expressed its commitment to improving skills training through implementation of the following policies and plans:

1.3 Education Policy, 2010

The Education Policy 2010 provides a new dimension in strengthening and scaling up skills development in Bangladesh. The policy adopted in 2010 gives attention to the need for producing more qualified and skilled manpower who will be engaged in delivery of skills training. The Education Policy 2010 contains about 25 strategies that focus on expansion, access, and vertical mobility of skills development system. It also emphasizes the need for access of physically challenged people, opportunity for the adult and dropouts from evening and part-time courses, and providing financial assistance to those who cannot continue studies after grade VIII to pursue skills training.

The positive elements of the policy which are important for contributing to increasing quality of training are: (i) establishing a 12:1 trainee/trainer ratio, (ii) compulsory introduction of ICT, (iii) requiring trainers to have training and practical work experience, (iv) provision of books in Bangla, (v) filling up trainer vacancies more quickly by establishing a separate Public Service Commission for recruiting of trainers in public training institutions, (vi) proportional government allocations to the students of technical and vocational education streams etc. The strategies also encourage private providers to increase their participation in skills training and make utilization of resources of public training providers for skills training more efficiently (e.g., commencing double shifts).

1.4 National Skills Development Policy, 2011

The National Skills Development Policy (NSDP), 2011 approved by the Cabinet in January 2012 guides skills development strategies and facilitate improved coordination among all elements in skills training and the parties involved. The skills development policy contribute to the implementation of other national economic, employment and social policies so that Bangladesh can achieve its goal of attaining middle income status by 2021. It advocates for a market responsive inclusive skills development programs and defines the roles of industry in skills training program.

The major objectives of the National Skill Development Policy are to:

- provide a clear statement of the reform agenda for skills development in Bangladesh;
- improve the quality and relevance of skills development in Bangladesh;
- establish more flexible and responsive delivery mechanisms that can better serve the needs of labor markets, individuals and the community at large;
- improve access to skills development for various groups of citizens, encourage the participation of industry organizations, employers and workers in skills development, and improve skills acquisition in communities; and
- facilitate more effective planning, coordination and monitoring of skill development activities by different ministries, development partners, industries, and public and private training providers.

NSDP provides greater importance on access to education, training and lifelong learning especially for the people with nationally identified specific needs, such as youth, women, low skilled people, people with disabilities, migrants, internally displaced people, older workers, ethnic groups etc.

Through skills development policy, the Government pledges to develop social and economic policies to encourage enterprises to invest in education and training, and support individuals to develop their competencies and careers.

According to the National Skills Development Policy 2011, Bangladesh skills development system consists of (i) National Technical and Vocational Qualifications

Framework (NTVQF); (ii) Competency Based Industry Sector Standards and Qualifications; and (iii) Bangladesh Quality Assurance System.

The National Skills Development Policy 2011 also provides the guidelines for implementation of National Technical and Vocational Qualifications Framework. The qualification framework includes two pre-vocational levels that have created a pathway for the people with low levels of education to enter into existing formal skills training courses in order to have national certificate as well as to pursue skills training for higher vocational levels. The NTVQF also includes five qualification levels and one diploma level qualification. The framework facilitates a common national benchmark for achieving qualifications up to the equivalent level of diploma, but it does not provide a path for going to the university level. It provides a benchmark for the international recognition of skills and knowledge of the people in Bangladesh.

The National Skills Development Policy, 2011 has entrusted the Bangladesh Technical Education Board (BTEB) to accredit the standards, assess the trainee performance and certify for national recognition. The section 21.1 of NSDP 2011 states that National Skills Development Policy 2011 will be reviewed every five years and revised appropriately to take account of the progress of implementation and emerging trends in national and international environment.

1.5 Skills Development Strategies in the Seventh Five Year Plan (2016-2021)

The Seventh Five Year Plan has focused on two strategic issues for addressing the skills constraint to growth acceleration: (i) skills mismatch, and (ii) skills deficiency of migrant workers. As Bangladesh continues to industrialize and undergo structural changes, it has been observed that the skill levels of workers are not aligned with the stage of growth. Industries in the private sector consistently identify low skill levels amongst the labour force as a fundamental constraint to growth. Low skill results in low productivity and prevents the utilization of labour potential. Sectors like the RMG, which has grown rapidly, face a shortage of skilled workers and management. Inadequate human capital will be a limiting factor towards the absorption of around two million working people each year.

Overseas employment is another prominent element of the economy of Bangladesh from which foreign exchange is being earned in the amount of US\$ 15billion annually. Presently more than seven million Bangladeshi workers are working worldwide of which 31% are skilled, 14% semi-skilled, 2% professional and 52% low skilled. Demand for skilled personnel is increasing with the advancement of technology which paves the way to greater remittance earning as well. However, although there have been improvements in the skills development system, there still exists a considerable mismatch between the capacity of labour and quality required in the overseas job market.

The main elements of the skills development strategy in the Seventh Five Year Plan are:

- a) To implement the vision and mission of National Skills Development Policy (NSDP 2011).
- b) To produce educated, qualified and skilled manpower for the accelerated economic development of the country.
- c) To diversify technical and vocational education programs to meet the technical manpower needs in the areas of emerging technologies, such as: Fish Production, Leather, Textile, Mechatronics, Mining & Mine Survey, Instrumentation & Process Control, Construction, Environmental, Garments Design & Pattern Making, Electro-Medical, IT sector etc.
- d) To encourage more women's participation in TVET to ensure empowerment, equality and gender equity.
- e) To develop and modernize the existing TVET Institutions with available rural technologies to meet the challenges of the fast changing economy in the rural setting for poverty alleviation and to arrest rural-urban migration.
- f) To encourage private sector involvement and initiative in the delivery of technical and vocational education programs.

2. Skills Development Activities under Revenue Budget

Training is an integral part of skills development. Training programs are run both under revenue budget and development projects/programs. A total of 23 ministries/divisions provide skills training through their attached departments/directorates. The aim of such training programs is to develop skills both for those who are already employed and for those who are new entrants in the labour market. The ministries that run skills training programs are:

- 1. Ministry of Health and Family Welfare
- 2. Ministry of Textile and Jute
- 3. Planning Division
- 4. Ministry of Primary and Mass Education
- 5. Ministry of Education
- 6. Information & Communication Technology Division
- 7. Ministry of Social Welfare
- 8. Ministry of Women and Children Affairs
- 9. Ministry of Information
- 10. Ministry of Youth & Sports
- 11. Local Government Division
- 12. Rural Development and Cooperatives Division
- 13. Ministry of Industry
- 14. Energy and Mineral Resources Division
- 15. Ministry of Agriculture
- 16. Ministry of Fisheries and Livestock
- 17. Ministry of Environment and Forest
- 18. Road Transport and Highways Division
- 19. Ministry of Railway
- 20. Ministry of Civil Aviation and Tourism
- 21. Power Division

- 22. Ministry of Expatriates' Welfare and Overseas Employment
- 23. Ministry of Shipping

Ministry of Education, Ministry of Expatriate Welfare and Overseas Employment, Ministry of Industry and the Ministry of Youth and Sports have major roles in the delivery of skills training through their training institutions located across the country. Taka 174 crore has been allocated in FY 2015-16 budget for imparting skills development training programs of 23 ministries/divisions. Skills training programs run by the above mentioned ministries/divisions under revenue budget are summarized below:

2.1 Ministry of Health & Family Welfare

Vision 2021 envisions Bangladesh to be a middle-income country with drastic reduction in poverty and with the conditions that allow individuals to reach and maintain the highest attainable level of health. Human Resources for Health (HRH) is considered as a key component of the entire health system. The Government has, there fore, set objectives and targets to achieve Universal Health Coverage (UHC) and one of the major objectives is to ensure the national capacity by strengthening pre-service and in-service training for nursing, paramedics and midwifery.

The Directorate of Nursing Services (DNS) under the Ministry of Health and Family Welfare (MoHFW) operates 43 public nursing institutes situated all over the country to offer a Diploma level program on Nursing Science and Midwifery. It produces more than 2,000 nurses annually. Bangladesh Nursing Council (BNC) acts as a National Education Board to control and monitor academic affairs of public and private nursing institutes in Bangladesh. It registers institutes, regulates nursing educational programs. It also conducts examinations and provides certificates.

Directorate General of Health Services (DGHS) provides Diploma in Health Technology. Eight Government owned Medical Assistant Training Schools produce 716 Medical Assistants every year. Institute of Health Technology (IHT) provides training to produce Medical Technologists who work as laboratory personnel. Eight government institutions provide diploma level training in (i) Laboratory, (ii)

Radiology, (iii) Physiotherapy, (iv) Sanitary Inspection, (v) Dentistry, (vi) Pharmacy, and (vii) Radio Therapy. Other than these courses Government Institutes also offer certificate courses on (i) Optometrist, (ii) Ophthalmic Nursing Assistant, and (iii) Cath-lab Technician. A large number of health personnel and support staff receive on the job training each year.

2.2 Ministry of Textiles and Jute

Ministry of Textiles & Jute through its Department of Textiles (DOT) administers the training activities of Textile Engineering College, 40 Textile Vocational Institutes (TVI) and two Textile Institutes. These institutes offer a four-year bachelor course in Textile Engineering, Diploma in Textile Engineering and a two-year SSC Vocational course in textile. Textile sector absorbs the graduates who complete vocational education in textile. In 2015, 188students completed B.Sc. in Textile Engineering, 363 students completed Diploma in Textile Engineering and 2,616 students completed SSC Textile Vocational course. Around 1,000 officials and staff were provided training in computer and use of ICT tools with a view to establishing "Digital Bangladesh". Around 290 weavers were trained through four training centers to enhance their professional skills.

2.3 Ministry of Planning

The Ministry of Planning administers a very large training academy- the National Academy for Planning and Development(NAPD) situated in Dhaka. The academy addresses the skill needs of government officials, NGO staff and the staff of private organizations in the areas of management, research, information technology, monitoring and evaluation. Around 8,000 people receive training from the academy every year

2.4 Ministry of Primary and Mass Education

Under the Ministry of Primary and Mass Education, National Academy for Primary Education (NAPE) conducts various training programs for the up-skilling of managerial capacity of the personnel in primary education. In addition to its regular

training courses NAPE conducts training courses on ICT/Computer Application. It also provided three month long ICT training to 40 unemployed youth.

2.5 Ministry of Education

The Directorate of Technical Education (DTE) under the Ministry of Education administers Technical and Vocational Education and Training through its 64 Technical School and Colleges (TSC) and 49 Polytechnic Institutes across the country. Under DTE one Technical Teachers' Training College (TTTC) and one Vocational Teacher Training Institute (VTTI) cater the need for training of technical teachers. In FY2015-16as many as 29,958 students have been enrolled in 49 Polytechnic Institutes and 44,797 students in 64 TSCs enrolled. Polytechnic Institutes and Technical School and Colleges (TSCs) have structured training facilities with necessary tools and equipment to deliver effective training. The Directorate of Technical Education also manages an MPO (Monthly Pay Order) scheme for about 1,626 private training institutes. MPOs constitute 100 percent basic salary of the instructors and staff engaged in those institutes.

Curriculum development, assessment and certification of TVET students is the sole responsibility of Bangladesh Technical Education Board (BTEB). BTEB is also responsible for developing and regulating formal TVET programs namely NSS Basic, NSS-II, SSC (Vocational), HSC (Vocational) and diploma level programs. At the same time BTEB is regulating all sorts of short term skill courses across the country. As stated in the National Skills Development Policy (NSDP) BTEB has prioritized the implementation of a competency-based training and assessment system wherein achievement is measured against each of the competency standard, and progress is determined by meeting standards and not by time spent in training.

2.6 Information & Communication Technology Division

Digital Bangladesh is an integral part of the government's vision 2021. In the year of 2010, the Honorable Prime Minister outlined the Digital Bangladesh initiative comprising four key priorities. One of the key priorities is to develop human resource and make them ready for the 21st century. Bangladesh, however, moves on

progressively towards strengthening Knowledge Economy (KE). The Knowledge Economy is an integral part of the economic development process. Specifically the seventh five year plan sought to enhance the role of ICT in increasing quality education and to minimize skills gap between rural and urban people.

Bangladesh Computer Council (BCC) under the Ministry of Communication and Information Technology provides a wide range of skills development programs for the students who complete SSC or HSC. BCC also offers training programs on ICT through its training institute named Bangladesh Korea Institute of Information and Communication Technology (BKIICT) for the government officials. The training programs focus on the skills areas of Graphic Design & Multimedia, Website Design and Web Application Development, Online Marketing and Search Engine Optimization (SEO), Introduction to Office Applications & Unicode Bangla, Electronic Governance Understanding and Application(for government officials), Digital Signature for Information Security (for government officials), and Freelancing Technique for Web and Mobile Application Development.

In the last three years, BCC trained 102,887 people on ICT and on the Government initiative for 'Inclusive Development', it also trained a total of 80 people with disabilities. The initiatives and the efforts of the Information and Communication Technology Division will enable the large sections of the conventionally educated youth, who possess little or no job skills to enter into labor market with ICT skills.

2.7 Ministry of Social Welfare

The Ministry of Social Welfare works in diversified areas focusing on human resource development, poverty alleviation and employment of disadvantaged groups. It administers the Department of Social Services (DSS) which undertakes various programs on poverty alleviation, human resource development, social risk protection, social security and social safety nets, social integration, prevention of social disintegration and community empowerment. The department manages training centers located across the country that include

• Training and Rehabilitation Centers for the Destitute Children

- Socio-economic Training Centers
- Vocational Training and Production Centers for the Destitute Women
- Training and Rehabilitation Centers for the Vagrants
- Training and Rehabilitation Centers for the Socially Disadvantaged Girls
- National Training and Rehabilitation Center for the Visually Impaired
- Training Center for the Physically Handicapped
- Regional Training Centers

Some of the major training programs undertaken by the Centers under DSS are- (i) Tailoring (ii) Electrical House Wiring (ii) Block Batic and Screen Printing (iii) Basic Computer (iv) Food Processing (v) Carpentry (vi) Industrial Sewing Machine Operation (vii) Mechanical Workshop (Lathe, Milling & Welding). The institutes have their own training curricula. The institutions conduct assessment and provide certificates to the trainees. The Ministry has initiated process to ensure access of underprivileged groups like destitute women, socially disadvantaged girls, physically handicapped to market responsive inclusive skills development programs linked to placement support services. This will enable underprivileged group to contribute to the economic development process.

2.8 Ministry of Women and Children Affairs

The Ministry of Women and Children Affairs through the Department of Woman Affairs (DWA) and Jatiyo Mohila Sangstha (JMS) offers various programs for empowering women including the creation of employment opportunities. The DWA provides market oriented training to women through its Women Training Centers (WTCs) located across the country. The training centers offer a wide range of courses that include (i) Fisheries, Agriculture and Poultry, (ii) Beautification, (iii) Mobile Phone Servicing, (iv) Bakery and Pastry , (vi) Nursery, (vii) Tailoring, (vi) Housekeeping, (viii) Ready made Garment, and (ix) Basic Computer. The DWA also provides both residential and non-residential training courses. Jatiyo Mohila Sangstha (JMS) provides livelihood training to destitute women for their self-employment. JMS also provides basic computer training through its 64 district level offices. It also

provides training on (i) Food Processing (ii) Beautification (iii) Mobile Phone and Electrical Appliances Servicing (iv) Interior Design (v) House Keeping (vi) Management Training for Women Entrepreneurs (vii) Block Batik and Screen Printing.

2.9 Ministry of Information

The Ministry of Information provides support to the National Institute of Mass Communication (NIMCO) to operate the training institute with the objective of developing professional skills of concerned officials and people working in private radio stations, television channels and film industry. It designs and develops training programs based on the skills needs of the job market. The training programs include –

- i) Television Drama Production Course
- ii) Basic Training for Broadcasting Technicians
- iii) Introduction to Digital Cinema Production
- iv) Digital Photography
- v) Techniques of Bangla News Casting
- vi) Radio Program Production
- vii) Film Production
- viii) Computer Graphics & 3D Animation
- ix) Radio and Television News Reporting etc.

The Press Institute of Bangladesh (PIB) is one of the institutes governed by the Ministry of Information to conduct training for newspaper, radio, television, information personnel and public relations officials. The training institute contributes to enhancing capacity of the journalists and persons engaged in printing technology, photography and newspaper management.

2.10 Ministry of Youth and Sports

The Department of Youth Development (DYD) under the Ministry of Youth and Sports offers a wide range of courses through its 110 Youth Training Centers spread over 64 districts and upazilas. The DYD provides both institutional and

informal/mobile trainings. The major training programs conducted by various training centers of DYD include-

- i) Integrated Agriculture Training Course
- ii) Pisci-culture
- iii) Readymade Garment
- iv) Basic Computer Training
- v) Electrical and House Wiring
- vi) Refrigeration and Air Conditioning
- vii) Block Batic and Screen Printing
- viii) Fashion Design
- ix) Food and Beverage Service
- x) Mobile Servicing and Repairing
- xi) Freelancing and Out Sourcing
- xii) Beautification and Hairdressing etc.

The DYD addresses the poor people in urban and rural areas. The DYD also provides loans to the trained youth to help them start their own businesses. The DYD produces about 300,000 graduates per year.

2.11 Local Government Division

Communication is crucial for socio-economic development and poverty reduction. An improved road communication is a must for reducing the cost of production which enables people to contribute to the socio-economic development process. This development process relates to the development of workforce who can efficiently construct the roads and culverts within a short span of time. The Local Government Division runs the course leading to Diploma in Engineering in surveying. The LG Division also manages high-end up-skilling training programs through its department LGED for technicians and supervisors involved in construction works.

LGED has 14 Regional Training Centers (RTCs) located in 14 districts that provide a wide range of courses such as Quality Control (Soil, Bitumen, Cement and Concrete

Test), Sanitation and Plumbing, Plain Table and Leveling Survey, Basic Computer, Understanding Drawing, Concrete and Building Works, Training of Trainers, Building and Road Structure Maintenance, Modular Based Capacity Building & Institutional Development for Upazila Chairmen and Members, Auto CAD Training for the Engineering Section, Sustainable Agriculture Production for WMCA Members, IGA Livelihood Development for WMCA Members, Fish Production Technology, Fisheries Program Management for WMCA Members and Upazila Chairmen, Gender Awareness Training for the field staff etc. LGED customizes training courses depending on the needs of job roles and skills set of the occupations.

2.12 Rural Development and Cooperatives Division

Rural Development and Cooperatives Division also supports Bangladesh Rural Development Board (BRDB) to operate the following institutes in order to alleviate poverty and develop the capacity of the people living in rural areas. The institutes are Bangladesh Rural Development Training Institute (BRDTI), Noakhali Rural Development Training Institute, Tangail Link Model Training Institute (TLMTI) and Bangabandhu Poverty Alleviation and Training Center (BPATC). The training programs focus on the development of Fisheries and Shrimp Culture, Hatchery and Nursery Management Process, Pond Based Integrated Training System and Food Security, Fruits Cultivation, Poultry Rearing and Farming, Goat Rearing and Farming, Dairy Farming and Beef Fattening.

2.13 Ministry of Industries

The Ministry of Industry provides supports to the Bangladesh Industrial Technical Assistance Center (BITAC), Bangladesh Institute of Management (BIM), Skill Development Center (SDC), National Productivity Organization (NPO), and Small and Cottage Industries Training Institute (SCITI) in order to increase labour productivity and enhancement of skills.

These institutes perform their training activities in various forms to address the needs for enhancing entrepreneurship, marketing, financial management and technical skills of people to fill up the skills gap in various industry sectors. Bangladesh

Industrial Technical Assistance Center (BITAC) provides high quality skills training through its five training institutes located in Dhaka, Chittagong, Chandpur, Khulna and Bogra. All the training institutes are well equipped with required training equipment and training facilities to offer a wide range of market responsive skills training programs. Linkages with industries and quality training of BITAC lead to a higher rate of job placement.

Bangladesh Small and Cottage Industry Corporation (BSCIC) provides training through its 15 Skills Development Centers located in different districts. The centers offer courses for addressing the skills need of the Light Engineering, RMG, Agrofood and IT sectors and a total of about 4,000 trainees received training in 2014-2015 and 2015-2016. BSCIC also attaches priority to building skills of the poor people living in Hill Tracts by offering training on various courses.

The Design Center administered by the Small and Cottage Industries Corporation (BSCIC) provides training on various courses and it trained about 1,020 people FY 2014-2015 and 2015-2016.

National Productivity Organization (NPO) under the Ministry of Industry also organizes training programs and workshops for skills development of industry people in order to maximize productivity in industry. It also trains people for building skills to appropriately utilize resources and minimize wastage in industry. In FY 2014-2015 and 2015-2016, National Productivity Organization (NPO) trained around 3,000 people.

2.14 Energy and Mineral Resources Division

Bangladesh Petroleum Institute (BPI) under Energy and Mineral Resources Division conducts training programs in (i) Engineering Construction & System Analysis, (ii) Gas Metering and Pipeline Control System, (iii) Cathodic Protection, (iv) Natural Gas Pipe Line Welding & NDT etc. BPI is providing training to officials in Energy Sector to enhance their skills.

2.15 Ministry of Agriculture

The Department of Agriculture Extension (DAE) under the Ministry of Agriculture operates a total of 14 Agricultural Training Institutes (ATIs) located in various districts. All the training institutes offer diploma program in agriculture in order to increase the capacity of the agriculture sector. Courses are accredited with the Bangladesh Technical Education Board.

2.16 Ministry of Fisheries and Livestock

Fisheries sector plays a vital role in contributing to the national economy having share in GDP of about 3.9% and engaging more than 11% of rural labour force. Quality assurance in fish harvesting, processing, marketing and exporting is important and it requires a series of training for the farmers, fish traders, entrepreneurs and staff engaged in the Department of Fisheries across the country. The government also emphasized the needs for disseminating improved aquaculture technologies through training, demonstration and facilitating innovative income generating activities for rural poor and unemployed people. The Department of Fisheries under this ministry implements training on a regular basis for fish and shrimp farmers, fish traders, other entrepreneurs and beneficiaries, and its staff through nine institutes located across the country. It also runs a Fisheries Diploma Institute (FDI) in Chandpur leading to a 4-year Diploma in Fisheries. FDI enrolls 25 students per batch and the total enrollment so far at the institute is 100.

The Department of Livestock Services (DLS) plays a significant role in economic development of the country. Bangladesh government has identified livestock as one of the key resources that helps the country to empower women and engage them in economic activities to alleviate poverty. The DLS operates two Veterinary Training Institutes (VTIs) and one Livestock Training Institute (LTI) which offer a two-year course on Diploma in Animal Health and Production.

2.17 Ministry of Environment and Forests (MoEF)

The Ministry of Environment and Forests runs three institutes where a Diploma in Forestry course is offered. These institutes are registered with Bangladesh Technical Education Board (BTEB). These institutes had enrollment of about 100 trainees in the year of 2015.

2.18 Road Transport and Highways Division

The Road Transport and Highways Division through its Bangladesh Road Transport Corporation (BRTC) manages 17 training institutes located across the country for delivery of skills training program. They offer various courses such as (i) Basic Driving (Light Vehicles), (ii) Basic Driving (Heavy Vehicles), (iii) Upgrading Driving (Light and Heavy Vehicles), (iv) Basic Automotive Mechanics, (v) TIG and MIG Welding, and (vi) Arc Welding.

2.19 Ministry of Railways

Bangladesh Railways under the Ministry of Railways offers a wide range of courses through four Workshop Training Units (WTUs) and one Railway Training Academy (RTA) located in Chittagong. Bangladesh Railways designs and develops training modules for up-skilling the staff involved in regular repair, maintenance and services of locomotives. The courses include the following: (i) Basic Course Mechanical, (ii) Basic Course Electrical, (iii) Basic Course Electronic, (iv) Preventive Maintenance Course on Mechanical and Electrical, (v) Supervisory Skilled Training (SST) Course, (vi) Locomotive Operation and Maintenance, (vii) Special Course on Cooling Systems, (viii) Special Course on Advanced Tools, (ix) Special Course on Compressor and Air Brake, (x) Special Course on Engine Oil and Fuel System, (xi) Special Course on Engine Governor, (xii) Special Course on Relay and Magnetic Conductor. Around 3,000 staff receive training annually from the five training institutes.

2.20 Ministry of Civil Aviation and Tourism

The Ministry of Civil Aviation and Tourism through Bangladesh Parjatan Corporation operates a training institute, namely the National Hotel and Tourism Training Institute (NHTTI) located in Dhaka. The NHTTI focuses on imparting hands-on training to its students. The institute offers a wide range of courses to meet the skills need of hotel and tourism industry. The diploma level courses are: (i) Diploma in Hotel Management, (ii) Diploma in Tourism Management, (iii) Professional Chef Course. The certificate level courses include: (i) Food and Beverage Production, (ii) Food and Beverage Service, (iii) Travel Agency and Tour Operation, (iv) Front Office Secretarial Operations, (v) Bakery and Pastry Production, and (vi) Housekeeping and Laundry Operations. All the courses require one month to three months On Job Training.

2.21 Power Division

Under Power Division, Bangladesh Power Development Board has two training Academies, three training centers, one regional training center. Different types of trainings are provided at different levels and fields such as IT, Technical, Administrative, Accounts and Finance. The training centers are-

- i) Engineering Academy, Kaptai, Rangamati
- ii) Training Academy, Cox's Bazar
- iii) Chittagong Training Center
- iv) Ghorasal Training Center, Narsingdi
- v) Rajshahi Training Center
- vi) Regional Training Center, Tongi, Gazipur

Bangladesh Power Development Board conducts training for the new entrants as well as for the existing workforce. Bangladesh Rural Electrification Board has a training academy in Dhaka which provides training for its employees. DESCO has training unit in Dhaka which arrange Foundation training for the new entrants in this department. In addition to this Dhaka Power Distribution Company Ltd. (DPDC) has also training unit to train its employees.

2.22 Ministry of Expatriates' Welfare & Overseas Employment

Overseas employment is one of the major sectors of the economy of Bangladesh. In order to bring more transparency, accountability and momentum in this sector, the Ministry of Expatriates' Welfare and Overseas Employment has prepared the "Policy on Expatriates' Welfare and Overseas Employment 2016". This Policy provides strategic direction regarding safe labor migration, security of the migrants and their families, their privileges and welfare, migration of women, integrating migration with national development, and overall governance of labour migration.

The Bureau of Manpower, Employment and Training (BMET) under the Ministry of Expatriates' Welfare and Overseas Employment operates its functions for developing skilled workforce for the local and international labor market. It has scaled up technical education program to establish additional new 27 Technical Training Centers (TTCs) and five Institutes of Marine Technology (IMTs) in different locations across the country. A total of 64 TTCs and six IMTs offer a wide range of courses to address the skill needs of the migrants and the new entrants seeking jobs. The Seventh Five Year Plan emphasizes the needs for the establishment of another 40 Technical Training Centers (TTCs) in 40 Upazilas and one Institute of Marine Technology (IMT) to address the skills needs of the people living in the remote areas of Bangladesh. BMET has established linkages with the industries of various sectors to provide skilled workforce for meeting skills demands. It customizes the training programs based on the demands of national and international job markets.

2.23 Ministry of Shipping

The Ministry of Shipping through three Maritime Institutes train seamen, inland and sea-going personnel. The National maritime Institute in Chittagong conducts the following courses: (i) Personal Survival Technique, (ii) Steering/Bridges Simulator Course, (iii) Basic Computer Course etc.

3. Skills Development Projects/Programs

In addition to the regular skills development activities of various ministries/divisions from the revenue budget, the Government is also implementing a number of development projects in collaboration with the development partners through different ministries and divisions. Taka 428 crore has been allocated for four skills development projects in FY2015-16 budget.

3.1 Bangladesh Skills for Employment and Productivity (B-SEP)

B-SEP project is being implemented by the Directorate of Technical Education (DTE) under the Ministry of Education. The overall objective of the project is to achieve a better trained and qualified workforce for key industry sectors in order for them to get decent work which will ensure sustainable economic development, poverty reduction and social inclusion in Bangladesh.

The project is supporting G20 initiative to improve coordination among the public institutions through strengthening NSDC-Secretariat so that it can play its role to coordinate and monitor skills system. B-SEP also supports enhancement of capacity of the key government agencies such as BMET, BTEB and DTE to help implementation and regulation of the new NTVQF. The project will increase engagement of the industries in the skills system by establishing Industry Skills Councils (ISC) in five industry sectors. The project aims to provide increased access to skills program and employment opportunities for disadvantaged groups, people with disabilities and women in the targeted sectors. It is also going to support employment in green jobs in the targeted sectors.

3.2 Skills and Employment Program in Bangladesh (SEP-B)

SEP-B project is extending supports to private-sector led training programs aligned with the skills needs of the RMG and Construction Sectors. The project, popularly titled Sudokkho, has two components to bring a systemic change in the labour market i) supporting private training providers to offer affordable quality training that

enhances employability, and ii) supporting private sector industries to develop and operate industry-led training facilities. SEP-B (Sudokkho) is supporting training of at least 110,000 people for which it has developed comprehensive sets of training materials. This includes skills standards, curricula, trainee's manuals and CBT assessment tools.

Sudokkho has partnered with the NSDC-Secretariat for forming Industry Skills Councils (ISCs) in two industry sectors (RMG and Construction). As a result of strong networking and sensitization, the Construction ISC (CISC) was formed and registered in January 2016. Similarly ISC in RMG and Textile sector (RTISC) is at the final stage of formation. SEIP and Sudokkho are joining hands in supporting both the ISCs in which SEIP enables the ISCs to operate through financial support for its facilities and staffing. SEIP also supports them implement targeted activities. On the other hand Sudokkho will provide technical assistance to the implementation of its core functions. This includes: (1) Curriculum Development and Training; (2) Assessment and Certification; (3) Labour Market Information; and (4) Sustainable financing.

3.3 Skills and Training Enhancement Project (STEP)

The Directorate of Technical Education under the Ministry of Education is implementing World Bank supported Skills and Training Enhancement Project (STEP). Initially the project period was July 2010-June 2015. The revised project period is July 2010-June 2019. Total cost of STEP is BDT 1789.68 crore out of which Government's share is BDT 239.84 crore (13%) and from development Partner 1549.84 crore (87%). Main objective of the project to strengthen selected public and private skill training institutes to improve training quality and employability of the trainees including those from disadvantaged socio-economic background.

STEP is supporting TVET system through direct start-up and operational support to Industry Skills Councils (ISC) and the National Skills Development Council-Secretariat. It provides grants to introduce additional market driven technologies. Supporting the disadvantaged group is a major task of STEP. As many as 523,000 TVET students, which include all female students, will receive stipends.

Public and Private training institutions offering short courses are also getting support from STEP. In 64 institutions (Public and Private) a total of 150,000 trainees will receive training in various short courses during the project period. Through partnership with key private sector institutions in TVET i.e. UCEP, PKSF, BGMEA, BKMEA and BAIRA, new market oriented short-courses will be introduced. STEP is piloting apprenticeship program in SSC (Voc) schools. STEP is supporting establishment of one Technical Teachers Training Institute to cater the need of teachers training. Recognition of Prior Learning (RPL) is almost a new initiative in Bangladesh. It is built on competency based training and assessment, and certificates are awarded to workers for competencies obtained through informal, on-the-job training and work experiences. STEP is supporting RPL program for 30,000 existing workers to be assessed in 30 centers in 10-15 demand driven occupations.

3.4 Skills for Employment Investment Program (SEIP)

SEIP project is being implemented under Finance Division, Ministry of Finance. SEIP project is financed jointly by the Asian Development Bank, Swiss Agency for Development and Cooperation and GOB. The project supports Government reforms in skills development articulated in the National Skill Development Policy (NSDP) and National Education Policy (NEP). It helps catalyze the private sector in a major way for providing market responsive skills development and forging partnerships with public training institutions to make skills development responsive to emerging labor market needs. The project will help the government to scale up skilling of new entrants and up-skilling of existing workers to increase productivity of the labor force which will lead to increase in average household incomes and contribute to accelerating economic growth. SEIP project is providing market responsive inclusive skills training, strengthening TVET institutions and quality assurance system.

SEIP emphasizes improvement of job-focused skills and up-skilling of the existing workforce. SEIP is a multi-tranche project and in the first phase it will run up to December 2017. In its first phase, six priority sectors have been included. These are: (i) Readymade Garment and Textile; (ii) Construction; (iii) Information Technology (IT); (iv) Light Engineering and Manufacturing; (v) Leather and Footwear; and (vi)

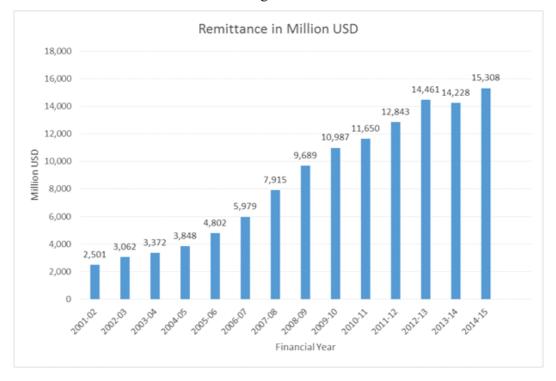
Shipbuilding. SEIP has targeted to support skills training of 260,000 trainees, of which about 70% or 182,000 will be provided with gainful jobs. The project aims to select and provide additional stipend to 40,000 trainees from socially disadvantaged, physically challenged and ethnic minority groups.

The training is being provided by institutions under both public and private sectors. SEIP is facilitating the training programs through three ministries/departments namely (i) Bureau of Manpower Employment and Training under the Ministry of Expatriate Welfare and Overseas Employment, (ii) Directorate of Technical Education under Ministry of Education and (iii) Bangladesh Industry Technical Assistance Center (BITAC) under the Ministry of Industries. SEIP is also financing skills training program being imparted by Bangladesh Bank SME Department and Palli Karma-Sahayak Foundation (PKSF).

The project is also facilitating training activities through the Industry Associations namely: (i) Bangladesh Garment Manufacturing and Exporters Association (BGMEA), Bangladesh Knitwear Manufacturers & Exporters Association (BKMEA), Bangladesh Textile Mills Association (BTMA), Leathergoods & Footwear Manufactures & Exporters Association, Bangladesh (LFMEAB), Bangladesh Association of Construction Industry (BACI), Bangladesh Engineering Industry Owners' Association (BEIOA), Bangladesh Association of Call Centers and Outsourcing (BACCO), Bangladesh Association of Software and Information Services (BASIS) and Association of Export Oriented Shipbuilding Industries Bangladesh (AEOSIB). SEIP also facilitates establishment of National Human Resource Development Fund (NHRDF) and the National Skills Development Authority (NSDA).

4. Skills Development for Overseas Employment

Migration is an integral part of the economic development process. Remittances make up a large share of the Gross National Income (GNI). The Government has taken a wide variety of initiatives to increase outflow of skilled migrants with appropriate migration solutions. As a result, the annual outflow of migrants and inflow of remittances have increased significantly in the recent years. The chart below portrays substantial increase in remittances during FY 2001-02 to 2014-15:

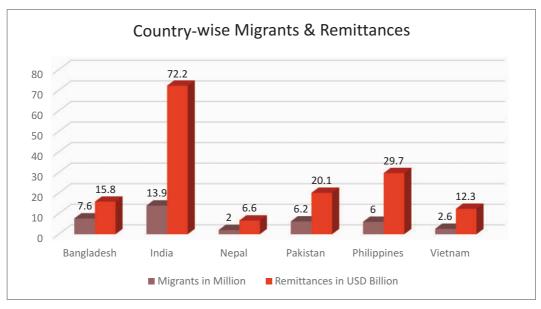


Source: Bangladesh Bank

4.1 Employment and Remittance

The Government initiatives have propelled up the overseas employment and the flow of remittance in the recent years. The continuously escalating trend of remittance is encouraging for the economic growth and development of the country. However, compared to many other labor sending countries, Bangladesh is lagging far behind in terms of Remittance/Migrant ratio. According to the source of Migration and Remittance Fact Data 2016 of World Bank as depicted in the chart below,

Bangladesh received USD 2,079 per migrant in 2015 whereas in the same period remittance/migrant for India stood at USD 5,194; for Nepal USD 3,300; for Pakistan USD 3,242; for Philippines USD 4,950; and for Vietnam USD 4,731. The migrants of these countries are able to send more remittances back home because of their higher income abroad due to advanced and high skills.



Source: Migration and Remittances Fact Data 2016, World Bank

In case of Bangladesh, it is obvious that inflows of remittance could have been larger if the workers were better skilled, indicating the necessity of skills development programs. Currently, more than seven million Bangladeshi workers are working abroad of which 31% are skilled, 14% are semi-skilled, 2% are professional and 52% are less-skilled. The Government's goal is to raise the share of overseas employment of skilled labour from 31% to 50% by 2030. The goal reflects the need for robust market analyses and consistent skills development strategies. In pursuit of achieving this target, the Government has undertaken following initiatives:

4.1.1 Digitization in Migration Management

A database has been prepared and updated to stop fraudulent practices in the process of migration. BMET is planning to link this database with the National ID database to make the former more reliable, effective and robust. The awareness campaign for the

overseas employment is regularly conducted. Smart card with a computer chip of 32 kb is provided to each migrant worker to ensure accountability and transparency in the migration process.

4.1.2 Establishment of Expatriates' Welfare Bank

In order to reduce the burden of migration cost, the Government established "Expatriates' Welfare Bank (Probashi Kallyan Bank)" on 20 April 2011 and the bank was inaugurated by the Honorable Prime Minister Shiekh Hasina. The main purposes of the bank are to (i) provide loan with a simple interest to the people going abroad; (ii) extend financial support to the migrants who return from abroad and intend to invest in productive activities; (iii) provide assistance to increase the flow of remittance.

4.1.3 Promotion of Skill Development Program

The Bureau of Manpower, Employment & Training (BMET) administered by the Ministry of Expatriates' Welfare and Overseas Employment (MEWOE) has scaled up technical education program to establish additional 27 Technical Training Centers (TTCs) and five Institutes of Marine Technology (IMTs) in different locations across the country. A total of 64 TTCs and six IMTs now offer a wide range of courses to address the skill needs of the migrants and the job seekers. "Migration and Skills Development Fund" has been established to facilitate skills development training and overseas employment.

Besides, the following actions will be taken during the implementation period of the Seventh Five Year Plan:

- Establishment of 22 more District Employment and Manpower Offices (DEMOs) to cover all the districts of Bangladesh (currently 42 DEMOs and four Divisional Offices already exist);
- Establishment of Catering Institute to deliver market responsive skills training;
- Development and operationalization of additional 40 Technical Training Centers (TTCs) in 40 Upazilas and one Institute of Marine Technology (IMT) to address the skills needs of the people living in the remote areas;

- Establishment of Teachers' Training Institute to up-skill the trainers of the Technical Training Centers (TTCs);
- Scaling up the training programs for domestic workers who will migrate whereby a total of 50,000 will be trained annually.

4.1.4 Initiatives and Incentives for Smooth Transfer of Remittances

The Government extends efforts to encourage expatriates to send foreign currency through official channels. In recent years, nationalized and commercial bank have established strong network abroad to facilitate smooth transfer of remittance to Bangladesh. As a result, the inflow of remittance in Bangladesh through official channels is increasing day by day. The Government has undertaken various investment initiatives to boost the remittance flow. Various types of savings instruments such as US Dollar Bond, Premium Bond, and Wage Earners' Development Bond are being offered for expatriate Bangladeshis. Moreover, tax holiday and tax exemption are also provided to encourage remittance flow and utilize it for economic development. Additionally, CIP (NRB) Cards and Privilege Cards for the expatriate Bangladeshis have been introduced to encourage more flow of remittance. Increasing number of public and private banks and exchange houses in major destination countries are making the remittance services easily available to the migrant workers abroad. Technology based mobile banking has also reduced transfer cost and time considerably.

4.1.5 Initiative to Explore New Markets

Government is trying to open up new destinations for overseas employment despite the persisting global economic down turn. Initiative has been taken to export manpower to new destinations, particularly in Australia, Canada, Russia, New Zealand, Sweden, Greece, Congo, South Africa, Lebanon, Algeria, Sudan, Poland, Romania, Botswana, Tajikistan, etc.

4.1.6 Efforts to Reduce Migration Cost

The manpower export sector was stigmatized by the allegation of charging high migration costs. This is mainly due to the unethical practices of some Recruiting

Agencies in procuring visa and selling it with high price. Government has adopted various measures towards curbing this corrupt practice. A Committee has been formed in the Ministry of Expatriates' Welfare and Overseas Employment along with the representatives from Bangladesh Association of International Recruiting Agencies (BAIRA) to critically analyze the item wise expenditure during migration and also to suggest a reasonable migration cost. Arrangement of G2G recruitment process has been made to check and balance the migration cost and visa trading.

4.1.7 Overseas Employment and Migrants Act, 2013

The adoption of the Overseas Employment and Migrants Act 2013 reflects the Government's will to address the inter-linkages of migration and development in a comprehensive manner.

Overseas employment has become a major source of income for Bangladesh. The Bureau of Manpower, Employment and Training (BMET) under the Ministry of Expatriates' Welfare and Overseas Employment is entrusted with the responsibility of overall planning and implementation of migration of workers and to maintain an important database on the skill levels of migrant workers, who are classified into the following four skill categories:

- professional (doctors, engineers, teachers, and nurses);
- skilled (garment workers, masons, drivers, electricians, plumbers, and welders);
- semiskilled (tailors and gardeners); and
- Low-skilled/unskilled (hotel boys, cleaners, domestic help, housekeepers, and cart loaders).

BMET has now been able to establish mechanism of facilitating the migrants to undergo relevant training programs so that migrant workers can work independently in the workplaces abroad.

4.1.8 Holding the Colombo Process

Bangladesh was the Chair of the Colombo Process in 2011. The fourth Ministerial Level Consultation was arranged by the Government of Bangladesh on 20 April 2011

in Dhaka. The Honourable Prime Minister of Bangladesh inaugurated the event. The theme of the 4th Ministerial meeting was 'Migration with Dignity'. Eleven labor sending states who were the members of this process attended the consultation where nine observers from different labour receiving countries and International Organizations were actively present. They discussed various common issues on the protection of rights of the migrant workers. A 'Dhaka declaration' was adopted in the concluding session. Task force keeps on monitoring at various stages of migration activities including in the airports during departure of the workers.

4.1.9 Global Forum on Migration and Development (GFMD)

Bangladesh is going to host the 9th Summit of the Global Forum on Migration and Development (GFMD) on 10-12 December 2016. This is an initiative of the United Nations Member States to address the migration and development interconnections in practical and action-oriented ways. It reflects the limits of a strictly national approach to migration issues against the global level in an intergovernmental framework where the civil society representatives are also involved from the outset.

The objectives of the GFMD include (i) providing a platform for policy-makers, practitioners and other stakeholders to discuss relevant policies, practical challenges and opportunities of the migration-development nexus with a view to fostering practical and action-oriented outcomes at national, bilateral and international level; (ii) exchanging good practices and experiences which can be replicated or adapted in other circumstances, in order to maximize the development benefits of migration and migration flows; (iii) establishing partnerships and cooperation between countries and other stakeholders on migration and development etc.

The theme of the 9th GFMD has been decided as 'Migration that Works for Sustainable Development of All: A Trans formative Migration Agenda'. Bangladesh is going to gain momentum towards further development through smart migration by taking leadership role hosting such a big global event.

5. Institutional Strengthening

The Government recognizes that the management of public and private training organizations need to be improved if the skills system in Bangladesh is to effectively deliver quality training. So far public sector is concerned, currently the Ministry of Education and the Ministry of Expatriates' Welfare and Overseas Employment administer more than 200 public training institutions that offer diploma level programs, Higher Secondary School Certificate in Vocational, Secondary School Certificate in Vocational, and short training programs to ensure the skilling of the new entrants in the country. One of the key challenges facing these training institutions is the need to improve the capacity of teachers and instructors. Filling up the vacant positions in these training institutions is also a big challenge since it takes a considerable amount of time to recruit TVET trainers. Revision and updating of the course-curricula is also important to make the training market responsive. At present, the public training institutions are not empowered to revise the contents of the curricula in order to make them responsive to emerging industry needs. The skills supply system should focus on the training programs based on the skills demand of different sectors. The projected labour demand for different sectors (2010 to 2050) is shown below. The public training institutions will need to be given greater academic autonomy to close down the courses in areas of the low market demand and be empowered to develop and deliver new courses in line with the skills set and job roles of the occupations of industry.

Labor Demand by Sector in Bangladesh 2010-2050 (million)											
Year	Agriculture forestry & fisheries	Mining and quarrying	Manufacturing	Electricity Gas and water	Constraction	Transport and communi- cation	Trade, hotel and restaurant	Finance & business services and real estate	Health Education public administra- tion & defense	Community and personal	Total
2010	24.31	0.09	6.34	0.09	2.46	3.78	7.94	0.95	2.18	3.22	51.36
2011	24.93	0.09	6.74	0.09	2.65	3.95	8.23	1.06	2.14	3.12	53.01
2012	25.53	0.09	7.16	0.09	2.84	4.12	8.52	1.19	2.10	3.01	54.66
2013	26.07	0.09	7.58	0.09	3.03	4.29	8.79	1.32	2.04	2.88	56.17
2014	26.73	0.09	8.04	0.09	3.25	4.48	9.11	1.46	2.00	2.75	58.00
2015	27.35	0.09	8.51	0.09	3.47	4.67	9.41	1.60	1.94	2.60	59.73
2016	27.43	0.09	8.83	0.09	3.62	4.76	9.54	1.72	1.84	2.40	60.32
2017	28.02	0.09	9.32	0.09	3.85	4.96	9.85	1.87	1.76	2.23	62.03
2018	28.62	0.09	9.83	0.09	4.09	5.15	10.16	2.03	1.69	2.06	63.81
2019	29.24	0.09	10.36	0.09	4.34	5.36	10.49	2.20	1.47	2.00	65.62
2020	29.86	0.08	10.91	0.08	4.53	5.57	10.79	2.23	1.38	2.05	67.49
2021	30.50	0.08	11.49	0.08	4.73	5.79	11.06	2.25	1.28	2.14	69.41
2022	31.29	0.08	12.14	0.08	4.96	6.05	11.39	2.29	1.18	2.24	71.72
2023	32.10	0.08	12.83	0.08	5.20	6.31	11.74	2.33	1.07	2.35	74.10
2024	32.93	0.08	13.55	0.08	5.45	6.59	12.09	2.37	0.96	2.47	76.56
2025	33.78	0.08	14.45	0.08	5.71	6.82	12.45	2.41	0.83	2.48	79.09
2030	38.33	0.09	19.68	0.09	7.11	8.13	13.47	2.60	0.98	2.63	93.12
2040	46.25	0.10	32.59	0.10	9.41	10.87	15.49	2.80	1.28	2.90	121.79
2050	43.93	0.12	50.73	0.12	10.41	12.26	19.37	2.86	1.63	13.28	154.72

Source: ADB Key Indicators 2013

The NSDP suggests clear guidelines and transparent procedures to decentralize the recruitment and selection of trainers in public training institutions. One of the key suggestions is to empower the public training institutions to locally recruit suitable qualified part time trainers and trainers on casual or fixed term contracts. The NSDP also emphasizes the needs for providing academic autonomy to the public training institutions for course revision, updating and closing down the courses which are not meeting the emerging industry needs.

There is a huge gap between the demand for skilled workforce and supply of workforce. To meet the skills gap the Government has undertaken a number of initiatives to develop institutions. The Government through its skills development projects like Skills for Employment Investment Program (SEIP), Skills and Training Enhancement Project (STEP), Bangladesh Skills for Employment and Productivity (B-SEP) and Skills and Employment Program in Bangladesh (SEP-B) has intervened in the areas of capacity building of training providers, training of trainers and managers, standard development and accreditation, curriculum development, monitoring mechanisms for quality assurance etc. The above programs and initiatives also provide supports for operationalization of Industry Skills Council (ISC), establishment of Centers of Excellent (CoE) and development of the labour market information system etc.

6. Inclusiveness, Gender and Poverty Alleviation

The development vision of Bangladesh aims at poverty reduction and improvement of living standards, improving health, quality of education, achievement of gender equality and regional balance. It emphasizes rapid growth of the economy focusing on broad participation of people and ensuring distribution of income to the poorer sections of the community. Since the people comprise diverse groups which face different realities, obstacles, and opportunities, some of these groups show a greater lack of economic and social advancement. Therefore, it is essential to identify the excluded, un-empowered and vulnerable members of the society. Some of them are women, children, ethnic minorities, persons with disabilities and other disadvantaged groups. It is well understood by the policy makers in the government and other development stakeholders that in an inclusive development framework without women participation in job market, reducing various dimensions of poverty can't be achieved.

The empowerment of women through education and training is commonly recognized as a key to reducing poverty and unlocking economic opportunities in many developing countries. Women need equal access to education and training to acquire or improve their skills which will allow them better job opportunities and improved social status. In the context of Bangladesh, it is seen that women are underutilized in the job market particularly in the non-traditional and informal sector. The employment scenario of women in Bangladesh in the job market is commonly characterized by low pay, lack of gender sensitive facilities and job insecurity.

The Quarterly Labour Force Survey 2015 shows 58.7 million of the population aged over 15 were employed in labour market of which 17 million were female, a 47% increase from 11.3 million in 2005-06. Though the female participation has increased by 47% in 2015 from the year of 2005-06, the key challenge is to substantially increase their participation in the country's labour force which is directly linked to economic growth of the country.

Efforts towards reducing gender gaps in skills training over the years through government's policies and actions created some positive impact on the ground.

However, in spite of the progress made over time in women's participation in job market, in reality women have fewer opportunities than men resulting in continued disparity between women and men and discrimination against women.

On the basis of the constitutional obligation and strong commitment in addressing gender based disparities and discrimination, the government has introduced the National Women Development Policy, 2011. The key goals of the policy are to ensure equality of men and women in all aspect of state affairs and public life, building women as human resource through education and skill development, participation of women in economic, political, social and in all other areas. The policy provides for taking appropriate steps for disabled women, minority women and create special opportunities for meritorious and creative women for utilizing their talent.

The Seventh Five Year Plan also encapsulates a strategy for inclusive growth that empowers women by creating employment opportunities, fostering the scope for greater labour force participation, particularly women supporting skill development in response to market demand, enabling access to credit for small and medium enterprises to be more productive.

In line with several sectoral policies and Women Development Policy, 2011 the government is prioritizing technical education sector in its efforts to change women into skilled human resource. In this regard the National Skills Development Policy (NSDP) 2011 has been formulated. The policy states "Women should have equal access to both formal and non-formal programs so that they can acquire or improve their skills for meaningful employment and upgrade existing employment opportunities". The policy also proposes several measures to address the gender imbalance prevailing in TVET institutions such as offering broader range of traditional and non-traditional courses to provide knowledge and skills for better employment opportunities, reviewing training programs and their delivery modes to assess their gender friendliness, conducting social marketing and awareness raising, providing separate washrooms, increasing enrollment rates of female across skills training programs, encouraging recruitment of female instructors in TVET institutions.

National Strategy for Promotion of Gender Equality in Technical and Vocational Education and Training (TVET) 2012 was also formulated in line with the NSDP guidelines. In this strategy several priority actions have been proposed. Some of them include the following:

- Reserve special quota for women at least 30 % in training courses.
- Provide gender responsive facilities and ensure safe and secure environment.
- Provide incentives and rewards to TVET institutions with higher enrolment of female, particularly in male dominated training courses.
- Introduce "motivational measures" for employers to hire women graduates from the training institutions.
- Carry out extensive social campaigning through sensitization and awarenessraising to reach out to women, families, employers and stakeholders.
- Develop social promotional measures to attract female students to market responsive male dominated training courses.
- Ensure higher inclusion and effective participation of women in decision making position.
- Engender employment policy including measures for increasing women's employment.
- Promote gender equality policies in TVET institutions.
- Set up, strengthen and develop sex disaggregated data base system.

The Government is very much keen to implement these policies and strategies for increasing women participation in the labour market by promoting skilling amongst women and make a plan to increase enrollment in skills training programs from the existing 8% to 25% within the next 10 years. A target for 40 percent female enrollment in technical and vocational education and training by 2020 has been set. In order to increase female enrollment rate in TVET, the Government has established four new Polytechnic Institutes exclusively for women in four divisions and also plans to establish additional three Women Polytechnic Institutes in Barisal, Sylhet and Rangpur and seven women Technical School and Colleges (TSCs) under the Ministry of Education.

The initiatives of the Government to enhance skill levels of women and to ensure their participation in job market have also been reflected in the various skills training programs or projects running across the country. Skills for Employment Investment Program (SEIP) being implemented by Finance Division has targeted at least 30% female of 260,0000 trainees to be trained on market responsive inclusive skills training programs by the end of December 2017 which is linked to the job placement support services. The project has also carefully addressed the issue of women participation in the pool of trainers in meeting the target of 25% of total trainers. In order to provide more equitable access to training programs being implemented across the country, special efforts have been taken. More specifically, the SEIP project is providing special stipend to address special needs of the disadvantaged groups in order to increase the participation of women, rural and remote communities, ethnic minorities and people with disabilities in the skills training programs.

Skills and Employment Program-Bangladesh (SEP-B) sponsored by the Ministry of Education is being implemented by the International Labour Organization (ILO) to focus on building the skills of workers in Garment and Construction Sectors. The key priority of this project is to ensure inclusion of women in skills development process. A total of 65,000 poor people will be trained and the training is linked to semi-skilled and skilled jobs in potential growth sectors. Out of 65,000 trainees, 60% women will be trained and placed in jobs in industry.

Government is also implementing various other programs under revenue budget for providing skills training to the women of the poorer section of the society. Ministry of Women and Children Affairs has taken an initiative to establish National Multilateral Skill Development Training Centre for women. The ministry is also operating Rural Women Skills Development Training Program at upazilla level. The Ministry of Labour and Employment has also taken a project to implement Skill Training and Employment Promotion for Women through strengthening TTCs. So gender sensitive comprehensive, broad-based and sustainable efforts are going on across the government for increasing participation of women in the job market which leads to rapid reduction of poverty and ensures inclusive economic growth.

7. Private and Public Partnership

The first PPP initiative on building skills of 300 RMG supervisors was implemented through a project titled 'Enhancement of RMG Training Facilities' at Bangla German Technical Training Center administered by the Bureau of Manpower Employment and Training (BMET). Since then, several programs have been implemented through PPP initiatives. Some of the programs are given below:

- 1. National Institute of Textile and Research (NITAR) administered by the Ministry of Textile and Jute was placed under the Bangladesh Textile Mills Industry (BTMA) as a PPP arrangement between the Government and BTMA to produce skilled manpower for the textile sector;
- 2. PPP arrangement on Char Livelihood Program (CLP), under the Ministry of Local Government, Rural Development and Cooperatives, BGMEA and BMET to train and arrange jobs of 1500 disadvantaged people in RMG;
- 3. PPP initiatives of DYD, BMET, BRDB under three different ministries with BGMEA and BKMEA to train the youth and adults;
- 4. PPP initiatives between Western Marine Shipyard, Chittagong and Chittagong TTC under the Ministry of Expatriates' Welfare and Overseas Employment to train and arrange employment of 500 shipbuilding welders;
- 5. PPP initiatives between TTCs under the Ministry of Expatriates' Welfare and Overseas Employment and Grameen Shakti for training and employment of solar technician;
- 6. PPP initiatives between Skills Development Project of the Ministry of Education and BGMEA for training 1,000Machine Operators for RMG sector which were implemented at the Technical Training Centers. The program was also linked to the job placement support services.

The Government realizes that skills are at the core of improving individuals' employment outcomes and increasing countries' productivity and growth. It is, therefore, important to develop partnership between Private and Public in the areas of skills development. This will enable the Government and industries to work together to develop occupation-specific and generic skills needed for the economy, and which will help learners find employment (including self-employment). Skills

for Employment and Investment Program (SEIP) under Finance Division, the Ministry of Finance has developed partnerships with nine leading industry associations such as Bangladesh Garment Manufacturers and Exporters Association (BGMEA), Bangladesh Knitwear Manufacturers & Exporters Association (BKMEA), Bangladesh Textile Mills Association (BTMA), Leather goods & Footwear Manufacturers & Exporters Association, Bangladesh (LFMEAB), Bangladesh Association of Construction Industry (BACI), Bangladesh Engineering Industry Owners' Association (BEIOA), Bangladesh Association of Call Centers and Outsourcing (BACCO), Bangladesh Association of Software and Information Services (BASIS), and Association of Export Oriented Shipbuilding Industries of Bangladesh (AEOSIB). The associations in six priority industry sectors have been entrusted to train around 192,400 (new entrants and up-skilling) trainees. Out of 192,400 trainees, at least 70% will be placed in gainful jobs in respective sectors.

Involvement of industry-associations in skills training helps link the requirements of industry with appropriately trained manpower. Through this PPP arrangement, active participation from the industry owners' has been ensured in the development of standards and curricula, engagement of industry trainers and independent industry assessors in carrying out training and the process of assessment. This has helped trainees to acquire market responsive employable skills to find employment.

A partnership under PPP between the Ministry of Information and Industry Associations is also planned by the project to be established through a social networking firm for a continuous advocacy program to promote skills based education and training. The Government is, in fact, playing an active role as facilitator to gear up the skills development process in order to boost up the economic growth of the country.

The private and public partnership needs to progress sequentially with private sector assuming greater roles overtime in skills development activities. Initially government will have to play the lead role in workforce development with participation of the private sector (Bangladesh model). As the workforce development is institutionalized, private sector will be in the driver seat with Government playing a supportive and trigger role (European model). Eventually

workforce development will be largely in the hand of the private sector but Government will never disappear as it will explore new frontiers with help of innovative private sector (US model). An alternative for the government is to support skill development institutions (universities, polytechnics, technical schools, colleges) where private sector (interested private companies) invest in creating bases for their own workforce development as well as for the development of general workforce that act as a pool for these companies and others (South Korea model).

8. Skills Gap at High-end

The skills gap in the industries sector has many reasons that include lack of skills of sector-specific experts, lack of training among the workers and managers, lack of adaptability with new machines and innovations, lack of institutional capacities and willingness of the industry owners for conducting training to develop workforce, lack of motivation among the industry owners for acquisition of skills from the expatriate workers and technologies; more importantly, industry owners are often influenced by the suppliers of new technologies to engage their foreign expertise.

It is recognized that shortage of high-end skills is a fundamental constraint to the design, production and marketing of the products of industry. Due to skill shortages in both technical and managerial level, a good number of foreign workers and officials are working particularly in RMG and Textile Industries. Currently more than 200,000 foreign nationals are working in various industry sectors mostly at the mid-level supervisors and higher level managerial positions to contribute to the process of manufacturing, production and marketing, and annually their take-home salaries and allowances stand nearly U\$ 5 billion.

In order to stimulate the industrial growth, productivity of low-end workers through training is not merely enough. To increase export to U\$ 50 billion by 2021 in RMG and Knitwear sector, entrepreneurs need to concentrate their focus on training of Mid-Level Managers and Supervisors. While interacting with the entrepreneurs of RMG sector and from the experience shared in various national level seminars and symposia, it has been learned that training at the mid-level managers is critically important which may boost their managerial and communicating skills with their workers as well as with foreign counterparts. It may help them to acquire required skills of the international standard and can provide a solution to the gradual replacement of the foreign nationals who are working in this country. It has also been learnt that the sense of national pride and sense of belongingness of the industry may play a vital role to take the right steps to educate and impart skills to their own industry managers and workers so that a pool of high-end technical and skilled professionals may be developed steadily for ensuring the sustainability issues in this sector.

It is necessary to initiate a comprehensive plan leading to a solution for the gradual and cumulative replacement of foreign mid- and higher level managers with Bangladeshis within their organizations by providing high end skills. To address the skills gap at the high end, it is also necessary to establish incubators for higher level managers and entrepreneurs at the private/public university. There is a need to establish a Skills University as the current National Technical and Vocational Qualifications Framework (NTVQF) does not provide desired path for the students to continue higher education in various technologies. The Skills University will establish linkage with the industries to foster job placement and promote career progression in line with the market needs. The Skills University will not only instill necessary skills and technical expertise that minimizes skills gap, but also develop an industry oriented pool of high-end skilled workforce to contribute to the economic and social development process of the country.

9. Roadmap for Skills Development

The Government has given greater importance to improving the skills development system through implementation of the National Education Policy 2010, National Skills Development Policy 2011, and Seventh Five Year Plan. These policies provide vision to add direction for skills development over coming years as they set out the major commitments and key reforms that Government will target to implement in partnership with the industry and the training providers. The projected training targets for different sectors are given below:

Projected Training Targets by Sector in Bangladesh 2013-2050 (Million)

Sector	2013	2015	2020	2025	2030	2040	2050
Agriculture, forestry & fisheries Mining and quarrying	0.261	0.273	0.298	0.337	0.383	0.462	0.439
Manufacturing							
1. RMG	1.000	1.125	1.442	1.910	2.602	4.308	6.706
2. Leather	0.070	0.079	0.101	0.134	0.182	0.302	0.469
3. Light Engineering	0.200	0.225	0.288	0.382	0.520	0.862	1.341
4. Textiles	0.250	0.281	0.361	0.478	0.650	1.077	1.677
5. Pharmaceutical	0.003	0.003	0.004	0.006	0.008	0.013	0.020
6. Shipbuilding	0.025	0.028	0.036	0.048	0.065	0.108	0.168
7. Ceramics	0.004	0.005	0.006	0.008	0.010	0.017	0.027
8. Furniture	0.070	0.079	0.101	0.134	0.182	0.302	0.469
9. Food Manufacturing	0.010	0.011	0.014	0.019	0.026	0.043	0.067
10. Other Manufacturing	0.431	0.485	0.622	0.824	1.122	1.858	2.892
Electricity, Gas and water	0.047	0.046	0.043	0.040	0.044	0.049	0.062
Construction	0.303	0.348	0.455	0.573	0.714	0.944	1.045
Transport and communication	0.214	0.233	0.278	0.341	0.406	0.543	0.613
ICT	0.500	0.563	0.721	0.955	1.301	2.154	3.353
Trade, hotel and restaurant	0.095	0.101	0.116	0.134	0.145	0.167	0.208
Tourism and hospitality	0.004	0.005	0.008	0.013	0.020	0.052	0.136
Finance & business services and	0.071	0.088	0.122	0.132	0.143	0.153	0.157
real estate							
Health, education, public	0.055	0.053	0.038	0.023	0.027	0.035	0.044
administration & defence							
Community and personal	0.014	0.013	0.010	0.013	0.013	0.015	0.067
Overseas employment	0.389	0.335	0.660	0.504	0.368	0.296	0.365
Domestic	3.627	4.045	5.064	6.502	8.563	13.464	19.961
Total	4.017	4.380	5.724	7.006	8.932	13.760	20.326

Source: Asian Development Bank (staff estimates)

The Government through its various skills development projects has commenced different activities to reform the skills development system for ensuring flexible and responsive delivery mechanism, promoting skills training program through social

networking by providing a key message that skills based education is not a second choice, improving access for underprivileged groups including women. The Government has already developed partnerships with the national industry associations of priority sectors to ensure effective training delivery mechanism involving two industry trainers in each course to maintain teacher-student ratio 1:12. The partnership also ensures the implementation of management training for the TVET principals, training of trainers on skills and pedagogy, and training of industry assessors. For institutional capacity development, government operated projects have also extended supports by providing equipment and tools in line with the standards being followed in the public training institutions. Selected public training institutions have been given authority to engage industry experienced trainers and job placement officers for ensuring market responsive skills training linked to semiskilled and skilled jobs in industry.

In the budget speech for FY 2015-2016the Honorable Finance Minister, indicated that a sum of BDT 100 crore would be earmarked for skills development in Bangladesh. This has recognized the national importance in support of skills development to empower the individuals to obtain gainful employment and ensure Bangladesh's competitiveness in the global market. The Government also focuses on the access and vertical mobility of underprivileged group and marginalized segments of the population so that these groups can actively take part in the economic development process. The Government is planning to establish National Human Resource Development Fund(NHRDF) and the National Skills Development Authority (NSDA) to address the skill needs of the industry in order to increase economic growth. It will extend support to operationalize the Industry Skills Councils (ISCs) in various sectors. The project will strengthen sector planning by reviewing MTBF allocation for skills development for all sector ministries and improve NSDC coordination for activities and results monitoring. A framework for sector wide approach (SWAp) to skills development will be developed and approved to support a common policy, sector financing and monitoring and coordination framework and mechanism. The Government will extend support to more industry sectors in order to enhance their capacity in terms of growth and competitiveness.

9.1 Government Initiatives for Skills Development

The government is now giving highest priority and required resources for human capital development to producing educated and skilled manpower for ensuring accelerated economic growth. Major plans and activities which are now underway have been listed below:

- Establishing National Skills Development Authority (NSDA) to look after the administration of skills ecosystem separating from the TVET training
- Establishing Human Resource Development Fund (NHRDF) for mobilizing additional resources for skills development
- Addressing the managerial skills gap at the mid and higher levels
- Reviewing MTBF allocation for skills development for all sector Ministries
- Establishing SWAp for private sector involvement in skills training
- Diversifying technical and vocational education programs to meet the technical manpower needs in local and international labour market
- Encouraging women's participation in TVET to empower them to play active role in economic development process
- Capacity enhancement and modernizing the existing public training institutions
- Encouraging private sector involvement in skills development process
- Establishing 40 Upazila level Technical Training Centers and one Institute of Marine Technology to ensure skill training in rural areas
- Establishing 68 District Employment and Manpower Offices (DEMOs)
- Training arrangements for potential female migrants
- Operationalizing Industry Skills Council (ISC) to develop standards, assessors and trainers for the respective industry
- Establishing Centers of Excellence (CoE) in priority sectors for conducting high-end training and research for development of the sector

9.2 Skills Development Plan for Migrant Bangladeshis

A large number of Bangladeshis are living and working abroad. According to BMET, more than seven million Bangladeshis are working in as many as 161 countries all over the world. Countries in the Gulf region received the most number of expatriate Bangladeshis. Saudi Arabia alone accepted 2.73 million Bangladeshis so far, making it the largest Bangladeshi diaspora community. On the other hand, Bangladesh is also one of the largest labour suppliers to the Gulf region. Majority of the expatriates living in those countries are engaged in menial work with meagre earning as they do not have required skill. It would be beneficial for them to enhance their productivity through arranging skill training in the applicable sectors of the destination countries.

One way of doing this is through expanding training and job placement support beyond domestic market, particularly in the Middle Eastern region where the expatriate Bangladeshis are large in number. The Bangladeshi migrant workers who are involved in low-paid, unskilled jobs may be given skills training in the appropriate sectors to place them on better jobs. Market responsive trades/courses will have to be selected for the training program. Considering the fact that most of the targeted trainees are already working in some places, time schedule for skills training should have flexibility to facilitate the migrant workers' attendance beyond their working hours. Training program for them should be arranged after working hours or during weekend. Recognized training centers will be assigned for providing training and they will be responsible for ensuring suitable jobs for the trainees. Obviously the training centers will have to follow suitable curricula approved by the appropriate authority of the destination country. The issue of Recognition of Prior Learning (RPL) may also be addressed through such training and certification process.

New initiative is required on the frontiers of skill development and qualification recognition for the Bangladeshi migrant workers in the destination country. In this regard, the Government is planning to conduct a survey on the overseas employers to identify the market demand in various sectors. An internationally reputed organization will be engaged to undertake such survey in selected countries. The Government is also planning to involve Bangladesh Missions located in the destination countries to collaborate with the recognized organizations in this regard.

Based on the findings, the Government will organize skills training on pilot basis in selected sectors in collaboration with BMET and reputed international organizations. This will facilitate higher skills with recognized certification and this will help migrant Bangladeshis to move up the value chain with higher salary.

9.3 Addressing the Skills Gap at Mid-level and Higher end

The Government is initiating a comprehensive plan to address the skills gap at the mid and higher end. The comprehensive Education Policy, 2010 emphasizes new ideas about strengthening and scaling up TVET in terms of access. One of the recommendations called for a massive expansion of TVET by expanding technical—vocational teachers' capacity by creating a technical university in the country to provide extensive introduction of apprenticeship and practical knowledge blended with theory.

There is always a gap between theorists, academia and the practitioners either in general or technical education at tertiary level. Even the engineering universities, engineering colleges and polytechnic institutions are hesitant to create access for their students to perform On Job Training (OJT) at relevant industries. Establishing specialized Skills University could bridge the two communities and can create sustainable impact and interdependence among them to contribute to this sector. But setting up a Skills University would take time and an alternative has to be expeditiously found out.

In the above context, two or three incubators may be set up in reputed private universities on a pilot basis in the short run for skills and entrepreneurship development. Incubators will support fresh graduates and in-service managers in developing managerial and entrepreneurial skills and will provide tailored support for early-stage, high-growth businesses and ideas. It also creates a virtuous cycle of job creation, university-industry collaboration, revenues for local businesses and for governments and show tangible benefits of immediate academic "impact" on industrial growth.

After gathering the incubators experiences finally a Skills University may be established which will not only instill necessary skills and technical expertise that minimizes skills gap but also develop an industry oriented pool of high-end skilled workforce who will be able to contribute significantly to the economic and social development process. The university will also link academia with the industry sectors to foster job placement and promote career progression as per contemporary market demand.

10. The National Human Resource Development Fund (NHRDF)

In order to accelerate economic growth to a higher trajectory, Bangladesh needs to convert its large working age population into productive human resource through enhancing their skills level. There is increasing demand for resources to meet the growing needs for skill development. In this context, the Government has decided to establish the National Human Resource Development Fund (NHRDF) in conformity with the National Skills Development Policy 2011.

Many countries in the world such as India, Malaysia, Singapore, etc. have created similar Funds with a view to developing their human resource. This type of 'Fund' works as a dedicated and continuous source of financing, in addition to normal government budgetary channels, and has become a common means and vehicle towards supporting skill development activities in those countries. Experiences from different countries show that financial support is needed for mainly four kinds of activities in skill development. First, for the segment of the people that do not have the ability to pay for skills training, grant-based schemes have to be introduced and continued. Second, for advancement and popularization of different elements of skills training such as advocacy, certification and assessments. Third, for initial support to create sustainable models of skill development; and fourth, for establishment of a contingent fund for mitigation of potential risks.

Main objective of the Fund will be to ensure uninterrupted funding for the creation of a skilled workforce in line with the demand for domestic and international markets. The other objectives may include:

- (a) Unify and coordinate various sources of finance;
- (b) Mobilize resources from diversified sources;
- (c) Finance pre-employment and up-skilling training systems and capacities;
- (d) Facilitate access to training to women, physically challenged and the disadvantaged groups;
- (e) Enhance quality of training through setting criteria for selection of training providers and performance conditions;

- (f) Develop competitive training market and reduce cost of training;
- (g) Build co-operation among employers and training providers.

Resources for the fund may be generated in various ways which include government contribution, financial support from development partners, levy fund contributions including grant, cost reimbursement and exception or rebate schemes. Common practice is to combine revenue from different sources into a single Fund that is distributed in varying amounts to different stakeholders, based on perceived priorities and needs. NHRDF may receive funds from one or more of the following sources:

- (a) Grants from the Government;
- (b) Contribution from the Development Partners;
- (c) Contribution of business entities from their Corporate Social Responsibility (CSR) fund;
- (d) Payroll levy from the industries and enterprises (levy will be the major source as the industries and enterprises are the prime beneficiaries of the Fund. However, it may commence at a later stage, perhaps 5 years after the introduction of the Fund. An act of the parliament will be required to this effect);
- (e) Subscription from the recruiting agencies equivalent to their license issuance and renewal fee:
- (f) Donations by private enterprises/individuals;
- (g) Income from investment of surplus fund;
- (h) Any other sources.

Resources of the Fund will be used for market responsive skills development related activities in conformity with the National Skills Development Policy (NSDP) 2011. The major scope of operation of the Fund will be as follows:

- (a) The Fund will support pre-employment and up-skilling, skills training of particular groups like female, physically challenged people, disadvantaged groups, etc;
- (b) The Fund will be disbursed to training providers of different sectors based on their priorities determined by the Government, skill needs and outcome based performance;

- (c) A framework will be developed by the government to finance the skills development training activities to be imparted by skills training providers both in public and private sectors to achieve the goal of skills development as determined by the NSDP 2011;
- (d) The Fund may finance initiatives relating to twinning arrangement with international organizations to ensure international standard and recognition;
- (e) The Fund will facilitate the recipient institution/organization in terms of technical and financial operability;
- (f) The Fund may finance various studies for exploring skills requirements in the domestic and overseas markets;
- (g) Any other suitable financing proposal may be considered by the Government on the basis of the merit and appropriateness of the case.

The Fund will finance skills development training activities both for new entrants in the job market and for up-skilling of existing workforce. Disbursement of the Fund will be linked to the performance of the training providers. Financial assistance from NHRDF may be channelized for training through different windows like:

- (a) Public sector training providers;
- (b) Industry Associations;
- (c) Industry Skills Councils (ISCs);
- (d) Private sector training providers including NGOs with proven track record;
- (e) Any other institution recommended by the Government.

The Fund will be a 'limited company' (owned by the Government) to be registered under the Companies Act, 1994 as an entity 'not for profit' after getting approval from the Cabinet. There shall be a Board of Directors of the NHRDF members of which will be appointed by the Finance Division, Ministry of Finance. The Board of Directors will be comprised of one Chairman, five members from the public sector and five members from the private sector.

NHRDF will contribute to the skilling and up-skilling of workforce creating a competitive environment leading to capacity building of training providers. Establishment of NHRDF will be an effective step in the structural reform initiatives in skill development system and help achieve the objectives of NSDP 2011.

11. National Skills Development Authority (NSDA)

In order to support achieving rapid and inclusive growth through enhancing individuals' employability and the ability to adapt to changing technologies and labour market demands, it is now critical to bring the entire scope of skill development activities under one regulatory umbrella. This will bring together all aspects of skills administration into a single unified central Government structure overarching the whole skills eco-system. The Government plans to establish the "National Skills Development Authority (NSDA)" to ensure better integration, coordination of skills training being imparted by the 23 Ministries and Divisions, accreditation of competency based training courses, assessment, certification and effective monitoring.

11.1 Justification of Establishment of NSDA

The prime justification of establishing NSDA is to separate the administration of skills development training from the technical education similar to many countries. In Bangladesh technical education cannot fully cater the needs of industry skills requirement. To make people - even the technical graduates - fit for the industry requirement, additional skills training is needed in most cases. Skills development training is a vast area in Bangladesh which is very partially addressed by the Bangladesh Technical Education Board (BTEB). BTEB has capacity constraint to equally look after technical education and skills training. BTEB is now certifying basic courses with a duration of 360 hours, long-term certificate courses like SSC Vocational, HSC Vocational and Diploma (Polytechnic) level courses which do not, in fact, satisfy the requirements of all skills trainings of different duration being run by different training institutions across the country.

The existing capacity of the Bangladesh Technical Education Board (BTEB), its five quality assurance manuals and course accreditation document are not sufficient for the skills development activities. With the current capacity of BTEB, it can assess and certify a maximum number of 5,000 trainees annually who complete competency based training (CBT) for achieving the qualification levels under NTVQF. More specifically, the initiatives of the Government have facilitated the

Skills development projects in Bangladesh to address the skills mismatch prevailing in labour market. The proposed Authority will ultimately set standards for all skill training courses in collaboration with the respective industries and Industry Skill Councils (ISC), arrange assessment and certification for them alongside other tasks. Like other Education Boards, BTEB will fully concentrate on certifying the formal vocational and technical education.

11.2 Objectives of the NSDA

The NSDA will ensure achievement of the following objectives in order to develop high quality, market responsive skills:

- (a) Effective coordination and partnerships among different ministries, public and private training providers and national industry associations;
- (b) Opportunities for all to acquire skills throughout life, especially for youth, women and disadvantaged groups and at all levels of the skills value chain;
- (c) Commitment by all stakeholders to skills development initiatives
- (d) A high-quality and skilled workforce (workers and entrepreneurs) relevant to current and emerging employment needs, promoting productivity and quality;
- (e) The establishment of flexible delivery mechanisms that respond to the requirements of a wide range of needs of stakeholders;
- (f) A real time online Labour Market Information System linked to responsive training delivery;
- (g) International recognition of the skills of Bangladeshi workers especially in key migrant worker destinations;
- (h) Sector wide Approach (SWAp) to ensure timely and adequate availability of financing across the skills sector.

11.3 Establishment of the Authority

The National Skills Development Authority will be established by an act of the parliament and will be functional by subsequent rules to be framed under the act. The authority may emerge upon the existing structure of NSDC Secretariat with

additional wings and functions added to it by law. To promote coherence across ministries it will be important for the NSDA to be located outside any line ministries who are involved in skills training and workforce development. It may be placed under any central ministry or division of the government like Prime Minister's Office, the Ministry of Finance, Cabinet Division or Planning Division as decided by the Cabinet. One of the wings of NDSA will provide secretarial support to NSDC and EC-NSDC.

11.4 Functions of the Authority

The functions of the NSDA will be, but not be limited to, the following. The NSDA will

- (a) Integrate, coordinate, regulate and monitor skills development programs, while promoting collaboration and partnership among all stakeholders;
- (b) Promote leadership of workforce development by industry and employers;
- (c) Work with Industry Skills Councils (ISCs) to ensure standards and training requirements;
- (d) Approve national competency standards and qualifications including assessment requirements;
- (e) Develop a registration, accreditation, and monitoring system for institutions and other training agencies involved in skills development;
- (f) Delegate to the Industry Skills Councils and to key Ministries, the carrying out of institutional registration, program accreditation and student/trainee assessment;
- (g) Issue certificates through workforce development programs;
- (h) Promote the quality and responsiveness of training institutions throughout the country;
- (i) In association with the Industry Skills Councils, develop and maintain a pool of trainers and assessors to ensure quality training, assessment and recognition of certificates awarded;
- (j) Make necessary reforms in the apprenticeship program so as to promote structured training in workplaces;

- (k) Develop and administer training incentives;
- (l) Conduct surveys, studies, policy and action research to collect labour market information for creating opportunities for greater employment for the trained workforce;
- (m) Provide secretarial supports to the NSDC and ECNSDC;
- (n) Monitor regularly the skills training institutions, ISCs and CoEs to help them improve their standards;
- (o) Maintain liaison with BTEB, BMET and other similar organizations to promote coordination and coherence in workforce development and certification;
- (p) Prepare national strategies and action plan to develop mid-level supervisors, higher-end managers and entrepreneurs;
- (q) Introduce twining arrangements with recognized international agency/organization to achieve recognition for the skills of the Bangladeshi migrant workforce etc.

Conclusion

Bangladesh is now well placed to enjoy the demographic dividend with a large population of 160 million, the average median age of which is only 26. For moving the economic growth to a higher trajectory Bangladesh needs to convert its large working age population into productive human resources through enhancing their skills level. Skill sets are critical for productivity, industrial growth, export diversification and producing high value products.

Highest priority has been attached in the Seventh Five Year Plan (SFYP) for reaping demographic advantage of the working age population for the next couple of decades. It is recognized that businesses will require a huge number of skilled workers, particularly the industry and service sectors in order to sustain economic growth as well as drastically reduce poverty. The SFYP has focused on two strategic issues for addressing the skills constraint to growth acceleration: (i) skills mismatch, and (ii) skills deficiency of migrant workers. To minimize the skills mismatch and skills deficiency of migrant workers, the seventh plan suggested a number of priority actions which will be implemented during 2016 to 2020.

Currently, a total of 23 ministries/divisions are involved in skills training to address the skills needs of labor market. Besides, private training providers are also providing training with the financial assistance of the government and development partners. There is little coordination among the ministries, private training providers and job market requirements. One of the major objectives of the National Skills Development Policy is to make more effective planning, coordination, and monitoring for skills development activities by different ministries, development partners, industries, public and private training providers. The Government is planning to establish a 'National Skills Development Authority (NSDA)' for meaningful integration, effective coordination and appropriate planning for the entire skills ecosystem in Bangladesh.

Establishment of the 'National Skills Development Authority (NSDA)' will also ensure accreditation of competency based training courses, assessment, certification and effective monitoring. Government's decision to establish the National Human

Resource Development Fund (NHRDF) in conformity with the National Skills Development Policy, 2011will extend continuous support to pre-employment training as well as up-skilling of the existing workforce with particular attention to female, physically challenged and disadvantaged groups.

Overseas employment is another important area that contributes largely to the economy of Bangladesh. It is recognized that Bangladesh economy essentially depends on remittance sent by migrant workers which is one of the main sources of foreign currencies. Currently more than seven million Bangladeshi workers are working worldwide of which 52% are less-skilled. Inflows of remittance could have been larger if the migrant workers had been skilled, indicating the necessity of skills development program.

It is well known that the Total Factor Productivity (TFP) plays a key role in economic growth. In order to increase the TFP, Bangladesh needs to improve its current low level of human capital by enhancing investment in health, education and skills. An important growth driver is expanding labor force along with their quality. The faster expansion of the labor force is caused by rising share of population in the working age group of 15 plus and increasing participation of female workforce. However, quality of labor force has remained poor (around 40% of the workforce had no education and 23% had only primary level education in 2010). These indicators are indicative of a very low skilled workforce. Policies/strategies and plans should be designed in such a way so that it can address both the issues of - increasing labour supply and their low skill. Hence, the investment in education, vocational and skills training needs to be raised from current level to the level it is planned so that the outcome of it is visible in all spheres of the economy. Strategies adopted to enhance participation of female labor force including greater opportunities for wage employment and self-employment need to be implemented with appropriate coordination among the stakeholders. There is, of course, a need to establish link between educational institutions and industries so that the former can cater the skill needs of the latter. Since, skill development is not an independent or isolated issue it requires concerted efforts and holistic approach for its proper implementation and application in order to reach the desired goal of attaining faster economic growth.

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