

A situational analysis on skills development - policies, practices and projects

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Abbreviations

ADB	Asian Development Bank
BIMT	Bangladesh Institute of Marine Technology
BITAC	Bangladesh Industrial and Technical Assistance Center
BMET	Bureau of Manpower Employment and Training
BRAC	Bangladesh Rural Advancement Committee
BSCIC	Bangladesh Small and Cottage Industries Corporation
BTEB	Bangladesh Technical Education Board
DTE	Directorate of Technical Education
DYD	Department of Youth Development
EC	European Commission
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
GoB	Government of Bangladesh
HRD	Human Resource Development
ICT	Information and Communication Technology
ILO	International Labour Organization
MoEWOE	Ministry of Expatriates' Welfare and Overseas Employment
NGO	Non- Government Organization
NSS	National Skill Standard
OJT	On the Job Training
SDC	Swiss Agency for Development and Cooperation
SSC (Voc)	Secondary School Certificate (Vocational)
TSC	Technical School and College
TTC	Technical Training Center
TVET	Technical and Vocational Education and Training
UCEP	Underprivileged Children Education Program
VTI	Vocational Training Institute
WTC	Women Training Center

1.00 Introduction:

The Constitution of Bangladesh expresses that “*The state is responsible for development of human resources of the country irrespective of gender, and to assist in employment as per the capabilities of every citizen.*” Bangladesh is a country with the population of about 140m and the labour force being about 60m. Technical and Vocational Education and Training (TVET) is indispensable for the development of human capital of this country. In the 6th five year Plan Document emphasis has been given to the enhancement of skills through “*Improvement of the percentage of vocational and technical graduates obtaining employment both in the domestic and international markets*”. This paper has been prepared to portrait the situational analysis on skills development, present policies, practices and projects.

2.00 Skills development Training of Bangladesh:

Education, Skill Training System and Labour Force

Public TVET in Bangladesh is delivered by institutions belonging to 19 ministries (annexed in appendix 1). A large number of private institutions deliver training courses commercially. Hundreds of large and small NGOs offer skills training through short courses. Industry bodies provide training as per the needs of relevant enterprises. Some industrial enterprises supply semi-skilled and skilled workforce through the on-the-job training. Employers prefer recruiting apprentices and helpers who develop skills through work practice rather than formal training. The workers sometimes prefer to learn a trade while working because of immediate earning and employment opportunity. A few recruiting Agencies for the overseas employment market are operating training institutes to cater to the needs of the Foreign Employers. Some agencies have established centers under joint-venture with the employers of Singapore particularly in Construction and Marine related trades.

The present education system of Bangladesh is divided into three major stages - primary, secondary and tertiary education. Grade I-V level education is administered by the Ministry of Primary and Mass Education (MoPME). Junior, secondary and higher secondary level institutions impart secondary education. The Degree, Masters and other higher-level qualifications are awarded by the tertiary educational institutions. All these educational areas are supervised by the Ministry of Education (MoE). The TVET starts after the completion of Grade 8 and continue up to graduate level. Many general education students drop out after completion of primary education. This vast group is not entitled to enroll in any formal TVET course. Usually they have to join the labour market without any training below the legal working age (15 years). The national skills development system and formal qualifications needs to accommodate these youth.

The national labour force increases annually by roughly 2.5 m. people most of whom are youth. Although around 3.5 m youth are entering the legal working age (15 years) only 2.0 m of them join the labour force as large groups of youth remain in general education and other streams of learning such as informal apprenticeships.

Structure of TVET providers and their training capacity

In Bangladesh, many Ministries and agencies deliver formal and informal skills training in the context of industry and community development. Many private training organisations, NGOs and donors also deliver skills training, both formal and informal. Skills training also occurs on-and-off the job in enterprises, and as pre-departure training for expatriate workers.

National Skills Development Council (NSDC):

The NSDC is the tripartite apex forum where representatives of government, employers, workers and civil society provide leadership and clear direction to the skill development system in Bangladesh to oversee and monitor all activities of public and private training providers related to skills development and training.

National Technical and Vocational Qualifications Framework (NTVQF)

The NTVQF has been approved by the NSDC as qualifications in the country to better reflect the changing occupational and skill profiles in both domestic and international labour markets. NSDC is responsible to ensure that gradually training organizations upgrade their curriculum to align it with the NTVQF as follows:

NTVQF Levels	Pre-Vocation Education	Vocational Education	Technical Education	Job Classification
NTVQF 6			Diploma in engineering or equivalent	Middle Level Manager /Sub Assistant Engr. etc.
NTVQF 5		National Skill Certificate 5 (NSC 5)		Highly Skilled Worker / Supervisor
NTVQF 4		National Skill Certificate 4 (NSC 4)		Skilled Worker
NTVQF 3		National Skill Certificate 3 (NSC3)		Semi-Skilled Worker
NTVQF 2		National Skill Certificate 2 (NSC 2)		Basic-Skilled Worker
NTVQF 1		National Skill Certificate 1 (NSC 1)		Basic Worker
Pre-Voc 2	National Pre-Vocation Certificate NPVC 2			Pre-Vocation Trainee
Pre-Voc 1	National Pre-Vocation Certificate 1 NPVC 1			Pre-Vocation Trainee

Bangladesh Technical Education Board (BTEB)

BTEB regulates admission, curricula and testing ensuring the quality assurance of the skill training system through accreditation of courses and registration of training providers.

Directorate of Technical Education (DTE) under the Ministry of Education supervises more than 120 institutions at different levels. Major training institutions and courses to deliver TVET supervised by the DTE are as follows:

	Institutions	Courses
1	Technical Schools and Colleges (TSC) ¹	2-year SSC (Voc) with entry qualification of Class VIII 2-year HSC (Voc) after the completion of SSC (Voc)
2	Polytechnic Institutes Monotechnic Institutes	4-year Diploma programs
3	Technical Teacher Training Center (TTTC)	Instructor training programs mostly for polytechnics
4	Vocational Teacher Training Institute (VTTI)	Teacher training for TSCs

Bureau of Manpower, Employment and Training (BMET) delivers skills training through 37 *Technical Training Centres* (TTCs) and one Institute of Marine Technology (BIMT). Six TTCs are reserved exclusively for women. TTCs offer a 2-year course (SSC voc.) in 31 different basic engineering trades; while the BIMT offers 4-year Diploma courses and 2 years certificate courses. Besides regular courses, short courses, language courses, special courses targeting to foreign employment and many evening skills upgrading courses on request of employers, are also conducted at TTCs.

Training programmes supervised by BMET involves Diploma in Marine Engineering, Diploma in Shipbuilding Engineering, Drafting Mechanical, Drafting Civil, General Mechanics, Machine tool operation, Machinist, Welding and Fabrication, Automotive, Electrical, Wood working, Civil Construction, Refrigeration & Air conditioning, Electronics, Plumbing & pipe fitting, Garments, Marine Diesel Artificer, Ship Building & Welding (arc & gas), Ship building & Mechanical Drafting, Shipwright /Platter, Computer, Architectural Drafting with AutoCAD, Electrical Machine Maintenance, House Keeping, Plastic Technology, Pattern making and cutting, 6G welding, Auto CAD (3D), Graphics design, Suttering, Block and Boutique, Rod binding, Tiles Fixer, Knitting and Linking operator, Mechanical Fitter, Sewing Machine Maintenance, Mid-level supervisor in garments

Major Public Institutions to provide skill development training are as follows:

¹ *Technical School and Colleges (TSC)* provide SSC (Vocational) and HSC (Vocational) courses. The courses include: general electrical, refrigeration and air conditioning, automotive, turner, general mechanic, machine tool operator, audio-VDO operator, welding, farm machinery, dress making and tailoring. Graduates from TSCs can get admission into higher studies or can be engaged in employment.

Institutions	
1.	Polytechnic Institutes
2.	Technical School and College (TSCs)
3.	Technical Training Centers (TTC)
4.	Youth Development Centers
5.	Agricultural Training Institutes
6.	BRDB Training Centers
7.	Textile Vocational Institutes
8.	BSCIC Training Center
9.	Glass & Ceramic Institute
10.	Graphic Arts Institute
11.	Survey Institutes

Ministry of Youth and Sports through its **Department of Youth Development (DYD)** provides training mostly in basic skills through 47 national Youth Training Centers and mobile training facilities in technical trades, secretarial courses, dressmaking, block and boutique, printing, pisci-culture, livestock rearing, poultry, etc. DYD is also operating self-employment schemes for youth by offering training in a variety of skills, such as welding, electrical wiring, radio and TV repair, garment making, dairy farming and poultry.

Training centres operated by the Department of Youth Development

SL.#	Institution
01.	National Youth Center
02.	Technical Training Centres
03.	Livestock, Poultry and Pisciculture Training Centres
04.	Dress-making Training Centres
05.	Block and Batik Printing Training Centres
06.	Secretarial Science Training Centres
07.	Central Human Resource Development Centre
08.	Zonal Human Resource Development Centre

Source: Ministry of Youth & Sports

Ministry of Women and Children Affairs is involved in skill development through its training centers under the Department of Women's Affairs which operates different training centers offering the courses on Embroidery, Tailoring, Batik, Tie-Dye, Handicrafts, Duck and poultry rearing, Fish cultivation, Agro-based training, Computer application, Graphics and Design Web page Design etc.

Informal Technical and Vocational Training

Training delivery by the NGOs

A number of NGOs are operating skill training programs in various fields like Livestock rearing, Crop production, Fish culture, Garment, Computer, Handicrafts, Electronics, Surveying, Block/Boutique, Book Keeping, Integrated Agriculture, Refrigeration & A/C, Driving, Poultry, Electrical, Nursery, Farm Machinery, Carpentry, Auto Mechanic, Welding, Plumbing, Mobile Servicing, Fitting, Communicative Language, Civil Estimation and Knitting are most important. Course duration for the engineering subjects is longer than that of

the agricultural subjects. Major NGOs in skill training are BRAC, Proshika, ASA, TMSS etc.

Non-formal training courses offered by the private providers at upozila level

Non formal training is normally subjected to no age limit and educational background. Some private training providers offer training courses on computer, sewing, electrical, secretarial science, mobile servicing, garment, refrigeration, farm machinery, book keeping, electronics, driving, crop production, welding etc.

Skills Development for Overseas Employment

Training for the overseas market is another aspect of importance. Skilled and Semi-skilled migrants are increasing in numbers every year. It also facilitate the demand in the overseas labour market. The trade-wise demand in the overseas market are mostly in Production Operator, Driver, Factory Worker, Mason, Carpenter, Electrical Technician, Welder/Fabricator, Painter, Steel Fixer, Plumber, Tiles Fixer, Pipe Fitter, etc. The flow of skilled manpower is an important factor in the skill training system and labour markets. The future growth of remittances from expatriate Bangladeshi workers is clearly linked more skilled migration which emphasize skill development training. Nationally recognised and consistent qualifications shall be available to expatriate workers to gain the recognition and better remuneration in overseas markets.

3.00 Policies and Strategies relating to Skill Development Training:

There are several policies relating to skill Development Training in Bangladesh. Recently NSDC approved the **Skill Deveopmet Policy 2011** of Bangladesh. The policy has emphasized the planned development of skills in Bangladesh for economic, employment and social policies to enhance national development in a coherent fashion. National Skills Development Policy represents the attempt to develop a cross-cutting policy agenda for skills development. The policy also extends and builds on other major government policies such as the Education Policy 2009, Overseas Employment Policy 2006, the Non-Formal Education Policy 2006 and the Youth Policy 2003. National Skills Development Policy provides the vision and direction for skills development over the period 2010-2015 as it sets out the major commitments and key reforms that government will implement in partnership with industry, workers and civil society. It aims to emphasise the varied types of formal and non-formal training involved in skills development beside state controlled TVET systems to manage its human resources more effectively.

Vision of the policy has been set as follows:

“Skills development in Bangladesh will be supported by government and industry as a coordinated and well planned strategy for enterprise and national development. It will empower all individuals to access decent employment and ensure Bangladesh’s competitiveness in the global market through improved skills, knowledge and qualifications that are recognised for quality across the globe.”

It aims:

- a. Enhancing individuals' employability (wage/ self employment) and ability to adapt to changing technologies and labour market demands;
- b. Improving the productivity and profitability of enterprises;
- c. Strengthening national competitiveness and reducing poverty;
- d. Improving the quality and relevance of skills development in Bangladesh;
- e. Enabling more effective planning, coordination and monitoring of skill development activities by different ministries, industry and public & private TVET providers.

6th Five year plan (SFYP) and Strategy for Training

Current most important strategy paper of the government is the 6th Five year plan document. Regarding skill development and employment generation issue it has emphasized –

- Creating good jobs for the large pool of under-employed and new labor force entrants by increasing the share of employment in the industrial sector from 17 percent to 25 percent.
- Increasing the contribution of factor productivity in economic growth to 10 percent.
- Overseas employment of skilled labour to be increased from 35% to 50%

Issues and Challenges

Based on a recent Labor Force Survey (2005-06), the working age population in Bangladesh is about 54 million (age 15 years and over). About half of **this population, have not been subjected to any formal education**, either at the primary level or lower, and women mostly fall within this category.

Most of the workers in **Bangladesh are employed in the informal sector**, with agriculture as the major sector of employment. The informal sector provides some 78 percent of total employment, of which 48 percent is in agriculture.

Overseas employment of poorly skilled workers has also become a significant source of employment. Every year, about 500,000 Bangladeshis migrate abroad. Some 8 million people of Bangladeshi origin are living and working abroad presently.

Skill development training is still only around 2 percent of enrollment after grade 8. The availability of trained labor remains a problem. Additionally, there is a mismatch between available jobs and required skills. The training content and quality are not valued highly in the market. Sometimes trained workers remain unemployed or cannot find employment in their area of training. It indicates mismatch and quality of training.

Training Strategies and Policies

The Government policies and goals are to increase substantially the proportion of post-primary students enrolling in VTE. The equity effect of this expansion is dependent on three interconnected questions: (a) the extent of the programs towards the disadvantaged and poor segments of the population, (b) effective programs in imparting in sellable skills, and (c)

impact of the training programs on increasing employment opportunities and raising income of the poor.

The Skill Development Council considers the following strategic approaches during the Sixth Plan:

- Strengthening the role of public sector skill training through expansion and modernization of VTE to meet market demands and extend greater benefits to the poor and women
- Improving the link between training and job markets.
- Improving the positive effect on poverty reduction by targeting new clientele.
- Improving efficiency and quality of programs by stressing standardization of certification.

To achieve the poverty reduction and MDG-related targets, Bangladesh tries to build sound foundation of economic development. The Industrial Policy of 2005 has identified several sectors as priority and thrust sectors, It also needs upgrading the skills and competencies of human resources. The technical and vocational education and training (TVET) system has a large role to play in economic growth and social development as provider of trained human resources to the labor market and the aspirant job seekers.

Inflow of foreign remittances is a major safety net program in Bangladesh. In 2011, more than 0.56million people have been engaged in overseas employment in 143 countries and country received US \$ 12.17billion as remittances. Remittance is now contributing 11.15% to the GDP which is 6 times of ODA and 13 times of FDI. The overseas labor market is highly competitive. About half of the current deployment of Bangladeshi workers is unskilled. An effective TVET system can increase the proportion of semi-skilled and skilled workers by internationally-benchmarked competency standards and training systems.

Over time, the government will move to ensure that all migrating workers are certified against the NTVQF, either through occupation specific courses or through the Recognition of Prior Learning at government registered testing centres. TVET can also be made much more relevant to the informal sector. A number of NGOs have successful training programs catering to the informal rural sector and achieving high employment rates. The NSDC plans to develop a strategy to increase the participation of women in skills development for overseas employment.

4.00 Projects relating to Skill Development Training:

A good number of projects are being implemented by different Ministries with a view to strengthening the skill training system of Bangladesh. The major ministries in this regard are the a) Ministry of Education, b) Ministry of Expatriates' Welfare and Overseas Employment, c) Ministry of Youth and Sports, d) Ministry of Women and Children Affairs, e) Ministry of Social Welfare.

These projects are mostly aimed to

- a) Expansion of training capacity for skill development training through establishment of new training centers;²
- b) Introduction of new courses and upgrading the existing courses;
- c) Modernising and renovation of existing Training Institutes;
- d) Stipend to the trainees.

Three projects are being implemented under the Ministry of Education with the participation of DTE, BTEB and BMET

SI	Name of the Projects
1.	Technical and Vocational Education and Training (TVET) Reforms <i>Funded by European Commission and implemented by ILO</i>
2.	Skill Development Project (SDP) <i>Funded by Asian Development Bank (ADB) and Swiss Agency for Development and Cooperation (SDC)</i>
3.	Skill Training Enhancement Project (STEP) <i>Funded by World Bank (WB)</i>

The primary objective of these Projects is to support the Government’s poverty reduction strategy through enhancing the capacity of the TVET system to provide demand-driven and good quality education and training programs particularly to the poor and the marginalized. The expected output is improved access and strengthened capacity of the TVET system in vocational training and technical education to address labor market needs. Specifically the Projects are aimed to –

- (i) To enhance relevance and access of TVET Programs.
- (ii) To improve capacity for good quality TVET delivery.
- (iii) To increase skill training for the poor, women and disadvantaged group.

² BMET has established 26 new Technical Training Centers (TTCs) in addition to 12 institutes under 4 projects in the recent years. Under two new projects 30 more TTCs and 5 Institutes of Marine Technology are being established in various districts.

5.00 Recommendations:

1. NGOs and other providers of non-formal skills training should be encouraged to provide training as per NTVQF in the non formal system.
2. **Industry Skill Committees (ISCs)** may extend skill training as per demand of the industry.
3. Commitment is needed to support to improve partnerships on PPP basis between industry and both public and private training organisations so the quality of skills development is improved.
4. New pre-vocational course pathways may be established for the lowly educated to enter into formal courses, including apprenticeships, to address any basic skills gaps.
5. Given the current low participation rates of women in skills development, special efforts are necessary to correct this gender imbalance. 30% enrollment rate for females across all skills development program should be aimed.
6. Action is required to increase the opportunities for **Persons with Disabilities (PWDs)** through increasing their access and participation in skills development programs. To achieve this, a strategy to increase the participation of persons with disabilities in skills development program is essential with customised curriculum and delivery methods for PWDs in agreed occupations and skill sets. A target of 10% of enrolments for PWDs across all skill development programs may be fixed.
7. The access and participation of working children to skills development should be improved. Informal courses should be specifically designed to cater for the needs of working children to gain meaningful employment.
8. To increase participation of disadvantaged groups, in skills programs, the government will set a target of 10% enrollments for monga and other affected areas in all skill development programs. Strategies to improve access for groups under-represented in both formal and informal skills training will be implemented to reduce the poverty.
9. **Community based training** for rural economic empowerment should be incorporated with specifically designed to increase employment opportunities for under privileged groups in their locality;
10. Accurate assessment of the demand for different categories of skilled workers in different overseas markets and improvement of skills training for overseas employment is needed.

Formal TVET programmes by the line Ministries

Other than the Major 5 Ministries mentioned earlier the following programs are being operated by various ministries and departments:

1. *Ministry of Health and Family Welfare* has the training facilities for paramedics: x-ray technicians, radiographers, dressers, dental technicians, health assistants, midwives, physiotherapist, dental assistant, dietitian, laboratory technician, etc.
2. *Ministry of Civil Aviation and Tourism: Bangladesh Tourism Corporation* is involved in skills training for the Hotel Management and Catering Industry.
3. *Ministry of Textile* offers a 4-year Diploma in Textile Engineering and textile vocational training institutions provide the Certificate-level training.
4. *Ministry of Local Government, Rural Development and Cooperatives (LGRD)* runs the course leading to the Diploma in Engineering in Surveying. *Bangladesh Rural Development Board (BRDB)* is a training provider at the Upazila level in livestock rearing, crop production, fish culture, sewing and integrated farming.
5. *Ministry of Environment and Forests* runs Diploma programmes in Engineering in Forestry and in Engineering in Forestry.
6. *Ministry of Social Welfare* organizes vocational courses in the Orphanages and Corrective Centers. This ministry has the training facility for physically retarded and the handicapped peoples. *Department of Social Services (DSS)* has the training courses in sewing, livestock rearing, crop production, fish culture, knitting, electronics, refrigeration, garment and computer.
7. *Ministry of Shipping*, through three marine training schools, trains seamen, inland and sea-going personnel.
8. *Ministry of Energy and Mineral Resources* provides training in house-wiring for the rural electrification program.
9. *Ministry of Defense* runs Diploma-in-Engineering in two institutions and has training facilities in Bangladesh Machine Tools Factory (BMTF).
10. *Ministry of Agriculture* runs a Diploma course in Agriculture.
11. *Department of Livestock (DLS)* conducts training courses on livestock rearing and integrated farming.
12. *Department of Fisheries (DoF)* organizes training programs on fish culture to various stakeholders.
13. *Bangladesh Power Development Board* is engaged in upgrading engineers, technicians, tradesmen, and other non-technical officers and staff.
14. *Bangladesh Railway* offers skill upgrading program for its technical staff. It operates four diesel locomotive training centers.
15. *Bangladesh Jute Mills Corporation* has four training centers.
16. *Bangladesh Chemical Industries Corporation* provides training through the Central Fertilizer Training Institute (CFTI). The Training Institute for Chemical Industries (TICI) at Palash, Narshingdi runs training programme.

17. *Bangladesh Industrial and Technical Assistance Center (BITAC)*, under the Ministry of Industries undertakes initial training in technical careers and advanced training for skilled workers to improve industrial productivity. It offers training in the following trades: Machine shop, Foundry, Machine Mould design, Pattern making, Welding, Heat Treatment, Electroplating, Automotive, Auto-Electricity, Machine Maintenance, Electrical Maintenance, Mechanical Drafting, Plastic Processing Technology and Quality Control.
18. *Bangladesh Small and Cottage Industries Corporation (BSCIC)*, a semi-government organization under the Ministry of Industries, offers training in trades and handicrafts through its five VTCs. It has in Dhaka the ‘Small and Cottage Industries Training Institute (SCITI)’, which offers courses to persons engaged in developing small and cottage businesses.
19. *Bangladesh Handloom Board* trains weavers in weaving and loom technology.
20. *Bangladesh Road Transport Corporation (BRTC)*, a semi-government organization has the facilities of training in their centers all over the country relating to automobile body building, welding and maintenance.
21. *Bangladesh Computer Council* has training centers are imparting training in various computer applications mainly covering the standard software applications. These institutions offer courses at the level of Diploma, Certificates and short term courses.
22. *Training facilities in the Hill districts* involve 6 institutions providing technical education for SSC, HSC levels and diploma courses. These institutions are: Technical Training Centre at Rangamati, Khagrachhari and Bandarban, Swedish Technical Institute at Kaptai, Textile Vocational Training center at Rangamati, and Vocational Training Institute at Khagrachhari

References

1. Assessment and Issues, Interim Report. March 29, 2007. ADB PPTA 4799 BAN. Skills Development Project.
2. Bangladesh Economic Review.
3. “Making Bangladesh a leading manpower exporter: Chasing a dream of US \$30 billion annual migrant remittance by 2015” Report by Prof. Sougata Ray on March 2007.
4. International benchmarking of vocational education and training, Tim Wyatt
5. Report on Human Resource Development of BMET, Jan 2008.
6. Migration scenario of Bangladesh Trends and major Issues by Dr. Md. Nurul Islam
7. Mapping of Human Resources of Bangladesh International Organisation for Migration (IOM), June 2007.
8. Strategy paper on promotion of overseas employment market of Bangladesh, November 2007. Ministry of Expatriates’ Welfare and Overseas Employment.
9. Human Resources of Bangladesh 2006, by BMET.
10. Statistical Pocket Book Bangladesh.
11. 6th Five Year Plan Document of Bangladesh 2011.
12. Feasibility study of the Socio-Economic Viability of Establishment of TTI at upozilla level. June 2006, by BMET.
13. Website of Board of Investment.
14. Website of BANBEIS.
15. Website of Ministry of Education.
16. Website of BTEB.
17. Website of BBS.
18. Website of BMET.
19. ILO website.
20. IOM website.
21. RMMRU website.