

Situation Analysis of Bangladesh TVET Sector: A background work for a TVET SWAp

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Acronyms and abbreviations

ADB	Asian Development Bank
AIMS	Aid Information Management System
BANBEIS	Bangladesh Bureau of Educational Information and Statistics
BBDN	Bangladesh Business and Disability Network
BBS	Bangladesh Bureau of Statistics
BEF	Bangladesh Employers' Federation
BMET	Bureau of Manpower, Employment and Training
B-SEP	Bangladesh Skills for Employment and Productivity Project
BTEB	Bangladesh Technical Education Board
CAMPE	Campaign for Popular Education
CBT&A	Competency-Based Training and Assessment (CBTA)
CEO	Chief Executive Officer
CO	ILO Country Office, Bangladesh
COE	Centre of Excellence
CPD	Centre for Policy Dialogue
CSLB	Competency Skill Logbook
CTA	Chief Technical Adviser
DfID/UKaid	Department for International Development, UK
DG	Director General
DLI	Disbursement Linked Indicators
DPO	Disabled Persons Organizations
DPs	Development Partners
DPSDWG	Development Partners' Skills Development Working Group
DTE	Directorate of Technical Education, Bangladesh
DWCP	Decent Work Country Programs
ECVET	European Credit System for Vocational Education and Training
EfVET	EU TVET associations
EIU	Economist Intelligence Unit
EMF	Environmental Management Framework
EQAVET	European Quality Assurance in Vocational Education and Training
EQF	European Qualification Framework
ERD	Economic Relations Division of the Ministry of Finance
EU	European Union
FGD	Focus Group Discussions
FYP	Five Year Plan (also referred to as 7 th FYP)
GDP	Gross Domestic Products
GED	General Economic Division, Planning Commission
GIZ	German Corporation for International Cooperation
HCDP	Human Capital Development Program
HSC	Higher Secondary School Certificate
IATI	International Aid Transparency Initiative

ILO	International Labour Organization
INGO	International Non-governmental Organization
IOM	International Organization for Migration
ISC	Industry Skills Council
JDC	Junior Dakhil Certificate
JICA	Japan International Cooperation Agency
JSC	Junior School Certificate
KII	Key Informant Interviews
KOICA	Korean International Cooperation Agency
LCG	Local Consultative Group
LFS	Labour Force Survey
M&E	Monitoring and Evaluation
MEAL	Monitoring, Evaluation, Accountability and Learning
MIS	Management Information System
MOE	Ministry of Education
MOEW&OE	Ministry of Expatriate Welfare and Overseas Employment
MPO	Monthly Payment Order
MRA	Mutual Recognition Agreement
MTBF	Medium-Term Budget Framework
MTR	Mid-term Review
NCCWE	National Coordination Committee for Workers Education
NEET	Not in Education, Employment and Training
NEP	National Education Policy
NGO	Non-governmental Organization
NHRDF	National Human Resource Development Fund (HRDF)
NPD	National Project Director
NSAPR	National Strategy for Accelerated Poverty Reduction II
NSDA	National Skills Development Authority, Bangladesh
NSDC	National Skills Development Council, Bangladesh
NSDCS	National Skills Development Council Secretariat, Bangladesh
NSDP	National Skills Development Policy
NSDS	National Skills Development System
NTVQF	National Technical and Vocational Qualification Framework
PMCC	Project Management Coordination Committee
PPP	Public Private Partnership
PRSP	Poverty Reduction Strategy Paper
PSC	Project Steering Committee
PTSC	Panchagarh Technical School and College
PWD	Person with disabilities
RPL	Recognition of Prior Learning
RTO	Registered Training Organizations
SDC	Swiss Agency for Development and Cooperation
SDG	Sustainable Development Goal(s)

SDWG	Skills Development Working Group
SEIP	Skills for Employment Investment Program
SEQAEP	Secondary Education Quality and Access Enhancement Project
SESIP	Secondary Education Sector Investment Program
Sida	Swedish International Development Cooperation Agency
SSC	Secondary School Certificate
STEP	Skills and Training Enhancement Project
SWAp	Sector Wide Approach
TMED	Technical and Madrasah Education Department
TOR	Terms of Reference
TQI	Teaching Quality Improvement in Secondary Education Project
TSC	Technical Schools and College(s)
TTC	Technical Training Centre(s)
TVET	Technical, Vocational Education and Training
TVET-R	TVET Reform Project
TVSD	Technical Vocational Skills Development
UCEP	Underprivileged Children's Educational Programs
UNDAF	United Nations Development Assistance Framework
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNEVOC	International Project on Technical and Vocational Education
VET	Vocational Education and Training
Voc	Vocational
WEF	World Economic Forum

Executive summary

Bangladesh is considered as one of the economic success stories globally with an average annual GDP growth of above 6% for the last decade and a half. The country has made notable progress in different socio-economic sectors related to extreme poverty reduction, promoting gender equality and empowering women, ensuring universal primary education, and reducing child mortality. Export of ready-made garments, leather goods and other items, and remittances sent by the migrant labours are boosting the foreign currency reserve. The Government of Bangladesh (GOB) aims to achieve the middle-income status by 2024 and recognises the potential contribution of Technical Vocational Education and Training (TVET) to the growth of the economy by creating skilled manpower and jobs. This has been fully reflected in the national strategic plans, including the 7th Five Year Plan of the government.

The National Skills Development Policy 2011 (NSDP) states: “*Skills development in Bangladesh will be recognised and supported by government and industry as a co-ordinated and well-planned strategy for national and enterprise development.*” The foundation of NSDP is built to assist coordinated effort and resource investment that was also recognised by the 7th Five Year Plan (7FYP) for 2016-2020 which reads as follows: “*A major hallmark was policy led reforms influencing and augmenting the flow of budgetary resources. The NSDP was instrumental in setting the stage for planning and investing resources for increased productivity, employability and mobility of the labour force to reap the benefits of demographic dividend and support the economic transformation in the future.*”

Following the above policy pronouncements, both GOB and the Development Partners (DPs) recognised the need for a sector wide approach (SWAp) in ensuring coordinated efforts and resource investments for the skills and TVET sector development in Bangladesh. The country has already gained considerable experience in implementing SWAp programs in the primary education, and in the health sector. A SWAp approach has also been taken for the secondary education sector. The Skills-21 project of EU, ILO and GOB commissioned an initial study in 2018 on SWAp for Skills and TVET. Consequently, the Secretary, TMED/Technical and Madrasah Education Division agreed to start with a TVET SWAp to be led by the TMED. This was further followed through a Government Order that established a high level TVET SWAp Committee, chaired by the Secretary, TMED, and a SWAp Task Force to be chaired by the EU and supported by ILO. During the Taskforce meetings, major DPs like the World Bank and the Asian Development Bank (ADB) have also expressed their interest and commitment for the TVET SWAp.

This study is the follow-up to the initial study conducted in 2018 by ILO and endorsed by the TMED, Ministry of Education. The scope of work for this study is also in line with the decision of the high level TVET SWAp Committee established by the government. Within the overall objective of building avenues and structures for a SWAp in the TVET sub-sector, the objectives of this study are to:

- 1) Conduct a comprehensive situation analysis on TVET in Bangladesh; and
- 2) Identify policy options and strategies including a prioritized TVET sub-sector development plan toward the development of a TVET SWAp.

This report is based on the findings of extensive desk research, literature review, field visit, key informant interviews, and a national level consultative workshop. The comprehensive situation analysis is based mostly on secondary data although a significant amount of discussions with the stakeholders was combined with the desk review. But not all data can be expected to be current that could be tested and validated within the short period of time.

Should the assignment allow more time to have rigorous consultations and workshops with active participations by all major stakeholders, more practical ideas could have emerged, and wider consensus of the approach might have been possible.

TVET in Bangladesh

In the current human capital discourse, the terms ‘TVET’ and ‘Skills Development’ are defined in different ways. According to UNESCO, TVET comprises formal, non-formal, and informal learning for the world of work. In the EU and in Australia, the most commonly used term is ‘VET’ which refers to education and training aiming to equip people with knowledge, skills and/or competencies required for particular occupations or the labour market in a broader sense. TVET programs are generally designed to prepare learners for direct entry into a particular occupation or trade, and usually lead to a labour market vocational qualification that is recognized by relevant authorities. The Bangladesh Technical Education Board (BTEB) considers the skills training as the Formal Training, Informal Training or the Non-formal training.

The formal training under BTEB is provided as short courses such as basic trade course and CBT&A course, secondary and higher secondary level vocational courses, and other professional level courses. The formal TVET provision, courses, and programs are offered by five types of providers including public and private technical schools and colleges, polytechnics, private training institutions, technical training centres and specialized institutes. The informal and non-formal skills training are provided by several ministries and government agencies, INGOs and NGOs. However, skills training provided by most of these public and private sector institutions are not always oriented towards the labour market need, or the National Technical Vocational Qualification Framework (NTVQF).

TVET is not new to Bangladesh, although it is still not a very popular stream of education and it suffers from social stigma. Often it is considered as an option for someone who has no options. The situation is changing; the TVET system, particularly at the secondary level, has been expanded in recent years. The average (2008-2014) Incremental Rate of enrolment in BTEB is 13.84 %; whereas in General Education, the rate is 5.81 % (BTEB, 2016).

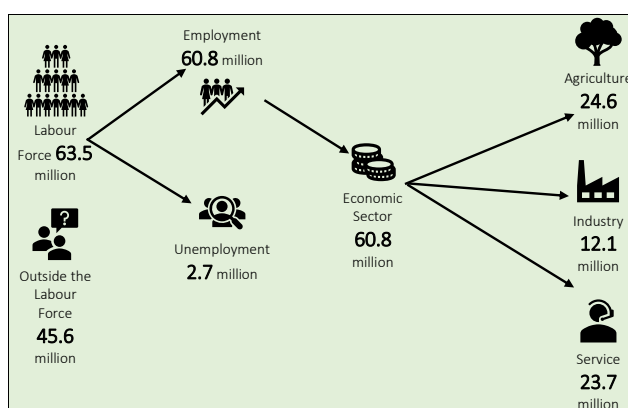
Why TVET is important for Bangladesh?

More than two million people, mostly young, are entering into the labour market every year, of which only half a million is being trained. The 2016-17 Labour Force Survey shows that millions of working age population are still out of the labour force, unemployed or employed in the informal sector. Labour market-oriented training could convert these people into human capital and meet the industry demand.

There has been a significant structural economic shift, away from traditional agriculture towards export-oriented manufacturing and services sectors. This has increased demand for skilled workers, particularly in export-oriented manufacturing industries.

About 63% of the country’s total population belongs to the age group of 15 to 49 years and 37% of the labour force

in the age group 15-29 years. This relatively young population is often cited as the country’s



“*demographic dividend*”. Bangladesh needs to capitalise the youth force by skilling them before this demographic dividend disappears in a decade.

The Government of Bangladesh has adopted a policy of overseas employment promotion because of the huge unemployment and underemployment pressure in the domestic labour market. However, about 52% and 14% of the migrant workers are low skilled and semi-skilled respectively.

Bangladesh has an ambitious target to reach middle income status by 2024. To do so, the country should increase investment in the socio-economic development, expand the share of manufacturing in GDP, increase and diversify exports, and produce quality skilled workers for both internal and external labour market.

Progress and challenges

Bangladesh has overcome some of the traditional challenges related to TVET through the improvement of the legislative and policy framework. The TVET sector is in general governed by the National Skills Development Policy 2011, National Education Policy 2010, NSDA Act 2018, BTEB Act 2018, and NFE Act 2014. The national strategic plans such as the 7FYP, Vision 2021 and other acts and policies such as Bangladesh Labour Act 2006, and the Expatriates Welfare and Overseas Employment Policy 2016 are also supportive to the development of the TVET sector including the employment of the TVET graduates. Proper implementation of these policies and acts including the required institutional capacities of the relevant agencies are the key challenges. There are also challenges related to quality, access and equity, and governance.

Quality

The quality and effectiveness of current training is hampered by : (i) lack of trained teachers due to low output by TVET teacher training institutions; (ii) lack of in-service training opportunities, and poor incentives; (iii) absence of quality of teaching and learning outcomes resulting from inadequate provision of modern learning facilities; (iv) high (about 50%) vacancy rate for teaching positions in public training institutions; (v) curriculum updating not adequately adaptive due to the centralised control; overreliance on written examination; (vi) overemphasis on theory in teaching and testing rather than on practical instructions; (vii) inadequate financing to maintain facilities, use of old-fashioned equipment, and consumables and training materials for training; (viii) poor labour market research and weak linkage with the industries leading to TVET courses with missing links to emerging industry demand, green jobs, technological changes such as 4th Industrial Revolution; and (ix) absence of government systems to delegate powers, particularly to public training institutions, to generate earnings, hire trainers and resource persons with industry experience, offer market responsive flexible courses, and enter into partnerships with employers and enterprises to make training relevant and place graduates in jobs.

The NTVQF forms the basis of consistent, industry wide training and skills recognition that can address employer needs for quality production and worker needs for appropriate pay based on skills. Although the NTVQF has been approved by the government, the implementation of the NTVQF is still limited because of the absence of relevant government orders to apply it and because of the limited awareness of the employers regarding the Bangladesh NTVQF.

Currently, the National Qualification Framework (NQF) is under preparation and is expected to be in place by the end of 2019. One of the key policy options in relation to NQF is a unified approach that will include all sectors of education and training with one national authority

responsible for implementation and quality assurance. The challenge lies in the rolling out of the NTVQF and NQF as early as feasible, and through which, the establishment of a flexible, open, accessible and responsive system for workforce development, and putting in place a strong industry leadership across the whole economy.

Access and equity

The proportion of students enrolled in TVET increased from 0.4 % in 2001 to 1.8 % in 2013 (CAMPE, 2016). It is still very low compared to the global average for proportion of secondary school people enrolled in skills development programs which was 11 % in 2010 (UNESCO, 2013). In 2018, out of one million enrolled students in 6,865 public TVET institutes about 25% students were girls, and out of the total 51 thousand teachers only 20% are female.

The prevailing formal TVET system (other than the non-formal short courses of less than 360 hours courses) requires completion of class-VIII at the entry level and thus excludes those who were school dropouts, out of school boys and girls, rural poor young - a large potential group of target beneficiaries. The rural population had less opportunity to pursue TVET as most of the training facilities were concentrated in the urban areas. Most trades were male-oriented and lacked any provision for inclusion of disabled persons.

The gender and equity issues are addressed through the 'National Strategy for Promotion of Gender Equality in TVET 2012' and the 'National Strategy for inclusion of persons with disabilities in Skills Development 2013'. NGOs and the development projects always put priorities on women and social inclusion in their skills and TVET development interventions.

Labour force growth of 2.81% during 1974–2017 was faster than population growth (1.86%) due to a rapidly expanding young population (the demographic dividend) and increased labour force participation. However, only 22.8% workers have completed primary school education, and only 4% have vocational education.

Recognition of Prior Learning (RPL) was one major step to expand the TVET access. But, the RPL certification at the Pre-Voc level has been stalled since 2014 because of the new regulations (e.g. NFE Act 2014) and the insufficient capacity of BNFE.

Management and Governance

Effective multilevel governance in the TVET sector in Bangladesh is of significant importance, especially in the context of Sector Wide Approach (SWAp). This governance process should be based on inclusive vertical and horizontal interactions between stakeholders and linked to the increased effectiveness, efficiency, coherence, transparency, accountability and performance of TVET policies and systems. The following are the key areas pertaining to governance and management of TVET in Bangladesh:

Institutional capacity: TMED is a relatively new public body within the Ministry of Education, and it covers both Technical and Madrasah education. TMED prepares its budget following MTBF against strategic objectives and activities. It has action plans for TVET sector development and for SDG-4 implementation. DTE is substantially understaffed for years. BTEB requires, among others, resources to develop and expand CBT courses. TMED, DTE and BTEB lack capacity related to results-based planning and monitoring, reporting, and financial management. There is also a very limited decentralisation and delegation of power at the local level empowering the public TVET providers at the local level for local resource planning, industry engagement and public private partnerships (PPP). Other sector bodies like NSDA, ISCs, and COEs are yet to be fully functional and effective.

Financing: A rough estimate by the World Bank shows that an investment of USD 600 million is needed to train the two million new entrants to the labour market. The actual estimated annual investment from public and private sources is about USD150 million, or enough to train only 500,000. The investment requirement will rise to USD 1.2 billion in 2025 to train 4 million new labour market entrants per year. TMED gets about 1.3% of the total national budget to cover both technical and madrasah education. Before increasing the sector financing, there is a serious need of institutional strengthening and financial management capacity building of the relevant public bodies on budget planning and on efficient budget utilisation.

Policy and legislations: The NSDP 2011 was due to be reviewed and updated in 2017 but has not happened as yet. The NSDA Act, BTEB Act, and the NFE Act have some issues to be further clarified in line with the mandates and capacity of the respective authority. Issues, those need immediate attention, are related to the RPL certification, training impartation, certification and accreditation of training providers.

M&E, data and information system: At present, TMED or DTE lacks a dedicated M&E and MIS department. The TMED Action Plan for SDGs makes a reference to its strategy to develop a results-based monitoring system for the delivery of TVET across all institutions. IMED is responsible for centrally manage the M&E of development projects, but they require quality inputs from the relevant departments.

Other than Household Income and Expenditure Survey, Labour Force Survey and web-based statistical reports on labour migration and remittances, there are no regular and systematic research reports on the TVET sector, labour market supply and demand, skills gaps, and tracer studies. Occasional studies carried out by public, private organizations and DPs are often project specific and incomparable with each other. The absence of a labour market research, skill gaps analysis, and a Labour Market Information System (LMIS) leave the training providers with no systematic records of job placements and a poor understanding of current and future labour market needs. This affects the revision of the TVET courses, developing market-responsive curricula and the expansion of the TVET access.

Sector coordination: A large number of development projects, worth over USD 1.5 billion supports the development of the Bangladesh TVET and Skills sector, albeit in a fragmented fashion. Each project has different priorities, approach and target groups – from public and/or private sector and industry bodies. These projects are often criticised for overlapping activities and lack of coordination. The Education Local Consultative Groups (ELCG) and different working groups within ELCG try to coordinate and update each other on activities and progress, but these are yet to yield significant results.

Rationale for a TVET SWAp in Bangladesh

As mentioned above, the skills and TVET sector in Bangladesh is quite large and fragmented; therefore, Government's decision to start the SWAp with the TVET sub-sector as a warm fit within the planned National Qualification Framework (NQF), which can address the major labour market demand. Bangladesh has practical experience of implementing different models of SWAp in the primary and secondary education and in the health sector. SWAp facilitated the alignment of sector financing and technical support around national priorities. It improved government's role in designing, as well as implementing programs, and at the same time

improving DPs' coordination. Since the use of SWAp, several systemic improvements have taken place in the country's systems with regard to Results Based Monitoring and Evaluation (RBM&E), results-based financing and reporting, financial and fiduciary management, procurement, and service provision. A SWOT analysis shows the strengths, weaknesses, opportunities and threats for the TVET SWAp.

The approach needs alignment with the principles of Aid

STRENGTHS	OPPORTUNITIES
<ul style="list-style-type: none"> • Consensus has been reached by GOB and major DPs. • A leadership role has been set up through the SWAp Committee and the SWAp Task Force. • Existence of a National policy • TMED's Action Plan articulates gaps and opportunities in the TVET sector for multi-pronged approaches in addressing these. 	<ul style="list-style-type: none"> • Coherence, complementarities, coordination and relevance of efforts. • Avoiding duplication and wastage. • Value for Money • Pool financing or better managed financing options • Effective monitoring and results-based management • Positive experience of SWAp in other sub-sectors.
WEAKNESSES	THREATS
<ul style="list-style-type: none"> • Lack of institutional capacity (technical, financial management, and leadership) • Lack of previous sector specific SWAp experience • Too many parties involved in the subsector, including over 22 ministries and agencies ¹ • NSDP has not been renewed, not costed and not supported by an action plan • No National Development Cooperation Policy that should reflect SWAp as a preferred modality of development cooperation 	<ul style="list-style-type: none"> • Unwillingness of some of the key stakeholders and DPs • Absence of government's commitment to create an enabling environment including policy and regulatory changes • Inadequate planning, implementation and financial management capacity • Limited involvement of the government during the preparation and planning of programs • Shifting priorities of GOB and the DPs during SWAp project implementation.

Effectiveness that highlights the need for ownership, harmonisation, alignment, results and mutual accountability. The SWAp will help the donors to engage closely with the Government in policies and implementation and will lay the ground for ushering in a budget support complemented by a system of monitoring through a set of Disbursement Linked Indicators (DLIs).

How to make the SWAp work better?

Analysing the experience and lessons learnt of Bangladesh in implementing SWAp in the Education Sector, ADB published a report on *What Worked Well and Why under the Sector-Wide Approach*. These lessons have been applied in the design of PEDP3 and PEDP4, and the lessons would be quite instrumental while starting the SWAp in the TVET sub-sector.

- i) design the program keeping the size manageable, less cumbersome, and with full clarity with an appropriate number of DPs in relation to the extent of activities, depending on the DPs' availability of staff and resources, the extent of procedural harmonisation, and the executing agency's (EA) institutional and staff capacities;
- ii) provide support at the design stage to strengthen the EA's institutional capacity prior to implementing the program;
- iii) provide support for analytical studies and technical support to ensure efficient M&E including joint annual reviews;
- iv) focus on strengthening the MIS for improving the results framework to monitor and report on progress;
- v) collectively strengthen the results framework to meet all the DPs' reporting needs so that a single report can be prepared annually, to assess progress and support policy dialogue;

- vi) adopt more stringent partnership agreements (including further harmonisation of implementation procedures) among the participating DPs under GOB leadership;
- vii) set up the SWAp administrative unit (e.g. Program Liaison Unit) within the resident mission of the lead DP;
- viii) separate the consortium functions from the lead DP functions as a self-contained arrangement to enhance mutual accountability; and,
- ix) include special arrangements to expeditiously address critical cases like corruption without jeopardizing regular implementation.

Roadmap for the TVET SWAp

The discussions on SWAp for the TVET and the skills sector have been going on for the last couple of years; bilaterally with major DPs and also in workshops and seminars, as well as at the meetings of the TVET SWAp taskforce and the SWAp committee. A participatory consultative process has been followed and inputs have taken from multi-stakeholders. Given the fact that skills sector in Bangladesh is quite large and fragmented where more than 22

Roadmap for TVET SWAp		
Step	Modality	Features
Step 1	SWAp 1 – modest start & flexible coordination	Establish priority action areas for SWAp 1 in the context of a long-term strategy to unify and strengthen the workforce development in Bangladesh; identify likely contributions to SWAp 1 from development partners and the government; draft the SWAp 1 action plan for approval by the government; form relevant technical working groups agreed through an MoU among all partners; overview the implementation of SWAp 1 action plan and the agreed overriding structure; among others; beginning of results based management. Leadership by a single nodal body (TMED); small number of DPs; focus more on coordination than on a unified TVET development program.
Step 2	SWAp – pool financing	Coordinated sector plan, multi-year planning for technical assistance, pool financing with Disbursement Linked Indicators. Increased harmonization and wider strategic future focus.
Step 3	Results based SWAp	Full blown Results-based management and resource planning for the sector development through an established mechanism of delivery.

ministries and 20 government agencies are involved, GOB’s decision to start with an initial TVET SWAp under the broad leadership from the Ministry of Education (MoE) and direct management by the TMED of MoE is regarded timely and practical. For justifiable reasons, in both the Taskforce meetings, and the roundtable discussions on “TVET SWAp: Way Forward”, and also at the consultative workshop on 6 July 2019, key stakeholders, DPs and sector actors have supported the decision to start with a SWAp1 modality initially and expand gradually to full SWAp like the primary education sector development program Bangladesh.

This report presents potential components, focus and features of the SWAp1 those could be finalised through the taskforce and the SWAp committee meetings. Regardless of what option is chosen, the key driver that will determine the scope and the details of the implementation modality should be the labour market need, NQF and the SDGs. The government should now formalise the roadmap and inform the DPs its decision for future TVET programming.

Eventually the SWAp could be expanded to cover the whole skills sector where the NSDA could play a bigger coordination role, as soon as it has the required capacity and resources.

To facilitate the initial start-up of the TVET SWAp, the EU has already committed a EUR 50 million sector budget support (SBS) to the TVET sub-sector under the HCDP-21 financing agreement with the Government. HCDP-21 will strengthen the institutional capacity of TMED, DTE, and BTEB to implement the SBS, and the Skills-21 project will support these agencies in attaining the agreed results indicators.

TVET sub-sector development

Prior to moving towards a programming approach, it is beneficial to list the priorities in terms of urgency and impact. An agreed sub-sector development plan will be instrumental for the investment planning. TMED already has an SDG Action Plan and a Comprehensive TVET sector development plan. It also prepares its MTBF/budget against medium term strategic targets. The priority action plans have been prepared considering the need of the TVET sub-sector at the policy, systems, institutions, and at

Level	Priority actions	C	L	M	H
Policy level	Review and update NSDP to reflect new challenges and opportunities of the TVET and skills sub-sector.				
	Complete the development and rolling out of the NQF				
	Operationalize the NTVQF through government orders and through appropriate communication strategy.				
	Address the issues related to NTVQF certification (e.g. RPL) among the BTEB Act, NSDA Act and the NFE Act.				
	Provide appropriate level of resources (including human resources) to the public TVET providers motivating and empowering them to conduct local resource mapping, making localized/contextualized decisions including implementation of PPP in TVET.				
	Assign a single competent agency to lead on the management of the Labour Market Information System (both supply and demand) to be supported by other relevant agencies.				
Systems and institutional level	Introduce a results-oriented culture in TMED and DTE.				
	Develop efficient system including planning, budgeting and financial management to cope up with results-based financing approach.				
	Strengthen institutions in efficiently manage and spend allocated budget.				
	Develop and implement performance measurement and M&E system in TVET supported through a robust MIS system in TMED with multiple interfaces, including with DTE; BTEB; IMED and ISCs.				
	Develop appropriate systems and institutional arrangements for apprenticeship keeping in mind the German Dual System.				
	Gradual implementation of the German Dual System, through integrating the Apprenticeship scheme.				
	Improve sector coordination by strengthening the existing systems and mechanism such as ELCG, SWDG etc.				
Operational level	Recruit more TVET trainers (including female, ethnic minorities) and manage teacher education and continuous professional development.				
	Revise the operational plans of TMED, DTE and BTEB to implement quality assurance, competency standards, assessing standards and learning outcomes, apprenticeship, RPL, industry linkages, enterprise development, workplace improvement, green jobs, environment consciousness, skills for migrants, and all forms of inclusion.				
	Operationalize Performance Based Management system (e.g. APA) and periodic sector performance monitoring.				

Codes: C: Continuous, L: Low priority, M: Medium priority, H: High/immediate priority

the operational level as well as the targets TMED has already set for itself. A detailed priority actions plan is presented in Chapter-4 of this report.

The sub-sector development should also take into account the international best practices in TVET presented in the Chapter 3 of this report.

A coherent national policy for the formation and development of skills for green jobs in all the potential sectors should be put in place and implemented.

CHAPTER 1: INTRODUCTION

1.1 Introduction and Background

Bangladesh is considered as one of the economic success stories globally. For the last decade and a half, the country has averaged above 6% annual GDP growth and in the last fiscal year 2017-18, the country recorded the highest ever GDP growth at 7.86%.¹ The per-capita income has increased from USD 405 in the year 2000 to USD 1,751. The country has also made notable progress in different socio-economic sectors relating to extreme poverty reduction, promoting gender equality and empowering women, ensuring universal primary education and reducing child mortality.

With a population of over 161 million and a labour force of 63.5 million,² only 5% of the labour force has received any form of training, and just 1% of the population has undergone any form of technical/vocational training.³ A lack of adequate education and skills are stopping Bangladeshis from obtaining quality jobs and the country ranks below many others in the region for levels of literacy, education and skills. 83% of the labour force is either illiterate or has no formal education, with only 60% completing primary school.⁴

The Government of Bangladesh aims to attain the middle-income status by 2024⁵ and recognises the potential contribution of Technical Vocational Education and Training (TVET) to the growth of the economy by creating skilled manpower and jobs. TVET can also contribute to reduce poverty by providing employability skills, particularly to those who drop out of school early and to the large number of unemployed and underemployed adults. Following government's vision and commitment, about 24 ministries and 20 agencies are involved in skills development and TVET, and non-formal education delivery. Besides, there are different types of public, private training institutes and NGOs which are directly or indirectly involved in the TVET sector.

Quality, equity, governance and finance have been the key issues dominating the policy frameworks at different stages. However, institutional capacities are yet to match effective delivery of policies at a satisfactory level. Development Partners (DPs) are supporting the government to strengthen the skills development system, that are aimed to deliver competencies that meet the needs of industry, and lead to qualifications that are recognized within the country and overseas.

The National Skills Development Policy 2011 (NSDP) states: “*Skills development in Bangladesh will be recognised and supported by government and industry as a co-ordinated and well-planned strategy for national and enterprise development.*” The foundation of NSDP

¹ <https://www.thedailystar.net/lifestyle/perspective/news/demographic-dividend-could-turn-demographic-disaster-1709272>

² Labour Force Survey 2016-17, BBS

³ *ibid*

⁴ *ibid*

⁵ The national development discourse in Bangladesh tends to consider graduating from the least developed country (LDC) category and becoming a middle-income country as interchangeable. The country continues to express its aspiration to join the middle-income country group by 2021, the 50th anniversary of its independence. However, this status has already been achieved – Bangladesh joined the lower middle-income country category (the lower tier of the two tiers of the middle-income category) on 1 July 2015. On the other hand, graduation from the LDC group is almost certain, but not until 2024, if the country meets all the technical requirements in the coming years. (CPD Policy Brief 2018).

is built to assist coordinated effort and resource investment that was also recognised by the 7th Five Year Plan for 2016-2020 which reads as follows: “A major hallmark was policy led reforms influencing and augmenting the flow of budgetary resources. The NSDP was instrumental in setting the stage for planning and investing resources for increased productivity, employability and mobility of the labour force to reap the benefits of demographic dividend and support the economic transformation in the future.”

Despite the many reform initiatives by the government, the TVET sector needs further strengthening, promotion, adoption/adaption, and replication by stakeholders, across policies, systems, processes and impact in the labour market. No less important is government's commitment and ongoing partnership with the industry and the private sector to improve the much-needed governance and management of the TVET / Skills Development system in the country. This includes development of a Sector Wide Approach (SWAp) for the skills sector to harmonize planned reform activities under a common planning and management framework.

1.2 Objective of the assignment

Within the overall objective of building eventual avenues and structures for the Sector Wide Approach (SWAp) for Bangladesh TVET sub-sector, the objectives of the assignment, as per the Terms of Reference (ToR) are to

- 3) Develop a comprehensive situation analysis document on TVET in Bangladesh; and based on this
- 4) Develop a document identifying policy options and strategies for the consideration of the Government toward the development of TVET SWAp, that includes a prioritized TVET sub-sector development plan for SWAp highlighting the areas of focus in consultation with the Government, the development partners, the private sector, and the employees.

These two documents have been merged into a single one in the interest of logical flow and sequential presentation of ideas and information, leading to a framework that prioritizes the actions for a TVET SWAp modality in Bangladesh (Chapter 4 refers).

1.3 Limitations of the assignment

The following are the key limitations of the study:

- i. The comprehensive study was based mostly on secondary sources of data although a significant amount of discussion with the stakeholders was combined in undertaking the assignment. Thus, not all data can be expected to be current that can be tested and validated within the short period of time.
- ii. Should the assignment allow more time to have rigorous consultations and workshops with active participations by all major stakeholders, more practical ideas could have emerged, and wider buying-in of the approach might have been possible.

1.4 Methodology

Desk research – an extensive desk research was carried out to capture policy and regulatory framework, relevant literature on TVET in Bangladesh, global practice related literature, as well as all critical issues and challenges impacting on the TVET sector in Bangladesh. Literature review captures relevant international best practices and models. The findings and documentations of the desk research also leads to the initial options and pathways for the SWAp.

Field visit – field visit to selected institutes and private sector institutes were carried out to address the gaps in data and validate findings from the desk research. Consultations, meetings, and Key Informant Interviews (KII) were conducted selectively to gather additional information, capture new ideas, and test these ideas.

Consultation workshop - A consultation workshop with relevant stakeholders was held on 6 July in Dhaka that featured a presentation by the consultant and open discussions towards collecting inputs and information that have been utilized in the finalization of this report. Post-workshop written feedback were also reviewed and considered in the preparation of this report.

CHAPTER 2: SECTOR MAPPING

2.1 Why TVET for Bangladesh?

The importance of technical and vocational education and training (TVET) in Bangladesh can be understood from the following discussion:

First, according to the Government estimates, about 2 to 2.5 million mostly unskilled young persons are entering into the labour market every year (BBS, 2017). Compared to this, the number of jobs available is only a small fraction of the number of job seekers. The majority of the young persons, including disproportionate amounts of women and disadvantaged groups, find low-skilled and poor-productive jobs in the informal economy, or are self-employed. Upgrading skills is one method of improving the income and livelihoods of these workers and can help to bring them out of poverty.

Secondly, there has been a significant structural economic shift away from traditional agriculture towards export-oriented manufacturing and services sectors. This has also increased demand for skilled workers, particularly in export-oriented manufacturing industries like garments, leather, furniture, agro-food, pharmaceuticals, and ceramics. Although reliable demand estimates for skilled workers are not available, employers frequently cite the shortage of skills as a major constraint.

Thirdly, Bangladesh's relatively young population implies a growing workforce for the future, but most remain unskilled. About 63% of the country's total population belongs to the age group of 15 to 49 years and 37% of the labour force in the age group 15-29 years. This relatively young population is often cited as the country's "*demographic dividend*". However, the main challenge is to equip this vast young labour force with employable skills and to provide enhanced support services to ensure a better transition from school to work.

Fourthly, the Government of Bangladesh has adopted a policy of overseas employment promotion because of the huge unemployment and underemployment pressure in the domestic labour market. However, about 52% and 14% of the migrant workers are low skilled and semi-skilled respectively. As the Government wishes to increase the percentage of skilled workers for employment abroad, the standard and quality of the TVET system needs to be improved. This will require major enhancements to the quality and relevance of training and greater participation from the enterprise and the private sector in skills training.

Finally, Bangladesh has an ambitious plan to reach middle income status by 2022. To do so, the country should increase investment in the socio-economic development, expand the share of manufacturing in GDP and reduce the share of agriculture, increase and diversify exports, and send abroad more and more skilled workers. These require concerted efforts to produce more and more skilled workers, expand access to technical and vocational education and training (TVET), and to design and develop an inclusive skills system that provides opportunities for those excluded from the formal education system. Most important of all, the system needs to be demand-driven with stronger links with employers and the private sector.

Recognising these trends, the country has embarked on a major expansion of its technical and vocational education and training system, including several donor-supported programs to reform and expand the system. One significant development in TVET is the reform of the system which started from 2008 with the launching of the major GOB/EU/ILO TVET reform program. A major achievement of this reform process has been the adoption of the National Skills Development Policy 2011 (NSDP 2011). This policy sets out a broad-based and forward-

looking skills system framework for Bangladesh and has made a positive impact on the renewed interest in skills development in the country.

2.1.1 Conceptual context: Skills, TVET and Lifelong learning

In the current human capital discourse, the terms 'TVET' and 'Skills Development' are defined in different ways. According to UNESCO, TVET comprises formal, non-formal, and informal learning for the world of work. Young people, women, and men acquire knowledge and skills from basic to advanced levels across a wide range of institutional and work settings and in diverse socio-economic contexts. The UNEVOC's (International Centre for Technical Vocational Education and Training) definition of TVET adds to the UNESCO definition by referring to a range of learning experiences that may occur in a variety of learning contexts, including educational institutions and workplaces. The UNESCO-UNEVOC jointly defines: 'The acquisition of knowledge and skills for the world of work to increase opportunities for productive work, sustainable livelihoods, personal empowerment and socio-economic development for both women and men, in both urban and rural communities.' In the EU and in Australia, the most commonly used term is 'VET' which refers to education and training aiming to equip people with knowledge, skills and/or competencies required for particular occupations or the labour market in a broader sense. TVET programs are generally designed to prepare learners for direct entry into a particular occupation or trade, and usually lead to a labour market vocational qualification that is recognized by relevant authorities.

Another common term is 'Technical and Vocational Skills Development (TVSD)' that indicates a move away from a school-orientated approach and includes non-formal programs which may be delivered in the workplace, does not lead to formal qualifications, and encompasses training in the informal economy. TVSD is understood as the acquisition of knowledge, practical competencies, know-how and attitudes necessary to performing a certain trade or occupation in the labour market. The notion of TVSD is non-discriminatory with regard to age, status, stage of life, type of learning, training environment and level of training. 'Skills' is a 'massively broader concept than technical and vocational education and training (TVET)'. Skills Development refers to the acquisition of practical competencies, know-how and attitudes necessary to perform a trade or occupation in the labour market. Skills have been analysed from the perspective of their acquisition level through formal - public and private schools, institutions or centres, informal - traditional apprenticeships, or non-formal semi-structured training.

According to the definition by UNESCO and the ILO, TVET refers to "aspects of the educational process involving, in addition to general education, the study of technologies and related sciences, and the acquisition of practical skills, attitudes, understanding and knowledge relating to occupants in various sectors of economic and social life" (UNESCO and ILO, 2001)⁶. In addition to technical knowledge and aptitude, increasing emphasis is on "softer" skills – communication, negotiation and teamwork. TVET is dispensed in public and private educational establishments, or other forms of formal or informal instruction aimed at granting all segments of the society access to life-long learning resources.

This vision of TVET is attributable to the crisis that Africa went through in the eighties. The serious economic and financial crisis that the continent faced at the time generated far-reaching changes in the production system and the labour market and contributed to

⁶ ILO Skills and Employability Branch note, cited in <https://www.ilo.org/skills/lang--en/index.htm>

increasing graduate unemployment. Within that context, the TVET systems found themselves unable to provide the skills required by businesses. Facing increasing costs within the context of structural adjustment programs, TVET systems endured drastic budgetary reductions. Lastly, inadequate investments in TVET contributed to its deterioration and reduced its effectiveness.

Yet, the principal objective of TVET is to train youths and adults alike, readying them for the labour market. With technical revolution and innovations in science and technology, labour market needs have significantly evolved. New challenges must be met in order to match the education proposed with vocational demands. In that regard, several countries are in the process of reforming their education system, with a view to training youths to meet national, regional or international market needs.

The Bangladesh Technical Education Board (BTEB) defines the skills training in following ways:

- **Formal training:** Organized, guided by a formal curriculum, leads to a formally recognized credential, such as a high school completion diploma or a degree, and is often guided and recognized by government at some level. Teachers are usually trained as professionals in some way.
- **Informal training:** No formal curriculum and no credits earned. The teacher is simply someone with more experience such as a parent, grandparent, friend or a boss. A father teaching his child to play a sport, or a babysitter teaching a child their ABC's is an example of informal education.
- **Non-formal training:** Non-formal training is a purposeful and systematically organized form of learning that generally occurs outside the formal educational institutions. It is designed to meet the learning needs of educationally disadvantaged persons of different ages and backgrounds, flexible in terms of organization, time and place and may cover basic and continuing education programs to impart basic literacy, including life skills, work skills, general culture, and facilitates lifelong learning and enhancement of earning capabilities for poverty reduction.

2.1.2 Decent Work for all

ILO has made Decent Work for all the organizing principle of its activities and has set the Decent Work Agenda as a policy approach for achieving the goal of Decent Work. The ILO's Decent Work Agenda is based on four strategic objectives:

- i. Creating Jobs – an economy that generates opportunities for investment, entrepreneurship, skills development, job creation and sustainable livelihoods;
- ii. Guaranteeing rights at work – to obtain recognition and respect for the rights of workers. All workers, and in particular disadvantaged or poor workers, need representation, participation, and laws that work for their interests;
- iii. Extending social protection – to promote both inclusion and productivity by ensuring that women and men enjoy working conditions that are safe, allow adequate free time and rest, take into account family and social values, provide for adequate compensation in case of lost or reduced income and permit access to adequate healthcare;
- iv. Promoting social dialogue – involving strong and independent workers' and employers' organizations is central to increasing productivity, avoiding disputes at work, and building cohesive societies.

The Decent Work Agenda, formulated at the International Labour Conference in 1999, is now part of the global discourse on skills and TVET which has been endorsed by heads of state at the UN General Assembly, the Group of 20, and regional organizations such as the European Union, the African Union, the Organization of American States, the Association of South East Asian Nations, and the Southern Cone Common Market. Many countries use the Decent Work concept to define development targets, identify policy priorities, and measure progress toward meeting specified goals; hence, the ILO agenda has gained considerable traction and international political buy-in over the past decade.

2.1.3 Lifelong learning dimension

At the nucleus of skills development, rests the concept and practice of Lifelong learning which is rapidly gaining currency in the human capital and skills development discourse. Although discussions on lifelong learning are becoming stronger now, the history of the concept dates back to 380 BC. In 'The Republic', Plato described different educational requirements associated with various life stages which could be seen as an early conceptualization of lifelong learning. But in Plato's time, it was a luxury only afforded the guardian class. In the 1920s, 'adult education' was described by the British government as a permanent national necessity, an inseparable aspect of citizenship and should be universal and lifelong. In the 1970s, UNESCO took up the idea of lifelong education.

Like sustainable development, there are myriad definitions of the term lifelong learning. This definition, from the European Lifelong Learning Initiative, is particularly useful: *"...a continuously supportive process which stimulates and empowers individuals to acquire all the knowledge, values, skills and understanding they will require throughout their lifetimes and to apply them with confidence, creativity, and enjoyment, in all roles circumstances, and environments."*⁷

It is this aspect of the lifelong learner being continuously supported which makes it of interest to TVET institutions. Both lifelong learning and skills development are seen as routes to empowerment and sustainable development. They can be supported and facilitated by governments and institutions, but both require participation and self-initiated action by individuals and communities. Lifelong learning for sustainable development has consistently been viewed by the UN and its agencies, national governments and Non-Governmental Organizations (NGOs), as a key component of innovation and social change. Thus, the demand for TVET is increasing both for youth and for lifelong learners.

2.2 TVET in Bangladesh – a decade ago

TVET is not new to Bangladesh. There already existed TVET institutions in 1960s, about a decade before the independence of Bangladesh in 1971.

However, both the development of the sector and the quality of the TVET have practically suffered due to various reasons, like access (dropouts, poor, availability of institute) and equity (girls, disadvantaged), teachers' ability - particularly pedagogical and practical knowledge, poorly equipped workshops, limited teaching and training materials and classrooms.

⁷ Commission of the European Communities: "Adult learning: It is never too late to learn". Brussels. 2006

The prevailing formal TVET system (other than the non-formal short courses of less than 360 hours) requires completion of class VIII in secondary education at the entry level and thus excludes those who were school dropouts, rural poor young - a large potential group of target beneficiaries. The rural population had less opportunity to pursue TVET as most of the training facilities were concentrated in the urban areas. Most trades were male-oriented and lacked any provision for inclusion of disabled persons. Female enrolment has been very low. Therefore, a major segment of the target population of the poverty reductions strategies (PRSP) of the government was deprived of access to the TVET system.

Yet, the TVET system was expected to play a large role in economic growth and social development through developing employable skills of the early-school-dropouts, unemployed and underemployed population, as well as producing human capital for the labour market. This has been a far cry, as the formal TVET system lacked linkage with the industry and was unable to respond to the need of the labour market.

The new government, in 2001, began to realise the importance of the human capital in a country with a focus on technical and vocational education. Government's understanding and commitment allowed the DPs to extend their cooperation in the development of the TVET and skills sector.

2.3 Sector profile – the Bangladesh TVET now

Considering the huge internal and external demand of the skilled labour and the TVET favourable demographic and socio-economic factors, the TVET sector in Bangladesh was expected to be at the centre of attention. Given the poor outreach of the TVET system and the traditional general perception of TVET in the society, the access to the formal TVET system is low. A large segment of the population acquires vocational and technical skills on the job, mostly as part of the production process. In the informal sector, people are just inducted and briefly trained to kick-start. In the formal sector, they are being trained to some extent, but the actual learning outcome is achieved through observation of supervisor or co-workers and routine work. So, the demand for skilled workers by the industry is hardly ever met.⁸

Bangladesh education system has made good progress in ensuring “access” to education which leads to a good number of gross enrolments in primary education. However, the dropout rate all together is alarming; for example, primary level dropout rate was 19.2 % and secondary level a total of 38.3 % in 2016. The dropout rate among girls in secondary level was 42.19 %, and among boys was 33.80 %. The dropout rate in higher secondary level in 2016 was 20.08 %, with 23.83 % girls and 16.55 % boys (BANBEIS 2017). This means that a handful of youth still do not stay in school long enough to be eligible for accessing the formal TVET, which has until recently only been open to students who have successfully passed the class VIII (Junior School Certificate - JSC and Junior Dakhil Certificate - JDC) public examination. The total secondary level enrolment to TVET under BTEB was 402,956 and higher secondary and diploma level was 406,479 in 2014 (BTEB 2016). The proportion of students enrolled in TVET increased from 0.4 % in 2001 to only 1.8 % in 2013 (BTEB, 2016).⁹ However, it is still very low compared to the global average for proportion of secondary school people enrolled in skills

⁸ M.A. Khan. Contribution of ILO in the TVET sector in Bangladesh. February 2019.

⁹ BTEB. Enrolment analysis in TVET under BTEB. 2016

development programs which was 11 % in 2010 (UNESCO, 2013)¹⁰. Average incremental rate of enrolment in TVET is projected to be 13.86%.¹¹ BTEB is the only statutory body to ensure TVET certification. As the target set by the government is to ensure TVET enrolment 20% by the year 2020, BTEB has to regularly update the enrolment rate of formal TVET in the secondary and higher secondary class of education. This data has not been up to date. This is required for strategy to be taken to enhance TVET enrolment to meet the national demand. Moreover, the NSDP-2011 represents a key commitment to strengthening and further growth of skills development in Bangladesh aligning with the targets of the National Strategy for Accelerated Poverty Reduction II (NSAPR - II FY 2009-11)¹². It is mentioned in the article 22 namely “Future Growth of the Sector” of NSDP-2011 (Page-37) that:

- a. TVET students shall comprise 20% of all secondary students;
- b. Total enrolment in TVET should increase by 50%; and
- c. Women’s enrolment should increase by 60%.

There are two types of TVET/skills training in Bangladesh, one is formal training and the other is informal and non-formal training. The formal training under BTEB is provided as short courses such as basic trade course (360 hours, 95 trades) and CBT&A course (51 occupations), secondary level such as SSC vocational course (31 trades), Dakhil-vocational offered by madrasahs, higher secondary level such as HSC-voc course (14 trades), HSC - Business management, Diploma in commerce, Diploma level course in engineering (34 technologies), textile engineering (3 technologies), agriculture, fisheries, forestry, medical (8 technologies) and other professional level courses. TMED has a plan to introduce a flavour of technical education in the primary education stage and a compulsory technical education subject at the secondary and higher secondary education. Thus, a pathway is being built between primary and secondary and TVET education. TMED’s broad plans, as enunciated in their SDG Action Plan includes introduction of vocational courses (Dakhil Vocational course) in 10,000 madrasahs by 2030, and introduction of SSC vocational courses in 20,000 general secondary schools by 2030.¹³

¹⁰ Madhu Singh. UNESCO. “TVET: Issues, concerns and prospects”. Published in Global Perspectives on Recognizing Non-formal and Informal Learning. Volume 21. Chapter on Bangladesh. 2013

¹¹ BTEB. Op cit.

¹² NSAPR –II is the successor to the PRSP. NSAPR II (FY 2009-11) was approved by the then Caretaker Government in 2008. The new government which came to power in January 2009 decided to align the NSAPR II in line with its development vision and election manifesto in terms of poverty reduction, economic growth, efficiency through use of science and technology as well as other socio-economic goals. In this regard, General Economics Division (GED) of the Planning Commission as the National Poverty Focal Point with cooperation from all the Ministries/Divisions and government agencies prepared the NSAPR I and the revised version II.

¹³ TMED SDG Action Plan

The skills development system in Bangladesh could be classified into five main segments:



Figure 1 Components of Bangladesh National Skills Development System

Bangladesh’s TVET system, particularly at the secondary level, has been expanded in recent years. The average (2008-2014) Incremental Rate of enrolment in BTEB is 13.84 %; whereas in General Education, the rate is 5.81 % (BTEB, 2016). Outside of schools, the skills system in Bangladesh has also recently experienced noticeable growth and diversification of provision, with several government ministries becoming more involved in skills training; large private enterprises creating formal pre-service and apprenticeship training programs, and a growing number of NGOs delivering formal training for the informal economy.

As part of the process to reform and modernise the whole education sector including the skills development, the government passed the National Education Policy (NEP) in 2010 and the National Skills Development Policy (NSDP) in 2011. Supportive legislation, act, policies, frameworks and strategies such as NSDA act, gender and inclusion, as well as NTVQF. have also been prepared and relevant bodies have been created or strengthened. However, the total expenditure on education was 1.6 % of total GDP in 1990 which increased to about 2 % in 2000. Since then, it has been hovering around this level (CPD and CAMPE, 2016). Despite growth in national budget, the share of the education sector in the total outlay has been decreasing over the last few years.

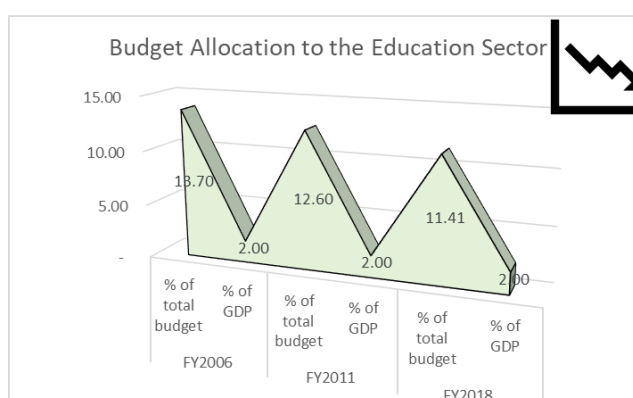


Figure 2 National budget allocation to education sector

Source: CPD and CAMPE 2016 and Fiscal Budget of respective years

Government’s commitment and initiatives allowed the development partners (DPs) to extend their cooperation in reforming and developing the TVET sector in Bangladesh. The development and reform of the sector have been supported over the years by several

multilateral and bilateral DPs such as the World Bank, ADB, the UN system of agencies, EU, DfID/UKaid, SDC, the Canadian government, GIZ, KOICA, JICA, Sida and AusAID/DFAT.

In 2007, the government initiated a major reform of the TVET sector in Bangladesh. The TVET Reform project supported by the EU assisted in the development of the National Skills Development Policy, a National Technical Vocational Qualifications Framework, (NTVQF) and strategies to promote social inclusion.¹⁴ The NTVQF is one of the two key components of the Bangladesh Skills Development System. It is a major milestone of standardising the TVET and improving the acceptability of the “qualification” certified in Bangladesh. Together with the National Skills Quality Assessment System, the NTVQF ensures quality, demand-based skills development in Bangladesh. The NTVQF is a comprehensive, nationally consistent yet flexible framework for all qualifications in technical and vocational education and training.

Table 2: Bangladesh NTVQF

NTVQF Level	Pre-Vocational 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 (NSC 3)		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 2 (NPVC 2)			Pre-vocational trainee
Pre-Voc 1	National Pre-Vocation Certificate 1 (NPVC 1)			Pre-vocational trainee

¹⁴ This achievement has also been recorded by EU at <https://europa.eu/capacity4dev/article/tvet-reform-promotes-social-inclusion-and-skills-bangladesh>

The National Technical and Vocational Qualification Framework (NTVQF) was developed through an active participation of the industries, professional bodies and key stakeholders. This created a strategic platform for the government to coordinate the skills development efforts of 22 to 24 ministries¹⁵ and over 20 agencies, in achieving the common national targets. A number of important aspects of the NTVQF establishment have worked relatively well in Bangladesh. These include a growing awareness of the value of a competency approach for workforce development; an appreciation of the value of continuous quality improvement through implementation of the 5 quality assurance policy booklets of the BTEB; and the establishment of the leadership of industry and professional bodies in the development and maintenance of qualifications. Aspects of the NTVQF approach which have worked less well, include implementation and expansion of the new NTVQF approach to workforce development; establishment of a flexible, open, accessible and responsive workforce development system; and putting in place strong industry leadership across the whole economy.¹⁶

The government had also set up the National Skills Development Council (NSDC) as the apex body to spearhead and coordinate all efforts in the skills development sector. The National Skills Development Authority (NSDA)¹⁷ Act elevated the NSDC into a full statutory body as an Authority under the Prime Minister's Office. The Government has also introduced the Skills Vision 2016, upgraded the 1968 Bangladesh Technical Education Board (BTEB) Act into the TVET Act 2018.

2.4 Key elements of the TVET sector in Bangladesh

The growing demand arising from the improved capacity of the sector has been fully capitalised by the Government. The "Skills development" as a theme is getting prominence in the policy priorities over time. For example, in 2005, the Poverty Reduction Strategy Paper (PRSP) of GOB mentions skills as "acquiring education, appropriate skills and access to the infrastructure may help the poor to exploit the opportunities for more remunerative activities." This was further promoted in 2012 with PRSP setting a macroeconomic target based on Vision 2021, to "ensure that Bangladesh is known as a country of educated people with skills in information technology". The following are the key elements of TVET in Bangladesh.

2.4.1 TVET Courses

The formal training under BTEB is provided as short courses such as basic trade course (360 hours, 95 trades) and CBT&A course (51 occupations), secondary level such as SSC vocational course (31 trades), Dakhil-vocational offered by Madrasahs, higher secondary level such as HSC-voc course (14 trades), HSC -Business management, Diploma in commerce, Diploma level course in engineering (34 technologies), textile engineering (3 technologies), agriculture, fisheries, forestry, medical (8 technologies) and other professional level courses.

The formal TVET provision, courses, and programs are offered by different government and private technical schools and colleges, polytechnics, private training institutions, technical

¹⁵ There is a difference in opinion with respect to the actual number of ministries with participation in skills development activities. Generally, it is regarded between 22 and 24 and between 20 and 24 specialized agencies of the government, including directorates.

¹⁶ ILO. David Lythe, Assessment of the National Technical and Vocational Qualifications Framework and roadmap for development of the Bangladesh Qualifications Framework. October 2018

¹⁷ NSDA replaces the NSDC and NSDC-S

training centres and specialized institutes throughout Bangladesh. The informal and non-formal skill training are provided by the respective ministries and government agencies, INGOs and NGOs.

2.4.2 Target recipients

The target recipients of the TVET are primary school completers, school leavers, out of school children, youth, job seekers, as well as women and socially and economically disadvantaged people. Each year about two million young people are entering the labour market with only about 200,000 are being given the chance to work in the formal sector. There is a need to skill the rest of the 1.8 million as well as create job opportunities in the formal sector.

2.4.3 Institution, Teacher and Enrolment

The following table presents the number of institutions, teachers and students including the proportion of female teachers and girl students by the type of the institution:

Table 3: Number of Institution, Teacher and Enrolment by Type 2018¹⁸

Type of Institute	No. of Institute	Teachers			Students		
		Total	Female	% of female	Total	Girls	% of Girls
Polytechnic Institute	439	11831	2033	17.18	250770	41614	16.59
Technical School & College	174	4015	784	19.53	92406	18992	20.55
Glass & Ceramic Institute	1	16	2	12.50	1008	43	4.27
Graphic Arts Institute	1	46	11	23.91	1196	145	12.12
Survey Institute	4	63	10	15.87	1277	80	6.26
Technical Training Centre	164	1706	305	17.88	38297	12700	33.16
Textile Institute	33	530	93	17.55	10143	795	7.84
Textile Vocational	51	467	101	21.63	7767	1815	23.37
Agriculture Training Institute	183	1342	277	20.64	30165	6587	21.84
Marine Technology	1	120	12	10.00	776	42	5.41
S.S.C Vocational (Independent)	169	2643	542	20.51	26591	7410	27.87
HSC Voc/B. Management (Indep)	675	9662	1853	19.18	166870	49167	29.46
Medical Technology	108	1347	233	17.30	14860	5638	37.94
Medical Assistant Training School (MATS)	209	676	221	32.69	26608	11199	42.09
SSC Vocational (attached)	2711	9083	2024	22.28	230395	58174	25.25
HSC Voc/B. Management (att.)	1942	7384	1711	23.17	168355	49861	29.62
Total	6,865	50,931	10,212	20.05	1,067,484	264,262	24.76

*Basic Trade (360hrs) 2600 institutes with trainees 280301 is not included in the above table.

¹⁸ <http://data.banbeis.gov.bd/images/ban007.pdf>

2.4.4 Teacher education

The following table shows breakdown of enrolment in teacher education by institutions and gender.

Table 4: Number of Institution, Teachers and Enrolment in Teacher Education by Type, Gender, and Management 2018¹⁹

Type	Management	No. of Institution		No. of Teachers			Enrolment		
		Total	Girls' PTI ²⁰	Total	Female	% of Female	Total	Girls	% of Girls
Technical Teacher Training College (TTTC)	Private	0	0	0	0	0	0	0	0
	Public	1	0	26	14	53.85	87	27	31.03
	Total	1	0	26	14	53.85	87	27	31.03
Vocational Teacher Training Institute (VTI)	Private	0	0	0	0	0	0	0	0
	Public	1	0	11	0	0	52	5	9.62
	Total	1	0	11	0	0	52	5	9.62

2.4.5 Public-Private Partnerships (PPP)

Public Private Partnership (PPP) is critical to the development of market driven skills system and professional skills needed by the industry. Bangladesh has little experience of strong public-private partnerships in TVET sector. ILO has connected five public technical institutes with five private companies under the PPP model²¹: Samatsuk Printers is working with Dhaka Graphic Arts Institute on printing technology. Similarly, Rangpur Technical School and College is working with Rangpur Woodpoint Furniture Limited; Panchagarh Gems Jute Mills Limited with Panchagarh Technical School and College; Janani Engineering Workshop with Narayanganj Technical School and College; and Mahin Furnitures Limited with Barishal Technical School and College. Through these partnerships, students are getting practical training along with theoretical education. Students are also getting the opportunity to use the machines and resources of these private enterprises. If structured within an appropriate model and framework, this could align with the principle of dual training system that is in place in Germany.

2.4.6 Recognition of prior learning (RPL)

The National Skill Development Policy 2011 gives priority to recognizing the prior skills of an individual. To provide different pathways to future education and training, a new system called Recognition of Prior Learning (RPL) has been introduced. The RPL is responsible to ensure the entry and re-entry of an individual to a specific course. Through this process, the skills of people will be formally recognized. Experiences gathered through in-service training, formal or informal or non-formal training, and paid or unpaid work are also recognized. Even, the prior

¹⁹ ibid

²⁰ PTI – Polytechnic Institutes

²¹ <https://www.thedailystar.net/round-tables/news/public-private-partnership-technical-and-vocational-education-and-training-promote-industry-relevant-1651339>

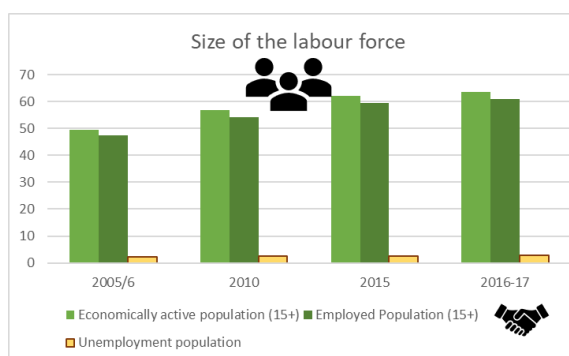
qualifications can also be considered for matching with the level of National Technical and Vocational Qualification (NTVQF). But to obtain such recognition, candidates must show the relevant documents like Samples of work, Certificates, Portfolios and References and referee reports. The qualification will only be accepted once the documents are judged to be sufficient, reliable and valid enough to meet the assessment requirement of the program for which recognition is being sought. An equivalent qualification or a Statement of Attainment for individual unit/s of competence under the NTVQF may only be awarded once all documents are undergone through a series of assessment or challenge tests. Special considerations will only be applicable to people with disability or low education level, but they must demonstrate the minimum level of skills which can be upgradable through training program.

2.4.7 Labour force

To minimise the traditional gaps between TVET and the industries, several Industry Skills Councils (ISCs) and Centres of Excellence (CoE) have been created. The industry needs about two million skilled labour whereas the sector delivers only 500,000²².

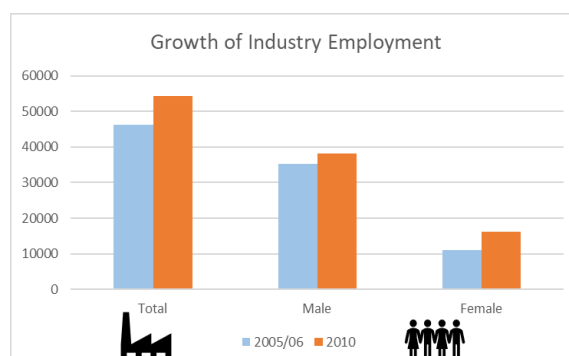
The labour market to consume the skilled labour force is based on the demand of the industries in Bangladesh, informal sector, self-employment, entrepreneurship and overseas employment or the global market. The following two figures show the size and composition of the labour force and the growth of industry employment over the last decade.

Figure 2 Growth of the labour force (2005-2017)



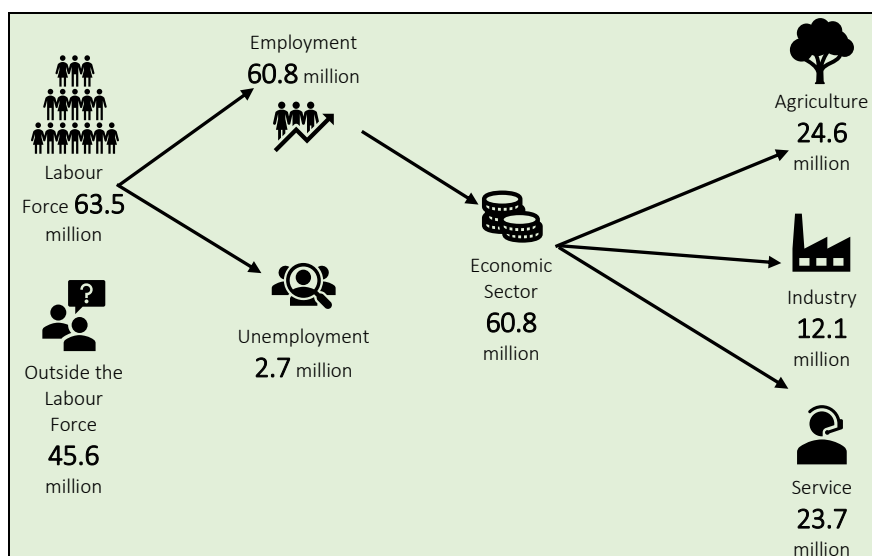
Graph created based on the data of Labour force survey 2013, QLFS 2015 and QLFS 2017, BBS.

Figure 3 Growth of Industry Employment (2005-2010)



Graph created based on the data of Industry Employment and Growth 2005/6 and 2010 (BBS 2011)

²² The 7th Five Year Plan, Bangladesh

Figure 4: Composition of the Labour Force in 2016-17²³

2.4.7 National Qualification Framework (NQF)

The EU-supported, ILO-managed Skills 21 program, among others, focuses on strengthening the National Skills Development System (NSDS) through the development of a National Qualification Framework (NQF). The NQF is also placing emphasis on skills development for “green jobs”. The NQF is a work in progress, as a draft NQF is being reviewed by 7 technical committees established by a high-level steering committee, led by the minister of education.

The aim of the NQF being developed is to provide pathways towards improved access to qualifications and assist people to move easily and readily between the education and training sectors and the job market.²⁴ To support the NQF operationalization, the Project will draft a NQF Quality Assurance System and Implementation Guidelines. The NQF will:

- a. provide a structure for establishing national equivalence and comparability of qualifications;
- b. facilitate international comparability of qualifications;
- c. provide opportunities for career development and clear and flexible pathways; and
- d. provide opportunities to facilitate the pursuit of lifelong learning.

One of the key policy options in relation to NQF is a unified approach that will include all sectors of education and training with one national authority responsible for implementation and quality assurance, with or without the Madrasah Education and Non-Formal Education as an integral part of the unified NQF structure. The challenge lies in the rolling out of the NTVQF as early as feasible, and through which, the establishment of a flexible, open, accessible and responsive workforce development system; and putting in place strong industry leadership across the whole economy.

²³ Info-graph created based on data from Bangladesh Labour Force Survey 2016-17, BBS

²⁴ NQF Concept Paper, Skills-21 project; March 2019

2.4.8 Breaking the barrier: disability and gender inclusion

In relation to equity and inclusion, collective efforts related to advocacy has contributed to 92 employers recruiting people with disability (PWD) in several occupations, that include readymade garments, furniture, pharmaceuticals, ceramics, leather products, and hospitality and tourism.²⁵ There are over 400 people with disability gainfully employed by employers across Bangladesh. ILO Bangladesh developed a practical and disability inclusion strategy, supported by several campaign materials. One of the significant outcomes of disability inclusion is that there now exists 118 TVET schools across the country which are PWD friendly and monitored by TMED. This breakthrough was possible given the government's impeccable commitment to disability inclusion across all sectors, and DP's timely and effective response to the NSDP's pronouncements on disability inclusion. The creation of a Disability Network, called Bangladesh Business and Disability Network (BBDN), fully housed and largely cost-shared by a Bangladeshi business enterprise with 42 members so far is an example of the engagement private sector employers, and the shared vision between the DPs, the private sector and the government in the area of disability inclusion.

The NSDP also recognizes the low participation rate of women in skills development and the need to correct the gender imbalance in the formal training system. It calls for promoting women's inclusion in non-traditional training courses and the recruitment of female administrators and instructors, where feasible. EU, Canada and ILO program collectively reached out to women of all ages, especially in remote and marginalized areas for skills training in areas that have been traditionally male-dominated occupations. This step was followed by support to find employment for the trained women. Some of the non-traditional occupations women were trained in include carpentry, furniture making, automobile mechanics, electronics, electrical trades, tour guide, and food processing.

The two major projects of EU, and Canada²⁶ worked with multiple NGOs to pilot and demonstrate the model of technical and entrepreneurial skills training leading to wage- and self-employment for women and persons with disabilities. The National Strategy for Promotion of Gender Equality in TVET in Bangladesh established the framework for actions related to gender equality. The Strategy established a national goal of 40% female enrolment in TVET by 2020 and called for action to address, among others, negative perceptions on women in non-traditional occupations and improving TVET institutions capacity on gender.

2.5 TVET Cost and Financing

Despite government's commitment and policy frameworks, the budget allocation for the education sector remains 2% of the GDP. There has been a consistent increase in the TVET budget of the Ministry of Education (MoE), mainly driven by the intention to expand the public network of Polytechnic Institutes and Technical Schools and Colleges. These increases in public funding have, however, not kept pace with the actual level of expansion in the sector, with the shortfall increasingly being met through private sector, informal learning and household spending.²⁷

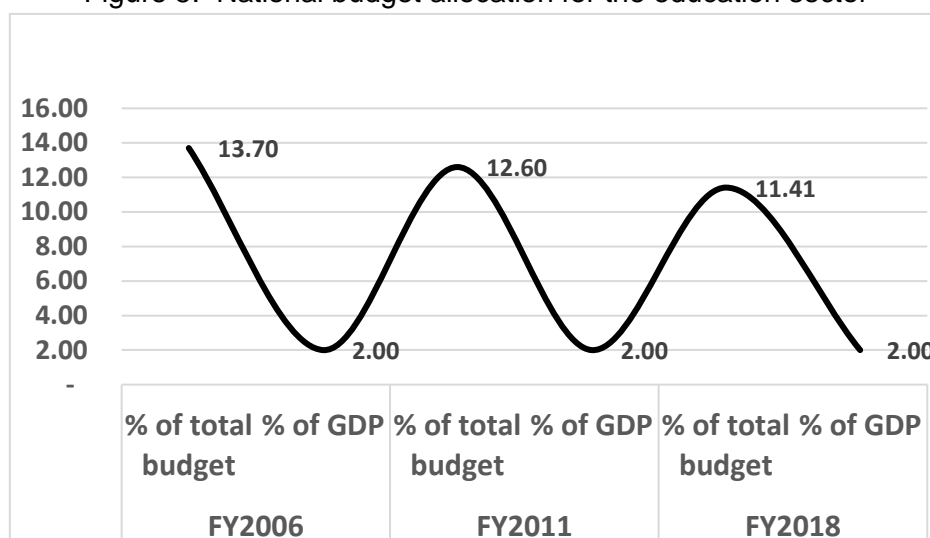
²⁵ M.A. Khan. Contribution of ILO in TVET Bangladesh in one decade, February 2019, as cited in B-SEP final evaluation, 2018.

²⁶ TVET Reform and B-SEP, implemented by ILO

²⁷ EU Human Capital Development Programme TOR, 2019

TMED’s budget was 1.32% and 1.23% of the total national budget for the FY2017-18 and FY2018-19 respectively²⁸. In FY2018-19, the budget for TMED was Taka 5700 crore (USD 675 million) which has been increased to Taka 7453 crore (USD 882 million) in the proposed budget for the FY2019-20. The budget for TMED, is shared between technical and madrasah education, a process that needs to be streamlined over time.

Figure 5: National budget allocation for the education sector



The Government of Bangladesh finances the majority of the costs of public training institutions and a significant share of teacher salaries at BTEB-approved private secondary vocational institutions. Different numbers have been cited about the proportion of MOE financing devoted to TVET. However, they have one thing in common—all the percentages are low. According to DTE, TVET absorbs 1.7% of the MOE budget. Another source indicates that the government spends a mere 1.3% of its education budget on TVET, and that it decreased from 2.5% in 2004–2005 (World Bank 2016).²⁹ For BTEB-approved SSC (voc) and HSC (voc) institutions, public spending comprised about 2.6% of the total education budget. Only about 1,600 out of 3013 BTEB-approved private TVET providers receive Monthly Payment Orders (MPOs).³⁰ Although BTEB is responsible for regulating private TVET programs, its inspection and monitoring cell is not fully staffed, which affect the frequency of inspection as well as service delivery by private training providers. Students also contribute through tuition and examination fees. However, these fees are minimal and do not provide substantial sources of funding for public institutions. Any cost recovery from students is mostly offset by stipends and scholarships to about two-thirds of all students in public institutions, who are not subject to income criteria or means testing. Rather than contributing financially to the cost of their own training, students receive additional and possibly unnecessary incentives (World Bank 2007).³¹

²⁸ <http://data.banbeis.gov.bd/>

²⁹ World Bank. Institutional survey covering 357 accredited secondary and postsecondary TVET. 2016

³⁰ Innovative Strategies for TVET, ADB 2015

³¹ World Bank Tracer Study (2007) cited in ADB. Innovative Strategies in Technical and Vocational Education and Training for Accelerated Human Resource Development in South Asia (RETA 6337) – Bangladesh, 2016

Government grants provide about 70% of public institutions' revenue. In addition, public diploma institutions produce about 20% of their revenue from fees. Private secondary-level institutions received, on average, slightly more than half of their revenue from MPO grants. Private diploma-level institutions are entirely self-financing. Based on a limited institutional survey, the following table shows the composition of funding received, by source, by public and private institutions.

Table 5: Funding Sources for Technical and Vocational Education and Training Institutions by Ownership and Level (%)

Source	Public		Private	
	SSC/HSC Voc	Post-secondary diploma	SSC/HSC Voc	Post-secondary diploma
Government grants	75.2	69.0	54.6	0.0
Tuition/fees	4.9	20.1	14.5	76.8
Sale of products				
Income from training	3.2	6.0	7.3	0.8
Others	11.8	4.9	14.4	15.9

HSC Voc = higher secondary certificate (vocational), SSC Voc = secondary school certificate (vocational). TVET = technical and vocational education and training.

Source: World Bank. Institutional survey covering 357 accredited secondary and postsecondary TVET. 2016

Public institutions can use tuition fees to fund short courses, and such fees remain at the institution and increase revenue. Regulations determine the use of the funds, mainly for teachers' salaries and teaching materials/consumables. However, these funds do not appear to provide a significant source of income. No institution raised a significant share of its revenue by selling products or providing training services outside its regular programs.

Two major budget items—revenue and development are key sources to finance public TVET. Development budgets fund major TVET projects and initial recurrent expenses for new institutions. When an institution is fully established, development projects are transferred to the revenue budget. However, this transition is a serious problem because the long-time frame creates insecurity for personnel and financing. The process for determining the revenue budget is largely input-driven. Most institutions are financed based on increments of previous budgets (World Bank 2016)³²; once approved, they cannot transfer funds from one main head to another head of expenditure. This inflexibility means that institutions must surrender funds to the government (Ministry of Finance) although there may be an urgent need for other expenditure items (e.g., instructional materials) that have already used up their allocations. In addition, protracted procurement procedures mean that some institutions cannot spend their entire budget.

³² World Bank. 2016. Op cit.

TVET institutions spend about 85%–90% of their government subsidies on teacher salaries and allowances. Several polytechnics had no budget allocation for recurrent expenditures other than for salaries and allowances. In comparison, TTCs spend an average 88% of their allocation on salaries and allowances, leaving only 12% for other recurrent expenditures (of which, roughly two-thirds is spent on electricity), leaving a very limited amount for funding other costs of instruction (World Bank 2016).³³ Compared with general education, the per-student cost of public TVET is expensive, largely owing to smaller class size and equipment and supplies. According to a 2007 World Bank study, the average TVET unit costs³⁴ were nearly three times higher than the cost of general studies, and the per-student cost (Tk16,000) of public vocational secondary institutions is nearly three times higher than the cost of public general secondary schools. Similarly, public polytechnics cost about an average of Tk 13,500 per student compared to Tk 4,720 for government colleges (World Bank 2007). The recently announced budget of the government (2019-2020 Financial Year) represents the highest amount allocated for the education sector so far. It is 15.2% of the total budget.

2.5.1 Finance monitoring through MTBF

A threshold of resources for maintaining acceptable quality have to be guaranteed combining increased public resources with those from the beneficiaries, private sector, and communities. Resource mobilisation and allocation have to be guided by established criteria for quality with equity. Appropriate partnerships of major employment sub-sectors and government for enhancing resources for this purpose should be explored. Resources generated from payroll taxes and managed in partnership with employers have been effective in several countries, especially in the Latin America. This can be further explored within the context of SWAp for TVET in Bangladesh along with the consolidated financing mechanism in the SWAp.

Appropriate policy measures are needed to remove or mitigate obstacles for the poor to skills development in the form of family cost per month for education and training ranging from Tk. 1,175 (general education), Tk. 1,928 for formal TVET and Tk. 694 for non-formal TVET, which add up to major share of the subsistence level income of at least 30 % of the families below the poverty line.³⁵

Another important aspect relates to the Medium-Term Budget Framework (MTBF) of the government. The Ministry of Finance while describing the importance of MTBF states in their website³⁶ :

Current trend of economic development suggests that Bangladesh is well on track to be elevated to a developed country by 2041. To achieve these goals, we have taken an initiative to prepare 'Vision 2041' as a long-term plan. High priority has been attached to implementation

³³ World Bank Tracer Study (2007) cited in ADB. Innovative Strategies in Technical and Vocational Education and Training for Accelerated Human Resource Development in South Asia (RETA 6337) – Bangladesh,2016

³⁴ Current financing is generally improving existing provision of TVET according to the available budget. Financial resources are mostly agreed without taking into account the unit cost of the chosen training scheme. When the unit cost is known, it mainly takes into account the running costs (salaries, expenditures for current needs, etc.). This unit cost ignores/underestimates tangible investment costs (updating of equipment and technologies) and intangible investment costs (innovation and continuous improvement).

³⁵ Education Watch 2012

³⁶ https://mof.gov.bd/site/view/budget_mof

of UN sustainable development goals (SDGs) and a slew of steps have been taken towards attaining these goals. Strengthening the Medium-Term Budget Framework (MTBF) process will have a catalytic impact in achieving all the goals of the Government.

The Ministry of Finance (MoF)'s Medium Term Budget Framework (MTBF) represents 62 ministries/divisions, including TMED of the Ministry of Education. The MTBF document for each ministry and division contains mission statement, strategic objectives, major functions, activities, impact on poverty reduction and women advancement, recent achievements as well as performance related information related to the technical divisions and ministries.³⁷

The MTBF for TMED is based on four strategic objectives, which align with the SDG targets and components of TMED. These are as follows: expansion of access to quality technical education; ensure equity and equality; generate skilled human resources for domestic and international labour market; and strengthening governance in education management. These are also largely in line with the themes for the envisaged SWAp and the HCDP 21 program themes. The Medium-Term Budget Framework for TMED is contained in Annex 1.

2.6 Skills/TVET scene and linkage with overseas employment & remittance

Globally, Bangladesh is one of the major labour-sending countries, exporting manpower to 157 countries around the world. The skills training, and TVET have also impacted quite positively on the growth of overseas employment, particularly on the growth of skilled and semiskilled manpower export and proportionate decrease in less-skilled overseas employment.

In 2016-17, Bangladesh's total labour force was 63.5 million. However, about 40% of the working-age population lacked schooling, and 26.4 % had only a grade 1–5 education attainment.³⁸ The share of the population with formal technical and vocational education and training (TVET) qualifications is too small and narrow to fulfil the industries' demands. A significant number of Bangladeshis (estimated about 600,000) leave for overseas employment every year, mostly as unskilled workers. Remittances from these migrant workers comprised about 2% of gross domestic product (GDP) in 2015-2016 which could have been greater if they were skilled and equipped with the necessary value-added life skills. Improving the quality of skills among its labour force by providing better access to quality TVET will increase productivity and help further the country's economic growth.

With a projected labour force growth rate of 2.2% over the next 10 years, 2 million youth joining the workforce every year. Among them 0.6 million are from mainstream education and 1.1 million are trained from government/ private skills development agencies. The rest of the forces fall within the NEET (Not in Education, Employment and Training) classification. Thus, there is a significant gap between the demand for skilled workers by the local industries and international job markets and the supply ensured by education and training centres. One plausible reason for this is the communication and coordination gap between employers and

³⁷ A new software Integrated Budget and Accounting System (iBAS++) has been developed and put into operation. It was used, for the first time, in the preparation of FY 2016-17 Budget. Implementation of Budget Execution and Accounting Modules of iBAS++ has also been introduced. The MoF hopes that it would ensure more transparency in public expenditure. Moreover, as part of the ongoing reforms initiatives, government has already approved the new Budget & Accounts Classification System (BACS).

³⁸ BBS. Bangladesh Statistics 2017

skills development agencies. Apprenticeship can be a practical solution to this problem. Apprenticeship is a significant endeavour to increase remittance per capita and ensure decent work for everyone through appropriate planning and coordination.

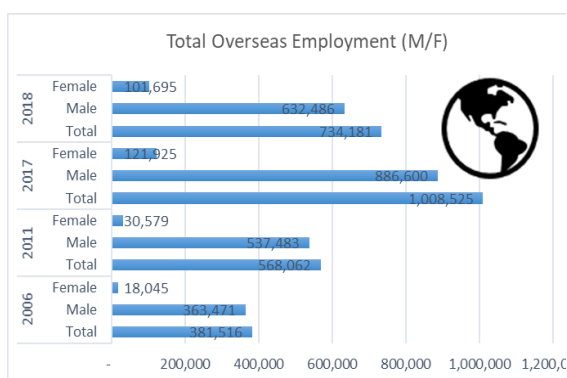
While labour migration can ease domestic unemployment issues and add to the national economy through their remittances, it is a challenge to ensure that policy keeps pace with new trends and opportunities for migrants. The National Skill Development Policy of 2011 (NSDP) defines and articulates a strategic plan for young people's skill development, while the National Technical and Vocational Qualification Framework (NTVQF) defines qualifications in the country to better reflect the changing occupational and skill profiles in both domestic and international labour markets. In order to properly match workers with jobs at home and abroad, Labour Force Surveys are undertaken by the Bangladesh Bureau of Statistics (BBS) to quantify skills available in the country. This information can be used to identify sectors of employment which are available in surplus inside Bangladesh and match these with countries with shortages in the same sector as well as to make projections and plans for future skills training. As the skills available in Bangladesh do change over time, so should change the profile of countries where labour migrants are currently placed.

While the Middle East and Arab countries have always been top labour receiving countries for low skilled Bangladeshi workers, the protection of worker's rights is often not guaranteed by law in those states. Therefore, it is important to analyse available protection mechanisms as well as labour market opportunities on a regular basis, and the occupational priorities for skills training opportunities thus need to evolve around these analyses. In order to improve protection mechanisms available for Bangladeshi migrants, the government is piloting new initiatives such as the Government to Government (G2G) agreement with Malaysia, which can be regarded an example to follow with respect to other bilateral agreements. While it is important to identify countries that have opportunities for the skill sets of workers currently available, it is also important to look for new skill sectors which the country plans to develop in the coming 5 to 10 years through the skills development plan. Although a majority of migrant workers from Bangladesh have been recruited for the construction and textiles sectors (male migrants) and the service sector (female migrants), the government is looking for new opportunities for potential skilled workers not only into new countries but also in new skill sectors within traditional countries of destination.

It is important to note in this connection that different types educational human capital play different roles at different stages of economic growth. The economic growth in Bangladesh in the last few decades was achieved by relatively unskilled labour. This has reduced the demand for secondary and higher education in the country, jeopardizing skills development in the country. The majority of the students mainly enrol in mainstream schools and Madrassa education, while a very insignificant sections of the population enrol in vocational schools. In other words, the supply of human resources possessing vocational skills as per the domestic and international market demand remains poor. Those who graduate from mainstream schools are skilled for other types of jobs, but not the types of skills required in service, manufacturing or industrial sectors of destination countries. In such a scenario, Bangladesh mainly participates in the unskilled and semi-skilled international labour market, where exploitation is higher, and return is low. Therefore, almost all strategic plans, i.e., the Sixth Five Year Plan, Seventh Five Year Plan, Overseas Employment Policy 2006 and the Overseas Employment and Migrants' Act, 2013 emphasize the need for reformulating the education system to increase the proportion of vocationally skilled human resource, which would ultimately serve both of the job markets, domestic and international.

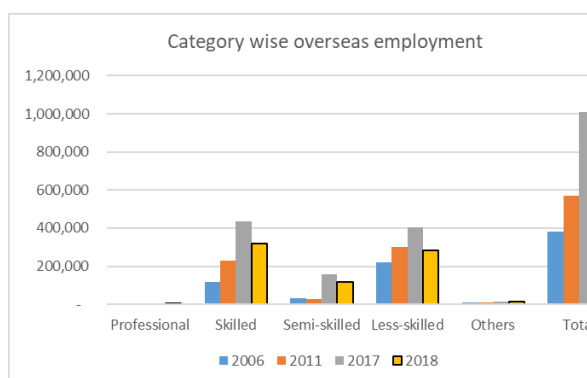
There is generally a mismatch between skills acquisition in Bangladesh and overseas business needs. Skills development of the Bangladesh labour force requires an enabling environment so that the provision of skills is balanced with the overseas provision of opportunities to use these skills. It is essential to examine the interaction between home country approaches to skills development and host country approaches to skills utilization. Past country experiences through studies conducted by IOM for example, suggest that training alone cannot result in effective overseas employment outcomes. A ‘win-win-win’ situation may be possible for all stakeholders involved in the migration process if a virtuous circle is created that benefits all the parties through the better management of labour migration and the skills-matching dimension. In fact, skills matching between migrant workers and jobs abroad is crucial to efficient labour mobility. In this context, comprehensive cooperation mechanisms are needed in order to reduce exploitation and skills waste and to ensure better skills matching in destination countries.

Figure 6 Total overseas employment (M/F)



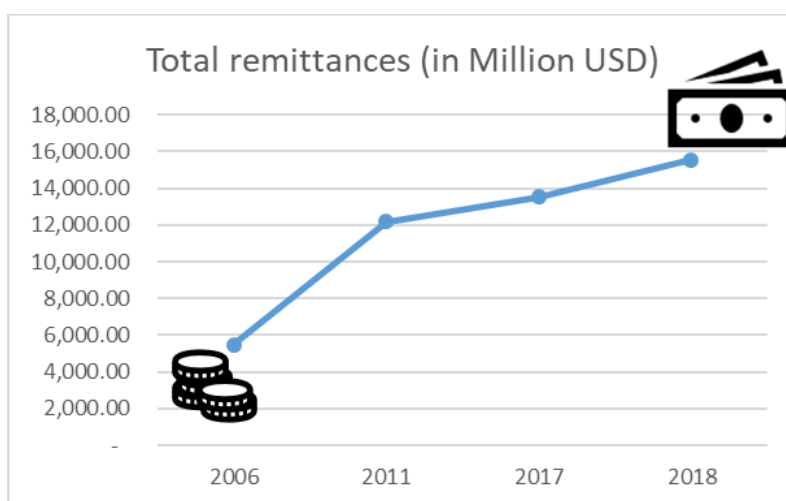
Graph created based on the data of BMET web-Statistical Report (2019)

Figure 7 Category wise overseas employment



Graph created based on the data of BMET web-Statistical Report (2019)

Figure 8 : Growth in remittance inflow (2006-2018)³⁹



³⁹ Graph created based on the data of BMET web-Statistical Report (2019)

2.7 Employability of TVET graduates

There has been a general argument from the employer's side that the traditional TVET graduates were deficient in terms of efficiency, updated skills on technology, and core (life skills) that is much needed in modern employment practices. With the introduction of NTVQF, and competency-based training and assessment system, the skills mismatch has been greatly minimized as course accreditation, new competency standards and course literature, manuals and the overall monitoring system were put in place. The ultimate impact has already started surfacing as revealed in the BTEB study titled 'Matching of NTVQF Qualification with The Occupations of Present Employment Market' (September 2018). The study shows that 94.4% graduates are now engaged in either paid work or as self-employed entrepreneurs while the remaining 5.5% could still have the potential to be employed but chose to move to occupations not linked to their qualifications. This reflects a strong impact of the systems and support mechanism, as well as capacity building endeavours undertaken for DET, BTEB, and the private Registered Training Organizations (RTOs).

The development of systems and processes is also understood from the following table:

Table 6: Distribution of Employment Status

Employment Status	RPL Stream	Graduates of RTOs	Industry Assessors	Teachers/ Trainers	Average
Employed by Govt./Private sector	54.8%	73.0%	80.6%	100%	77.1%
Self-employed	39.8%	11.7%	17.5%	0.0%	17.3%
Total gainfully engaged	94.6%	84.7%	98.1%	100%	94.4%
Not employed	5.4%	15.3%	1.9%	0.0%	5.6%

Source: BTEB, September 2018

The *Not Employed* figures (5.6%) represent mostly those who opted to migrate overseas for employment or other purposes, and also a handful of those who opted to change their career, not related to their training in skills area (*discussions with BTEB and DTE*).

Relative to the unemployment figures of the Public and Private University graduates in Arts, Science and Business in Bangladesh, the employment rate is extremely low, or none for the TVET graduates. A recent report of the Economist Intelligence Unit (EIU, 2015) partly attributes the graduate unemployment problem to the fast expanding but poor-quality private education sector and use of outdated curriculum in public universities. Unemployment among graduates rose in fiscal 2016-17 in a worrying development for a country like Bangladesh with a sizeable young demographic. The rate of unemployment among persons with an education of up to tertiary level increased 11.2 percent in fiscal 2016-17 from 9 percent a year earlier, according to the latest Labour Force Survey (LFS) by the Bangladesh Bureau of Statistics (BBS).

The above discussion not only points out to the progress in the TVET graduates' employability scene, it also reflects progress in the sector in the last decade in Bangladesh that have contributed to significant changes in peoples' attitude, practices, knowledge, employability, and growth in sustainable livelihood areas.

2.8 Addressing skills matches through apprenticeship: Current state of apprenticeship in Bangladesh

Bangladesh is facing a paradoxical situation with regard to mismatch between the supply and demand for skills. For example, a skills demand survey by the National Skills Development Council (NSDC) had revealed the shortage of skilled workers in nine growth sectors of the economy (GOB, 2012). While employers report shortages of skilled workers, a huge number of unemployed young people remain unemployed and seeking jobs. This is partially due to the fragmented Bangladeshi TVET system, which is comprised of a large number of technical and vocational training centres in both the public and private sectors. These training providers train thousands of graduates, but many remain unemployed. In other words, the formal TVET system is highly supply driven.

In response to this situation, the government had initiated several reform measures, including increasing the participation of private sector enterprises in skills training. At the same time, it has undertaken measures to invest in large skills development projects funded by the government from its own and external sources. The National Skills Development Policy 2011 (NSDP 2011) states: *“It is important that the TVET and skills training institutions are aware of the skill needs in industry and understand the latest technology trends. Without this knowledge, the skills produced by institutions will not meet the needs of industry”* (NSDP, 2011).

The apprenticeship law was adopted by the Government through the enactment of the *Apprenticeship Ordinance (1962)* which constituted part of the country’s labour laws. In 2006, the Government of Bangladesh enacted the *Bangladesh Labour Act (2006) (or BLA 2006, 11 October 2006)* which contains Section XVIII on Apprenticeship. This new Labour Act supersedes the 1962 Apprenticeship Ordinance.⁴⁰ According to the legal definition, *“Apprenticeship means a system of training in which an employer undertakes to employ a person and to train him or have trained him systematically in an apprenticeable trade or occupation for a period fixed in advance and in the course of which the apprentice is bound to work in the employer’s service”*.

Even with the enactment of law as early as in 1962, formal apprenticeship as a mode of training has remained insignificant and unattractive to the employers. Most of the employers are either not aware of the legal requirement for apprenticeship or not willing to participate in the program. This was pointed out by a survey on apprenticeship carried out by the ILO and the TVET Reform Project in 2009:

“With this definition, formal apprenticeship in Bangladesh is extremely limited with a total of 54 formal apprentices within three formal apprenticeship programs in the private sector. Few businesses are even aware that a government mandate for the incorporation of an apprenticeship structure even exists.”

⁴⁰ There is a perceived anomaly between the Apprenticeship Ordinance 1962 and the BLA 2006 and the Amendment of the Labour Act (in 2013) regarding the competent authority to oversee the apprenticeship programme. The 2013 amendment of BLA designates the Chief Inspector of Factories and Establishments as the *“Competent”* authority to inspect and supervise the apprenticeships. However, BMET is still keeping its previous responsibility for registration, monitoring and certification of the apprentices (both formal and informal). It is understood from the BMET sources that this provision of the labour act will be amended.

The NSDP-2011 has identified the Bureau of Manpower, Employment and Training (BMET) as the responsible government entity for implementing the apprenticeships in the country. BMET has three apprenticeship offices in the three regions: Dhaka, Chittagong and Khulna. With the initiation of the TVET reform program, the concept of apprenticeship had gained prominence, particularly as a result of the formation of Industry Skills Councils (ISCs). Initially, five sector ISCs were established which currently stands at 13 representing 13 industrial sub-sectors. Their role is vital in bridging the gap between the formal institutional training system and the enterprises. One of the tasks of the ISCs is to establish Centres of Excellence (COE) in each sector to support and promote employer participation in skills training including a strengthened and expanded apprenticeship system. Government with support from DPs continued to support the strengthening of both formal and informal apprenticeship in Bangladesh. Apprenticeship training was introduced (formal and informal) for over 12,000 individuals (26% of formal apprentices were women). For formal sector apprenticeship, the GoB-Canada-ILO B-SEP project for example, built linkages to the NTVQF by supporting ISCs to develop Competency Skills Logbooks (CSLBs). These were based on competency standards, ensuring recognition and coherence of skills, and supported training for managers and supervisors. Informal apprenticeships were developed and delivered through a number of NGOs and development projects which ensured wide dissemination of the strategy and its adoption by several NGOs. The model has been adopted by the Department of Social Services and local government authorities as a core service delivery strategy. Furthermore, an Apprenticeship Cell has been established at BMET to track all apprentices and issue certificates, ensuring that there is overall management of this approach. The BTEB has worked closely with industry to assess more than 10,000 workers with the support of the project, and this will continue.

2.8.1 Apprenticeships in the informal economy

In the Bangladeshi labour market, the informal economy plays the primary role in terms of employment generation and skills formation. Millions of workers, mostly young people, work in the informal economy and only gain skills through informal employment relationships between a skilled worker and one or more apprentices working under their supervision. Since the formal apprenticeship system plays limited role in the overall country context, the huge demand for skills is met through the relatively well-developed informal apprenticeship system.

Consequently, efforts have been made to revamp the informal system by introducing a supervised and well-structured model that will follow a standard methodology and process. Such an approach also seeks to improve informal apprenticeships through skills recognition, content standardization and certification. This has been highlighted in an ILO report as follows:

“Despite the system’s strength of providing skills relevant to local markets, informal apprenticeship has a number of weaknesses. Long working hours, unsafe working conditions, low or no allowances or wages, little or no social protection in case of illness or accident, and strong gender imbalances are among the decent work deficits often found in apprenticeships.

On one hand, upgrading informal apprenticeship is considered important to address these weaknesses. On the other hand, compared to investing in expanding formal technical education and training, it is a cost-effective way to invest in a country’s skills base and enhance employability of youth, since training is integrated into the production process. Improved informal apprenticeship systems can also dynamize local economies by contributing to the diversification of products and services and the innovation, productivity and adaptability of micro and small enterprises” (ILO, 2012).

Despite the merits and demerits of informal apprenticeship modality, an inclusive TVET system needs to take into account both formal and informal apprentices. A summary of the ongoing apprenticeship initiatives is provided in Annex 2.

2.9 Policy and regulatory environment

The NEP and the NSDP are the two main reference documents for TVET policy environment in Bangladesh. While the NEP provides a strategic approach to vocational and technical education to build up skilled manpower, the NSDP puts a more concrete emphasis on three areas of focus: quality, equity and access, and governance which are not only featured in the TMED's Action Plan goals, these are also key Disbursement Linked Indicators (DLIs) of the EU funded Human Capital Development Program 21 (HCDP 21) that will commence implementation this year.

Followings are the relevant acts, policies, strategies and plans impacting on TVET and skills development in Bangladesh:

National Education Policy (NEP), 2010 – promotes an inclusive education agenda aiming at removing all disparities including gender in education. It guides towards achieving the aims and objectives of vocational and technical education:

- to increase competent manpower in diverse sectors including Information and Communication Technology at a fast pace keeping in mind the national and international demands;
- to build up skilled manpower at a fast pace to create opportunities of economic development and to increase dignity of labour;
- to create wide-ranging employment opportunities through export of skilled manpower and to enhance foreign currency earnings.

National Skills Development Policy (NSDP), 2011 - The NSDP provides a good framework to prepare Bangladesh for transition from what it calls a “low skills, low productivity and low wage equilibrium” to a “high skill, high productivity and high wage” virtuous cycle by expanding the frontiers of growth with strategic investments in human resource development. The NSDP emphasizes (i) establishing a national human resource development fund (NHRDF) to sustainably finance the scaling-up of quality skills development to meet current and future labour market needs; (ii) strengthening coordination between key institutions involved in skills development by building on the initiatives of the NSDC; (iii) establishing a robust quality assurance framework through a partnership between the Bangladesh Technical Education Board and Industry Skills Councils; (iv) catalysing the private sector on a large-scale and promoting public–private partnerships to make the skills development programs much more responsive; (v) targeting disadvantaged groups by various mechanisms; and (vi) enhancing sector-wide monitoring by NSDC.⁴¹

The policy stresses the need to think beyond the State controlled TVET systems and emphasise the varied types of formal and non-formal training through which skills are developed. Better alignment of TVET with skills development systems and industry skills demand is key. To achieve this, the NSDP calls for a new national system of training and certification for instructors and trainers to deliver a more strategic approach to the development of the training workforce. It ensures that common standards, programs and

⁴¹ ibid

qualifications apply to all instructors and trainers working in the public and private sector delivering programs that are recognised under the proposed qualification framework. The objectives of the policy are to enhance employability, improve productivity and profitability of firms and strengthen national competitiveness and reduce poverty. Skills development efforts under this policy include: (a) pre-employment and livelihood skills training and apprenticeships in technical and vocational education training; (b) education and training for employed workers in areas of increased demand; and (c) employment oriented and job related short courses that are not affiliated with the Bangladesh Technical Education Board.

Along with skills requirement within the country, it also incorporates overseas labour market needs from Bangladesh in Section 18 of the document. It suggests the development of a coordinated strategy to locate labour market demands of major destination countries for different categories of skilled workers and the alignment of national qualifications with international standards, and the development of a system of dissemination of labour market information to overseas employers. Some of the specific activities suggested are: (a) improve the capacity of trainers to international standards; (b) enhance regulations and monitoring to assure quality; (c) communicate to overseas governments and employers of the meaningful changes in skills policy; (d) provide information to prospective migrants/employers with skills demand in overseas markets and its availability in Bangladesh; (e) focus on addressing issues to safe migration prior to departure; (f) establish links between better qualifications and job outcomes overseas; (g) provide skills training to potential migrant workers; and (h) establish a system of skills certification for returnee migrants. There will also be an emphasis on improving female participation rates in international migration.

The NSDP has a separate section on skills development of female migrants, which needs to be implemented. This will help diversification of jobs carried out by female international migrants. While enhancing the skills level of potential migrants is important, it is also vital to ensure that skills that returnee migrants acquire during their time abroad are appropriately integrated in the economy. While there has been some work in collating information on skills of returnee migrants and using that database to market these skills, there is very little research analysing the economic reintegration of overseas workers. Given that Bangladesh is aspiring to achieve a middle-income country status by 2021 and a developed country status by 2041, integrating highly skilled returnee migrants into the economy will be important.

2.10 Human Resources Planning and NSDP

The issue of human resource planning for the purposes of migration has received some importance in policy making in Bangladesh in recent years. In this section, a review of research which has been carried out in this area is listed.

- a. The economic growth in Bangladesh in the last few decades was achieved by relatively unskilled labour. This has reduced the demand for secondary and higher education in the country, jeopardizing skills development in the country.
- b. The majority of the students mainly enrol in mainstream schools with very insignificant sections of the population enrolling in vocational schools, where the skills generated has high demand in both domestic and international labour market. In such a scenario, Bangladesh mainly participates in the unskilled and semi-skilled international labour market, where exploitation is higher, and return is low.
- c. The evidence on the impacts of migration and, in particular, financial remittances, on education is mixed. On one hand studies show that remittances lead to increase in educational expenditure (IOM, 2010; Siddiqui and Mahmood, 2015). On the other hand, remittances may

act as a disincentive for individuals to invest in education, as migration (unskilled) provides an avenue for a better livelihood.

d. Higher levels of mainstream education do not translate into more remittances sent back. However, it is not clear whether higher levels of education lead to better job conditions and better standard of living for migrants.

e. Highly skilled professionals have made significant contributions in some the areas in tertiary education in terms of both teaching and research. Additionally, networks of scientists, physicians and entrepreneurs have resulted in improved delivery of health services, agricultural innovation, cultural diversification and development of enterprises.

While there is some research that has been carried out in this area, it is not significant enough to undertake evidence-based policymaking. The following are proposed as potential research avenues:

a. A comprehensive analysis of education policy and its action plan is required to identify the drivers behind mismatch between choice of skills acquisition and skills demand both in Bangladesh and abroad. This should have a special focus on technical education feeding into specialised jobs in manufacturing and public works, which often employs overseas skilled workers from other countries.

b. It is also important to understand why a large number of Bangladeshi workers are willing to take up unskilled and semi-skilled jobs in the Gulf and other Arab countries, but not to enrol into vocational schools which would ensure better pay. In other words, it is important to understand the factors that hinder enrolment into vocational stream of education.

c. Research is also required to find out avenues to encourage return or circulation of highly skilled. In this respect an action research can be designed where academic researchers and government functionaries can jointly learn from the experiences of China and India in encouraging return or circulation of their highly skilled migrants. Based on the findings, a national strategy can be developed in this area.

National Skills Development Authority (NSDA) Act, 2018 – the act sets up the National Skills Development Authority as a statutory apex body to:

- develop skills development policy, strategy, and action plan.
- develop Key Performance Indicators (KPIs) for public and private training institutes and develop uniform training curricula for producing skilled workforce for the national and international job market.
- establish skills database and forecast/project demand of skilled workforce for future.
- implement RPL approach and accredit it.
- ensure arrangements for improving quality of skills training, certification and equivalency certifications.

Bangladesh Technical Education Board Act, 2018 – the BTEB act replaces the Technical Education Act 1967 aiming to enhance SSC (Vocational), Dakhil (Vocational), BM and Diploma level education, research under the Technical Education Board, and also create new entrepreneur and employment generation through students having the certificate from the board. The board will carry out technical, vocational education and training, competency assessment, examination, recognition of prior learning (RPL) and certification.

Non-formal Education Act 2014 - laws made for the purpose of making provisions for education opportunities for the deprived sections of the population, and opportunities for life-

long education, livelihood through technical and vocational training, transforming skilled human resources and creating self-employment capabilities and alternative opportunities.

National Strategy for Promotion of Gender Equality in TVET, 2012 – provides strategic framework charting out specific mechanisms, action areas and activities to implement the stated objective: “to increase access of women to formal TVET institutions and employment through a number of measures”.

National Strategy for inclusion of persons with disabilities in Skills Development, 2013 - to provide equal opportunities for persons with disabilities by ensuring that:

- Every skills development program is inclusive of persons with disabilities.
- Persons with disabilities have access to skills development programs that will improve their employability.

Bangladesh Labour Act, 2006 - to consolidate and amend the laws relating to employment of labour, relations between workers and employers, determination of minimum wage, payment of wages and compensation for injuries to workers, formation of trade unions, raising and settlement of industrial disputes, health, safety, welfare and working conditions of workers, and apprenticeship and matters ancillary thereto. Among others, the act provides regulation to introduce and operate an apprenticeship program in an organization.

7th Five Year Plan 2016-2020 (7FYP) - Accelerating Growth, Empowering Citizens – notes that the industry needs about two million skilled labour whereas the sector delivers only 500,000. The 7th FYP also recognizes that the Skills Development Policy was instrumental in setting the stage for planning and investing resources for increased productivity, employability and mobility of the labour force to reap the benefits of demographic dividend and support the economic transformation in the future.

Perspective Plan of Bangladesh, 2010-2021 (Vision 21) – aims to ensure that Bangladesh is known as a country of educated people with skills in information technology.

The Expatriates Welfare and Overseas Employment Policy 2016 - aims to ensure and encourage safe migration and protection of migrants and their families. This policy revises the Overseas Employment Policy, 2006 with the objective to elaborate a new instrument taking into account current challenges and opportunities for Bangladesh and its workers in the sector of labour migration.

2.11 Development partners programs and partnership

The development partners in Bangladesh who opted to be involved in the TVET sector have developed a niche in the consultative process, partnering with 24 ministries and over 20 departments as and when required, that has not been an easy task given the fragmented and complex nature of skills coordination between the ministries. Compared to the early days of the TVET reforms in Bangladesh, the sector has started receiving substantially more interest from the development partners, as well as the private sector and government agencies, largely given the quadrangular partnership arrangement that is in place⁴², beyond the traditional tripartite nature of partnership. Since September 2010, quarterly meetings of the Development

⁴² Government, Employers, Employees and the Development partners, making up a unique quadrangular partnership. The traditional triangular partnership did not include the DPs. This partnership is extremely necessary as more joint ideas and collaboration emerge, especially with respect to financing of the SWAp and financing for the TVET/skills sector as a whole, to reach the SDG targets.

Partners' Skills Development Working Group (DP SDWG) under the Local Consultative Group (LCG) are held on a regular basis, which is co-chaired by ILO for policy, sectoral alliance building, and common approaches to the sector.

Notwithstanding this partnership and DPs' participation in various dialogues, there exists fragmented, and often uncoordinated nature of interventions by the DPs, and other partners, including INGOs and local NGOs. The SWAp task force has recently undertaken a survey of development partners' activities classified according to the three themes, which are also in line with the envisaged priority areas of SWAp, as agreed by the DPs and the government: i. Quality; ii. Equitable access and participation; and iii. Management, governance and financing. The Matrix containing DP's work is given in Annex 3. A summary of some of the key interventions, undertaken in the recent past and present, that make up the contribution of the DPs to the TVET sector in Bangladesh is given below:

'Skills 21 – Empowering citizens for inclusive and sustainable growth' project (2017 – 2020, Euro 23m, EU) – builds on the TVET sector reforms initiated and implemented by the TVET Reforms project, Skills21 brings in new dimensions like developing model TVET institutes, promoting skills for migration, establishing instructional materials development centre and centre for skills excellence, developing National Qualification Framework, designing a SWAp to improve skills governance, and establishing Mutual Recognition Agreement (MRA) in skills qualifications.

Skills Training and Enhancement Project (STEP) - (2010-2019, USD260m, World Bank, GAC) - aims to strengthen selected public and private training institutions to improve training quality and employability of trainees, including those from disadvantaged socio-economic backgrounds. It provides institutional capacity development to TMED, DTE, and BMET and works with MoE to develop TVET programs that are relevant to the needs of the labour market.

Skills for Employment Investment Program (SEIP) – (2014-2021, USD1070m; ADB, SDC) - helps the government scale-up skilling of new entrants and up-skilling of existing workers to contribute to higher growth of priority sectors. It works through Finance Division of MoF and with Bangladesh Bank, PKSF, industry associations and other ministries. SEIP aims to support the transition to a sector-wide approach (SWAp) by establishing a unified funding system and enhancing overall coordination of the currently fragmented system.

First Programmatic Jobs Development Policy Credit – (USD250m, World Bank) – aims to improve the policy framework to support diversified, job-creating private investment; strengthen national social protection systems to reduce vulnerability of workers; and improve programs to enhance access to jobs for vulnerable populations. The implementing agency for this program is Finance Division of MOF.

Skills for Employment Program in Bangladesh (SEP-B/Sudokkho) – (2014-2021, GBP22m; DFID, SDC) – aims to reduce poverty through better training and job opportunities for the poor by contributing to a stronger and more inclusive private sector training market creating better job opportunities for the poor. The program tests and scales-up market-driven, quality skills training systems within the readymade garments (RMG) and construction sectors that will stimulate further investment in training by trainees, private training providers and employers. DTE is the executing agency for the program.

Building Skills for Unemployed and Underemployed Labour (B-SkillFUL) project – (2015-2020, USD4.5m; SDC, EU) - aims to develop the skills of poor and disadvantaged men and women at the grassroots level, to enhance their income through decent employment and move them out of poverty. The project works with the Informal Sector Industry Skills Council

to improve work conditions through partnerships with the private informal enterprises and private training providers.

TVET-Reform Project - (2007-2015, EUR15m, EU) – targeted to ensure Bangladesh’s competitiveness in the global market and reduce poverty by improving the quality of vocational educational and training. The project, implemented by the International Labour Office (ILO), has achieved a couple of ‘first’ in the country’s history: it has produced a National Skill Development Policy, a National Technical Vocational Qualifications Framework, and it promotes social inclusion⁴³.

Bangladesh Skills for Employment and Productivity (B-SEP) project – (2014-2019, CAD19.5) - supported Government’s efforts to strengthen and deepen skills reform in Bangladesh for improved productivity and economic growth. B-SEP project addressed the challenges facing the TVET sector by developing institutional capacity of the skills system as well as building industries capacity for improved productivity. In addition, B-SEP project creates linkages between institutions and industries, matching supply and demand for skilled workers as well as promoting social inclusion. It had launched first Public-Private Partnership (PPP) model in TVET to promote industry relevant skills.

Skills Development Project – (2008-13, USD50m; ADB, SDC) - The project aimed to enhance access to market-responsive technical and vocational education and training (TVET) programs, support partnerships with industry, and improve capacity for relevant skills training and project management.

KOICA’s TVET Projects (2013-2019, USD13.5m) - Korea International Cooperation Agency (KOICA) has the following ongoing projects for TVET and TTC capacity building:

- Modernization and Strengthening of Training Institute for Chemical Industries (USD5m)
- Capacity Development of TTC, Rajshahi (USD8.5m)
- Promote Better Quality TVET and Employment through Upgraded TTC’s (USD8.5m)

JICA’s Bangladesh Preparatory Survey for Education Sector (2017) – Japan International Cooperation Agency (JICA) undertook a comprehensive analysis of the education sector in Bangladesh, with special emphasis on TVET sector. The main purpose of this study is to present to the government a comprehensive analysis of the sector with a view to ascertaining gaps which can be addressed by JICA on the basis of their comparative advantage.

Supporting Hardest to Reach through Basic Education (SHARE) - (2011-17, Euro 50m, EU) – the project was delivered to achieve the objective that hardest to reach children enjoy their right to quality basic education.

Reaching Out of School Children (ROSC) (2004 – ongoing, USD80m; World Bank) - ROSC has been providing second chance primary education to out-of-school children in targeted rural upazilas (sub-districts) of the country through learning centres (LCs) since 2004. The 2nd phase of the project has started in 2013 with a closing date in 2017, but the project is still ongoing. The project also provides alternative education to the out-of-school children of urban slums in 8 city corporations and pre-vocational training (PVT) to dropped out over-age children and adolescents.

⁴³ <https://europa.eu/capacity4dev/article/tvet-reform-promotes-social-inclusion-and-skills-bangladesh>

Underprivileged Children’s Educational Programs (UCEP) - UCEP Bangladesh is a not-for-profit and non-governmental organization that aims to uplift the socio-economic conditions of underprivileged communities through a range of skills training. It also provides second chance education, and TVET followed by job-placement support to the youth graduates and women.

Imminent DP project of importance:

Human Capital Development Programme (HCDP) (2019 - 2023) – The European Union will support a comprehensive and integrated program covering Primary Education and TVET institutional strengthening, to support the government in the implementation of its development policies aiming at a better educated, trained and qualified human capital, as laid down in its national strategic development plans. The project, working alongside the Skills 21 and ensuring complementarity with it will aim for effective delivery of TVET services, through targeted technical assistance that will provide institutional strengthening support, capacity building, policy advice and evidence-based research, as required. The project will assume a catalytic role in supporting the establishment of a SWAP for the TVET sector, through enhanced results-based planning, management and assessment, disbursement linked indicators, and improved coordination across the TVET sector.

In the Bangladesh TVET sector, most bilateral and multilateral development partners’ interventions focus on strengthening the sector, with direct and indirect links to policies, legislations, systems and the labour market. Others adopt a broader scope of skills development, taking a market and private sector development approach. The spectrum of interventions, thus, remains wide, and often marred by absence of coordination and sporadic interventions. These include some DPs along with large INGOs, and private sector entities, mostly directing their assistance towards the informal sector. The ensuing HCDP-21 takes a different stand, as it promises a results-based approach through institutional strengthening, linked to the attainment of SDGs and related policy pronouncements of the government, including the development of SWAp.

The DP Matrix attached to the document reveals this feature prominently. However, the DP Matrix, although was a modest beginning towards a mapping exercise, a regular and comprehensive documentation of the work undertaken by DPs, INGOs, NGOs and the private sector through different financing mechanisms (hybrid, direct support) need to be undertaken. The ERD, Ministry of Finance operated Aid Information Management System (AIMS) which was done through the Aid Effectiveness project in 2016 is meant to contain such information, including substantive information related to the objectives, partner institutions, sectoral focus and financing framework.⁴⁴

⁴⁴ ERD has a home grown online aid portal called Bangladesh Aid Information Management System (AIMS), a web based software application that will help the country to track and manage its aid flows. Bangladesh AIMS now serves as a single-entry window for all foreign aid related information in the country. In the meantime, the project has launched an exercise piloting automatic data import from the International Aid Transparency Initiative (IATI) repository into the Bangladesh AIMS. DPs have the choice between entering their own data or importing their headquarters’ IATI data automatically. In addition, 30 DP focal points and 33 ERD focal points were also trained on AIMS data entry process and AIMS related core functions. Concerned Development Effectiveness Wing (DEW) staff have also been trained on AIMS operations. (Khan, M. A. Final Evaluation of Aid Effectiveness Project in Bangladesh, 2016).

CHAPTER 3: SECTOR ANALYSIS

Key issues and challenges

A number of gaps and challenges are inherent in the TVET planning, policies and practices in Bangladesh, which, however, are by no means peculiar to the context of Bangladesh. Much of these issues are linked also to the overall economic, social and demographic conditions in Bangladesh which demands addressing within the overall context of social and political governance of Bangladesh.

Several of the recommendations emanating from the past studies, and evaluations of the sector and various projects have been pursued in different styles and means, often not timed and coordinated as necessary. These include policy and legislations enactment, streamlining teacher recruitment, apprenticeship models, private –public partnerships, qualification frameworks, and inclusion strategy development. The creation of the NSDC (then upgrading it to NSDA as a statutory body) is a direct result of the government’s commitment to the reforms in the sector. Once fully implemented, the policy recommendations regarding NTVQF, equivalency and apprenticeship will promote flexibility in the system by establishing equivalencies between formal courses and skills standards and by encouraging apprenticeship. However, other proposals (e.g., the proposed introduction of prevocational courses in general education) remain to be addressed.

(i) Gaps in educational attainment and training in the labour force: Labour force growth of 2.81% during 1974–2017 was faster than population growth (1.86%) due to a rapidly expanding young population (the demographic dividend) and increased labour force participation. However, the labour force is mostly unskilled, and workers often have little or no education (40%). Only 22.8% workers have completed primary education school, and only 4.0% have vocational education.⁴⁵

(ii) Gaps in absorptive capacity: New entrants to the labour force numbered 2 million in 2013, and that figure is projected to reach 4 million in 2025.⁴⁶ These new workers need training if Bangladesh is to grow its economy quickly and earnings are to rise. Similarly, absorptive capacities of TVET centred government agencies need to be assessed as anecdotal evidences show anomalies between the quantum of mandated jobs, and the capacity of these institutions to deliver these effectively.

(iii) Gaps in funding: A rough estimate by the World Bank shows that USD300 is needed to train each trainee at present, with a required investment of USD600 million needed is to train the 2 million new entrants. The actual estimated annual investment from public and private sources is about USD150 million, or enough to train only 500,000. The investment requirement will rise to USD1.2 billion in 2025 to train 4 million new workers per year. There is also a serious need of institutional strengthening and financial management capacity building of the relevant public bodies in budget planning and in efficient budget utilization.⁴⁷

(iv) Gaps in quality : The quality and effectiveness of current training is hampered by (a) a lack of trained teachers due to low output by teacher training institutions, a lack of in-service training opportunities, and poor incentives; (b) about a 50% vacancy rate for teaching positions

⁴⁵ World Bank. Bangladesh Skills for Tomorrow’s Jobs: Preparing Youth for a Fast-Changing Economy. 2018

⁴⁶ *ibid*

⁴⁷ *ibid*

in public training institutions; (c) overemphasis on theory in teaching and testing rather than on practical instruction; (d) inadequate financing to maintain facilities, replace old equipment, and consumables and training materials for training; and (e) a need for government rules to delegate powers, particularly to public training institutions, to generate earnings, hire trainers and resource persons with industry experience, offer market responsive flexible courses, and enter into partnerships with employers and enterprises to make training relevant and place graduates in jobs.

(v) Gaps in market responsiveness: Skills-gap analysis and tracer studies are rare, which leaves training providers without systematic records of job placements and a poor understanding of current and future labour market needs. This problem is compounded by too few public-private partnerships. The results are lost opportunities to make graduates job ready.

(vi) Gaps related to legislations, and institutional arrangements: The two acts, recently promulgated, i.e., the Bangladesh Technical Education Board Act, 2018 and the National Skills Development Authority Act 2018 are landmark policy, regulatory and institutional initiative of the government to further the development of TVET in Bangladesh. Notwithstanding this, there remains a number of duplication of activities, mandates and expectations from the two organizations. The areas mainly relate to NSDA's role in training impartation, certification and accreditation of training providers, which ideally should be performed by BTEB. An analysis in Bangla is annexed to this report. The World Bank undertook a comprehensive study in 2018 titled. 'Bangladesh Skills for Tomorrow's Jobs: Preparing Youths for a Fast-changing Economy' that identified critical issues pertaining to demand and supply side of TVET in Bangladesh. These are summarized below:

3.1 Demand-side issue

Changing Demands for Skills and Weak Participation and Trust in Skills Development

Technologies are increasingly affecting industries and jobs at a global scale, raising demands for high-level and low-level skills and making skills demands unpredictable. Diffusion of new technologies may exacerbate inequalities or displace workers from jobs if not accompanied by acquisition of relevant skills. Some, especially those in advanced economies, are seriously concerned about the possibility that automation and robots powered by artificial intelligence will wipe out many occupations from the workplace, including even those considered white collar jobs. Even when technologies do not replace the whole job, it is likely that technologies replace parts of the job and alter how tasks are undertaken. On a global scale, it is estimated that about half of the world's economy would be affected by technologies in near future. Evidences abound that technologies are affecting jobs and skills; however, it is notoriously difficult to predict the course of technological changes and business scenarios. The only thing that is predictable is that technical skills needed for jobs are increasingly becoming unpredictable. This presents a unique and serious challenge for skills development systems which now must find ways to be adaptive and remain up to date with the constant changes.

Experience and forecasts in neighbouring countries suggest that similar changes are imminent in Bangladesh, and automation and technologies will likely impact the jobs and skills demands in Bangladesh significantly. The ASEAN countries are ahead of the game in adopting new technologies in manufacturing and service sectors. Computerized manufacturing machines such as automated cutting machines and sewing robots are increasingly prevalent in ASEAN countries. Extensive studies commissioned by ILO shows that in ASEAN countries such as Cambodia and Vietnam, where textile industries play a large part in economy as in Bangladesh,

nearly three in five jobs are at high risk of being fully or partially automated. As technology adoption is making significant strides in Bangladeshi industries, and the global market is closely integrated nowadays, it is highly likely that jobs and skills demands in Bangladesh would also be impacted by automation and other technologies in very similar manner as ASEAN countries.

Despite the increasing importance of technical skills, Bangladeshi society as a whole still holds poor perception about skills training and graduates of vocational education. Enterprises are not enthusiastic about providing skills training to its workers in spite of the potential positive returns to such investment in human resources.

A discussion follows in this document on the aspect of the 4th Industrial Revolution that warrants countries like Bangladesh to think, plan, and strategize its future role with respect to the demands of fast evolving technological changes.

3.2 Supply-side issues and Life skills

Some crucial life skills gaps exist that Bangladeshi workers should aim to enhance in order to better cope with and thrive in the fast-changing economy. Higher-order Cognitive Skills and Non-cognitive/Soft Skills: Skills such as critical thinking, problem solving, leadership, communication, work ethics, and teamwork, have become essential to cope with fast changing technologies and business requirements, and are sought by employers. However, these are largely missing skills for workers in Bangladesh. For professionals and technical and engineering workers, overemphasis on theoretical knowledge at the expense of practical skills during tertiary education is a cause for serious lapses in their technical competencies.

In many workplaces, workers now must be able to use information technologies to fully exploit the growth potential of new technologies; and job opportunities in the ICT industry likely keep growing in Bangladesh. Employers are wanting to see technical workers to be better skilled in ICT. Significantly more ICT skills are needed to meet domestic and international business requirements.

Poor Foundational Skills: Due to poor quality and relevance of education in primary and secondary education, foundational skills – literacy and numeracy – which are the basis for other high-level cognitive and job-relevant technical skills often remain inadequate, even among those entering post-secondary education. Both job seekers and education institutions in Bangladesh are weak in job search skills and job placement capacity and tend to have unrealistic expectations about their job prospects and skills requirements. This creates unnecessarily large frictions and mismatch in the job markets.

3.3 Other issues

Other issues that find place in the overall situation analyses of TVET in Bangladesh, consistent with the TMED's SDG Action Plan and the themes agreed are:

Quality

Under the NSDP 2011, a set of competency standards was developed for a number of occupation groups, along with pre-vocational qualification standards, which are equivalent to the educational attainment required for skills certification. These national standards form the basis of consistent, industry wide training and skills recognition that can address employer needs for quality production and worker needs for appropriate pay based on skills. Over the past decade, government, the employers, mostly representing the manufacturers' associations, donors and investors have worked to improve the quality and coherence of training for the industry, albeit in their own manner that suited the needs of the individual employers. The Bangladesh Garment Manufacturers and Exporters Association (BGMEA)

recently launched a campaign in rural areas offering training to potential migrant garment workers, in an effort to meet the training needs of the industry.

Although considerable work has been done to develop national competency standards, these need wider adoption by industry to influence training and employment practices. These sporadic approaches are not generating enough workers to meet industry needs. More critically, the available training does not meet any common standard for content or results. In other words, the competency standards, including the NTVQF need to be effectively rolled out with quality and efficacy, as a recognized unified national standard, linked to and consistent with international best practices. The ultimate goal in terms of quality is the establishment of a flexible, open, accessible and responsive workforce development system; and putting in place a strong industry leadership in the country.

Access

TVET is characterized by mostly long term, pre-employment training, restrictive access requiring basic education in most cases, formal TVET is small in relation to secondary education (1% in Nepal; 3% in Bangladesh) and education spending (1.2% of education spending in Nepal, slightly over 2% in Bangladesh), the system is strongly centralized and there is fragmentation of public provision (22 ministries and departments involved in TVET in Bangladesh, 10 in Nepal, and 21 in Sri Lanka although the Ministry of Youth and Sports Development has consolidated skills development to a large extent.⁴⁸ A major consequence of low investment in human capital development historically is that South Asian countries, including Bangladesh rank low in global competitiveness index. To correct this, large investments are needed in high quality schooling, targeted but large-scale skills development and strategic and targeted investments in higher education.

There is an absence of workplace curriculum that is current, accessible and able to be implemented in the workplace. Training curriculum lacks linkage with industry standards and required work practices. Employers who are dissatisfied with current training arrangements design their own training for their own particular labour force needs. These are often immediate which do not assist government and industry to address skills forecasts.

The World Bank study 'Bangladesh Skills for Tomorrow's Jobs: Preparing Youths for a Fast-changing Economy' revealed that having at least nine years of school education, 6.5% received Technical and Vocational Education (TVET) which includes Secondary (Vocational), Higher Secondary (Vocational), Higher Secondary (Business Management), and diploma in Engineering, Agriculture, Commerce, Textiles, Fisheries, Health Technology, Nursing, Jute technology, and Forestry etc. About 9% of males and 4.2% of females had TVET ($p < 0.01$), but the proportion was mostly equal for urban and rural population. Those who did not go through TVET, nearly a third of them reported that TVET did not come to their mind while taking a decision about further education beyond grade 8. Over a quarter of the respondents in the World Bank study (26.2%) had no idea about such education provision, 15.7% had no scope to go for such a study because it was not offered in their secondary schools, and 13.8% reported not getting any advice or encouragement from their family members to go for TVET. This is an interesting finding with respect to the issue of access. Also, about 9% of the respondents aged 11 years and above had skills training of short duration (less than one year).

⁴⁸ ADB. 2016. Innovative Strategies in Technical and Vocational Education and Training for Accelerated Human Resource Development in South Asia. Manila (RETA-6337)

About 11% of males and 7.4% of females ($p < 0.001$), and 8.3% of rural and 12.3% of urban respondents ($p < 0.001$) had this training. Males were ahead of females in both the areas. Major courses included tailoring, computer operating, agriculture and food processing. Of the 11 years and above respondents, 42% received skills training through informal/non-formal ways. Major training areas include agriculture and food, rural handicrafts, and tailoring. It was 48.4% among males and 36.6% among females ($p < 0.001$), and 41.5% in rural and 44.5% in urban areas ($p < 0.001$). Gender difference persisted in both the areas.⁴⁹

Equity

Different types of inequality across the TVET sector exist, such as inequality in literacy, skills development and lifelong learning opportunities. These are reflected across gender, area of residence, administrative division and sub-groups of population concentrations. Even variations from one neighbourhood to another is very high. Furthermore, household wealth and family educational background plays an important role in Bangladesh in literacy achievement and access to skills training and lifelong learning opportunities. Although it is not unlikely that the well-off household would take greater advantage of facilities, the system so far reinforced disparities, rather than mitigate or reversing disparities.

Overall, there's a significant shortfall of skills development opportunities, especially among females and the poor. Access to skills training opportunities has been increasing but still fall far short of meeting the demand. Skills training are particularly difficult to access for female workers and poorer groups of the labour force. Females have traditionally been underrepresented in skills development. Management Skills, especially at the Mid-Management Level are hard to find in Bangladesh across the board that resulted in the recent years employing average quality managers from neighbouring countries in various industries, including export-oriented businesses.

International migration also poses unique skills challenges as skills levels of migrant workers have been slow to improve. In terms of skills composition, less skilled workers still constitute the largest share. Around 56% of Bangladeshi migrant workers are classified as either unskilled or semi-skilled. The lack of skills training for informal workers, as discussed elsewhere in this report severely undermines the skills development agenda.

Governance

Globally, a wide variety of initiatives are taking place to improve governance and shape TVET policies, by increasing the role of national authorities, social partners and civil society organizations. There is a growing recognition of the benefits of multilevel participation in the TVET policy cycle, and the contribution of such an inclusive process to the development of integrated and comprehensive policies – policies through which TVET can play a key role in promoting the growth and welfare of a country. Effective multilevel governance in the TVET sector in Bangladesh is of significant importance, especially in the context of Sector Wide Approach (SWAp) that has received the attention of the government and the DPs. This governance process should be based on inclusive vertical and horizontal interactions between stakeholders and linked to the increased effectiveness, efficiency, coherence, transparency, accountability and performance of TVET policies and systems.

The participation of NSDA, ministries, and their technical bodies in the management of TVET has the potential to stimulate economic growth at national and local levels and enhance the

⁴⁹ World Bank, op cit

matching of labour supply to market needs. This needs to be harnessed and coordinated. It is also to be recognized that multilevel coordination as a guiding instrument is linked to good governance principles in TVET that can contribute to modernizing and raising the profile of TVET systems based on more multi-participatory policy dialogue. In the management of TVET there should be more focus on creating synergy between the different government ministries and agencies, as well as the private sector entities. Setting up effective coordination mechanisms at vertical and horizontal levels is essential to improve performance in TVET policy making. The management role and responsibilities of TVET providers, whether schools, training centres, higher education institutions or work-based contexts should be critically examined. The role of social partners and civil society organizations should continually be reinforced to support demand driven training provision. Particular focus should be given to strengthening the capacities of all actors regarding TVET policy implementation, monitoring and evaluation.

Labour market information:

Labour market information is far from adequate and not well connected with job seekers and educators. Job market information about what jobs and skills/experiences are in demand are largely missing. Information in the labour market information system are limited which leads the job seekers to have limited and biased information on jobs and other opportunities.

The production of labour market and skills intelligence has a key role in skills governance also. Various countries use a range of different types of forecasting tools and instruments, which vary according to the data they produce, the regularity of updates and the timeframe which they cover. Types of forecasts may also differ in relation to the model of education and training (planned or market). The stakeholders involved in commissioning and producing skills intelligence also vary. The information produced may therefore be national in scope or may relate to a specific sub-sector of the labour market or sub-system of education and training.⁵⁰ While BBS produces Labour Force Survey and BMET produces statistical reports on overseas employment, there is no regular tracer studies or life-story mapping to track the recipients of the TVET or skills training. However, as a corrective measure, the TMED Action Plan has provisions for tracer studies that, if followed will fill a major gap in the data and knowledge management system.

Capacity for Flexible Curriculum Development and Examination System

Curriculum updating are not adequately adaptive due to the centralized control, overreliance on written examination is a long-standing issue. Quality of teaching and learning becomes challenging with inadequate provision of modern learning facilities and insufficient teacher training opportunities in the TVET and skills training institutes. In addition, quality assurance is still a relatively new concept in education and skills development sectors of Bangladesh, and the implementation of policy framework in this area remains weak.

Results Based Monitoring and Evaluation (RBM&E)

A Results Based M&E (RBM&E) system has generally three major functions. First, it should make strategic planning and evidence based and results oriented steering of the program possible. Therefore, not only the processes and outputs of the program are in the focus of the system, the main importance is placed on the results or outcome of the program. To systematically evaluate these results, research-based and practitioner-oriented, user friendly

⁵⁰ BBS Labour Force Survey and BMET statistical reports on overseas employment.

methods are necessary. The standard steps in the M&E cycle and data collection and analysis methods are based on the latest guidelines for results-oriented M&E used by several governments and development agencies, mainly EU and GTZ.

The second main function lies in its control and reporting role. The agencies responsible for the program should be provided with relevant information, which are as reliable as far as possible. The M&E system in Bangladesh is generally weak, as far as the government led process of monitoring and evaluation is concerned. There is no known M&E system in the TMED or in any of the TVET agencies that is clearly focused on the results indicators of the program and the results matrix. The NSDA's possible role together with TMED could be explored in the area of M&E. If a SWAp is to be installed, an M&E System needs to be developed and harmonized with the standard global M&E practice, especially that relates to the TVET sector in Bangladesh.

Thirdly, this combined system serves as a tool for initiating change processes in the M&E process by introducing a more outcome-based focus and by utilizing the system for respective capacity development of the involved partners. This is more crucial for an integrated SWAp approach. Through experiences of the piloting the SWAp's M&E system and provision of related capacity building measures, the TVET sector monitoring capacities of the partner should improve. The selected integrated approach should lead to a high level of accessibility, transparency and efficiency. The EU funded forthcoming HCDP 21 has a strong emphasis on results-based monitoring approach that will be introduced in the TMED, in line with the three components and corresponding DLIs of HCDP 21.⁵¹

The Implementation Monitoring and Evaluation Division (IMED) of the government has the mandate for monitoring and evaluation of project implementation across all sectors. It will be important that IMED play a role together with TMED in monitoring employment outcomes of different interventions being pursued by the individual projects and DPs. IMED's role need to go beyond specific programs and analyse the employment implications of various policies that will be identified under the job strategy, for example.

The TMED Action Plan for SDGs makes a reference to its strategy to develop a results-based monitoring system for the delivery of TVET across all institutions. The SEIP project, under the Ministry of Finance promises to support the establishment of data processing and monitoring system to monitor performance and effectiveness of the skills development system. This data processing centre, to be located in the NSDC-S (now NSDA), will involve system validation, compliance monitoring, and so on. An external agency will be contracted for implementation and operation of the MIS, who will provide technical inputs to the NSDC-S for analysis and dissemination of data to prospective users. The project is expected to coordinate data analysis from the MIS and publish an Annual Sector Performance Report for the skills sector, with information on student enrolments, skills training courses implemented, graduates' employment rates, and progress on key performance indicators. The MIS will also draw data from ISC reports, LMIS, employer satisfaction surveys, and tracer studies, as relevant. The results-based approach will be introduced in the TMED through HCDP 21.

⁵¹ Components of HCDP are largely in consonance with PEDP 4 : Quality; Equitable Access and Participation; Management, Governance and Financing.

Policy and legislations

While there has been a landmark policy document for skills development in Bangladesh (the NSDP) in 2011, it is rather an ‘expired document’ with its shelf life ending in 2017. Two years have gone by without its review, revision and updating to bring it close to the conditions and demand of the sector, although some efforts are under way in this direction.

On the more implementation side, skills development for the poor should be promoted with substantial expansion of effective apprenticeship policy, and introduction of short courses, to be more frequently accessed by those with <USD1 daily earning. Attention must be given to improving quality and market responsiveness of these policies and strategies so that earnings and working conditions can improve for the participants.

The major policy challenge is creating “decent work” - moving from present average earning of less than or only close to average per capita income even for those with formal TVET to better wages and work conditions. International experience suggests steps to build stronger “foundational skills” through basic general education, “transferrable skills” through secondary education and TVET and “job specific skills” through high quality TVET and apprenticeship. These skills building measures need to be combined with complementary policy intervention in employment market and social protection for workers.

The other policy issue relates to infrastructures, learning facilities and, instructional approach and practices both in TVET and general education have to be remedied ensuring a threshold of resources to guarantee the application of acceptable quality criteria. Establishing quality standards and applying them in programs remain conditions for success and cannot be neglected.

While the NSDP delineates a comprehensive reform agenda to improve access, quality, relevance and governance (including regulatory aspects) in the subsector and emphasises both formal and non-formal ways of gaining skills, the policy initiatives, are yet to show concrete results in transforming TVET to address the problem of a mismatch between skills and jobs. The problem originates from a combination of two factors: a) deficiencies in basic foundational skills arising from primary and secondary education quality and the quality of vocational training on offer, and; b) Inadequate market linkages characterised by a limited participation of the employers in designing training. Moreover, the TVET system as it exists has not developed the capacity to address the skills need of the informal sector which accounts for up to 90% of employment.

Another area of concern and policy weakness is the lack of a sufficient and systematic effort to prepare workers for overseas employment and raise their skills profile to improve their earning and working condition. Some 500,000 male workers and 100,000 female workers are estimated to have gone overseas in 2016. Their annual remittance has topped record high USD 16.4 billion⁵², ensuring a healthy foreign currency reserve for the country. The large majority of these workers, however, are of low skills, thus working with low wages and in vulnerable conditions. For ensuring demand-supply matching for migrant workers from Bangladesh in terms of skills and competencies, it is necessary to develop relevant training structures that will be responsive to the needs of the destination countries.

The national skills policy and legislative frameworks also establishes responsibilities for government bodies to oversee technical training centres and accredit programs and assess

⁵² The Dhaka Tribune, July 3, 2019

and certify trainee skills (Bangladesh Technical Education Board). However, the government lacks the human and financial resources to operate technical training centres. The functional capacity of these agencies to manage trainee information and to assess skills at the local level are limited. This is also a combination of policy, financing and monitoring issues.

Leadership and commitment on the part of national policy and decision-makers are needed to overcome the conventional fragmented approach of government operations and policy making to enhance the possibility of a comprehensive and coordinated approach to skills development. The National Skills Development Authority (NSDA), with its mandate to implement the NSDP, has a special role in this respect, especially in its role as a statutory and apex body. NSDA's role in the SWAp conditions need to be carefully crafted and agreed by all actors in the SWAp. Also important is the need to clarify the areas of duplication in the two legislations (the NSDA Act and the TVET Act 2018). For example, Clause 8 of the BTEB Act mandates BTEB to provide Recognition of Prior Learning (RPL), while the NSDA Act's clause 6 allows NSDA to do the same where applicable. Both legislations allow the respective organizations to be involved in training quality improvement, certification and mutual recognition. NSDA being the apex body for coordination and overall quality direction, their micro-level involvement may not only create confusion, but also could jeopardy its main apex purpose. BTEB has provided RPL certification at the NTVQF pre-vocational level to 9000 employees during 2012 – 2015. BTEB has stopped this since the Non-formal Education Act 2014 assigns BNFE to do this certification. Since then, no NTVQF graduate has been certified at the pre-vocational level.

3.4 Environmentally conscious planning

The main greening shifts in the economy and the labour market of Bangladesh have taken place predominantly in renewable energy – most prominently in solar photovoltaic energy followed by biogas, but only rather weakly in materials management, telecommunication, transport, and manufacture of bricks and ready-made garments (RMG). The shifts in the sectors other than renewable energy remain weak, owing primarily to inadequate policy and institutional support. Available evidence shows that green jobs in solar energy steadily increased by 18.5% annually from 60,000 in 2011 to 140,000 in 2016, compared to 1.9% nationally.⁵³ Bangladesh has embarked on a large number of legal acts, policies and programs for adaptation to climate change and mitigation of its adverse impact, but it has no national policy for the formation and development of skills for greening the economy. In all the sectors including renewable energy, skills response remains informal, essentially provided by NGOs. National skills development objectives and targets do not match national environmental objectives and targets; and existing national skills development policies, programs and strategies have no correspondence with national climate change policies, programs or strategies. They are mutually exclusive. This works to the detriment of a smooth transition of the economy to a greener growth path.

A coherent national policy for the formation and development of skills for green jobs in all the potential sectors should be put in place and implemented. However, in the interest of SWAp, an Environmental Management Framework (EMF) needs to be developed at the outset first, similar to PEDP 3 and 4 that laid down the environmental safeguard issues and strategies and mitigation measures. Specific infrastructure activities, if undertaken under the SWAp, like

⁵³ ILO and Canada. Skills for green jobs in Bangladesh. 2018

site/location, land requirements, local communities, geophysical land features need to be considered in the EMF to establish the mechanism to determine and assess future potential environmental impacts of interventions that are to be identified and cleared based on a community demand driven process, and to set out mitigation, monitoring and institutional measures.

The SWAp may consider supporting the development of the skills sector environment policy that should target implementation of the skills needs for green jobs in various sectors with priority to renewable energy, RMG, waste management and brick manufacture as identified by the present study; incorporate them into the occupational profiles, curriculum design and education and training provision for greening existing occupations and for developing emerging and new green occupations; and promote strategic interventions for overcoming the skills gaps. Further research and regular data collection on green jobs, especially by the Bangladesh Bureau of Statistics (BBS) in its periodic Labour Force Survey (LFS), should be undertaken with a view to updating knowledge and progress in greening the economy.

A good beginning in the direction of environmental consciousness raising and environmental safeguards has taken place already through TMED's commitment in the SDG Action Plan. TMED SDG Action Plan proposes a number of actions, and interventions in support of environmental consciousness raising, as well as integrating green employment practices in the TVET sector. These include organizing innovation and green job fair in conjunction with the Ministry of Environment and Forest; and imposing reward and penalty for green practices and lack of it in the mainstream formal, non-formal, informal and TVET education. TMED also proposes to conduct community outreach program focusing green technology, establish classroom for every trade and technology of each institution; and developing training program for 5000 TVET teachers on sustainable development issues. TMED, in conjunction with DTE and BTEB also proposes to prepare curriculum with the inclusion of climate changes and global warming issues. These topics will include, inter alia, green technology (such as solar wind, biogas). Green practices, similar to PEDP 4 in every institution, transforming 200 TVET institutes into green institutions (green campus, paperless office, zero energy, green dining, and practicing 3R (reuse, recycle, and reduce) across all institutions. TMED however, needs to also focus on green practices in the government agencies, such as TMED itself and its implementing agencies, such as the Directorate of Technical Education (BTEB), and the Bangladesh Madrasa Education Board (BMEB).

3.5 Employment challenges

The various employment challenges in Bangladesh have been articulated in the recent years in a number of studies that include the ILO-ADB Employment Diagnostic Study (2016) and the World Bank's Jobs Diagnostic (2017) on employment and labour market challenges.⁵⁴ These studies show that the pace of structural transformation of the economy has been slower than required for generating productive employment that could absorb the country's surplus labour. Moreover, growth of employment for women appears to have slowed down in recent years.⁵⁵ Projections for the country's Seventh Five-Year Plan (FY2016 – FY 2020) point to an employment growth ranging from 3.45 per cent in FY 2016 to 3.88 per cent in FY2020. The latter implies annual additions of 2.3 million to 3 million jobs per year. But the results of the

⁵⁴ ILO. 2018. Development of a National Job Strategy for Bangladesh (Draft Outline) Rizwanul Islam and Rushidan Islam Rahman

⁵⁵ *ibid*

Labour Force Surveys of 2015-16 and 2016-17 indicate that the actual numbers are much lower.⁵⁶

The ILO commissioned National Job Strategy for Bangladesh which is in progress is expected to contribute to strategies and policies for addressing the employment challenges. While other past studies have provided detailed analysis of issues relating to the employment and labour market situation of the country, this study is expected to carry a broader perspective in the context of relevant economic and labour market aspects conditions, and in the context of the Eighth Five Year Plan (2020-2025), the new Perspective Plan (2020 to 2040), and SDG attainment. Importance of this study also lies in its articulation of the key areas that could be addressed under the SWAp umbrella.

3.6 Lessons from Bangladesh TVET so far

A number of lessons can be learned from the TVET practice in Bangladesh, from the perspective of policy, systems, processes and most importantly their impact on employment creation, gainfully paid or self-employment. These are summarized below:

- i. Policies, regulatory frameworks and legislation need to be coordinated, with participation from the agencies involved, and must be the product of wider consultations, especially with regard to private sector, and civil society actor. A number of anomalies and overlapping provisions in the legislations could be avoided through a consensus building approach.
- ii. Technical-Vocational Education and Training (TVET), as it stands today, alone does not guarantee productivity gains or job creation. A blend of cognitive and non-cognitive skills supported by favourable policies in economic and social spheres can enhance the country's competitiveness and contribute to social inclusion, increased employment and alleviation of poverty. The value skills acquired in existing TVET must be matched by portable and soft life skills, which TVET or general basic education do not offer effectively. There appears to be a low-skills equilibrium in which the economy and the private sector are trapped. The economy seems to have adjusted to a state of low skill and low productivity of workers at the cost of low productivity of the economy, and generally low earning and underemployment among workers, with or without skills training.
- iii. Strengthening of the institutions and the reforming the systems including structural changes are needed to deliver the modern and forward looking TVET. This also includes forecasting jobs in the context of the 4th Industrial Revolution and preparing for green jobs (further discussions follow). At the policy and institutional level, new thinking about governance, management, resource provision and use, evidence-based planning, and sector performance monitoring are needed. Sustainable capacity building at different levels are of significant importance.
- iv. Appropriate capacity building of the TVET providers are also required to deliver TVET to more people and gaining economies of scale and efficiency. Against a two million skilled labour demand from the industry, the low and mid-level skills development provisions for about a million trainees per year cannot be considered adequate.
- v. Quality of private TVET provision needs intensive monitoring and assured. Without a standardized pricing of the courses access to TVET provision leaves access to the

⁵⁶ ibid

- hand of the market, as public provisions are inadequate, and market 'competition' are not conducive to fair access to TVET education.
- vi. There is no TVET segregated data in the BANBEIS 2018 Education Finance report on the "Cost per student per year as per national budget". However, the general perception is that the cost of TVET per student is higher than primary and secondary level. While the social stigma is that TVET option is for those who has no option. Paying such high cost for training for many of these groups might be additional barrier.
 - vii. A comprehensive skills anticipation and labour market information system are inadequate. Instead of doing ad-hoc research through different ministries or through different projects, a national specialized agency like BANBEIS and/or BBS should be assigned to conduct regular research and to input to the system. Policies, courses and curriculum should be designed and developed accordingly.
 - viii. The existing overlaps and confusions in the mandates, legislations and functions of key public sector agencies such as NSDA, BTEB, BNFE are not examples of good governance in the TVET sector. An appropriate balance should be ensured between the assigned functions and the allocation of resources including human resources, if necessary, through reassessment of the three legislations mentioned in this report (NSDA Act. 2018, BTEB Act 2018 and BNFE Act. 2014).
 - ix. To increase the proportion of secondary level enrolment in the vocational-technical stream, a vocational/technical secondary level stream has been created for students after grade 8 general education since the 1980s. But the results are at best mixed. The general international experience shows that "vocationalising" formal secondary schools raises the cost of the school without corresponding benefit in skill development or better employment prospects for students.⁵⁷
 - x. There are no easy solutions for the complex problem of preparing young people for the world of work and meeting the changing skills needs of the economy. The easy prescription is to insert courses in practical and vocational skills in secondary or even primary schools. Curriculum change and investments with this end in view may not produce the desired results. International experience also suggests that the most useful vocational/occupational preparation in the secondary school is building a sound foundation of communication skills, mathematics and basic science, which make young people trainable for the employment market (UNESCO-GMR 2012).⁵⁸
 - xi. A broad definition of skills development as a part of human capital development requires comprehensive and coordinated attention to the spectrum of skills comprising foundation skills, transferrable skills and job-specific skills. This broad view needs to be taken as the conceptual framework for exploring policies and actions in the TVET sub-sector.
 - xii. Reform and development initiatives have led to some flexibility in the public training system through non-regular short-term training on the basis of cost recovery. The BTEB administers well-developed exit examinations, though the focus remains on the theoretical aspects of training. Some training providers have established linkages with

⁵⁷ Manzoor Ahmed. Matching education, training, skills and jobs. The Daily Star. 3 February 2016

⁵⁸ The Global Monitoring Report (GMR) theme for 2012 was Youth and Skills: Putting Education to Work

industry. Availability of short market-responsive courses to those not finishing grade 8 has increased. (ADB 2012).

3.7 International best practices

This section documents some relevant lessons and best practices from other countries including the development of a comprehensive approach in the skills sector in EU member states (e.g., Germany, Austria) from the available studies and also from the experiences with the EU TVET associations (EfVET) as per the provisions of the TOR.

The Dual Training System in Germany

The German vocational education and training system⁵⁹, also known as the dual training system, is highly recognized worldwide due to its combination of theory and training embedded in a real-life work environment.

The dual system is firmly established in the German education system. The main characteristic of the dual system is cooperation between mainly small and medium sized companies, on the one hand, and publicly funded vocational schools, on the other. This cooperation is regulated by law. Trainees in the dual system typically spend part of each week at a vocational school and the other part at a company, or they may spend longer periods at each place before alternating. Dual training usually lasts two to three-and-a-half years.

The 4th industrial revolution, for example, will bring about significant changes to occupational profiles and training regulations as well as to Continuing Vocational Education and Training (CVET), providing challenges that are already being addressed, for example, by the joint “Skills for the digital workplace of tomorrow” initiative of the Federal Ministry of Education and Research (BMBF) and the Federal Institute for Vocational Education and Training (BIBB).

There are currently around 330 occupations requiring formal training in Germany. Employer organizations and trade unions are the drivers when it comes to updating and creating new training regulations and occupational profiles or modernizing further training regulations. As a result, training, testing and certificates are standardized in all industries throughout the country. This ensures that all apprentices receive the same training regardless of region and company. Moreover, employers have trust in these certificates as they provide evidence of what an individual knows and is able to do.

The shared responsibility between government, employers and trade unions also helps in responding to emerging new challenges such as digital innovations like the Internet of Things which will have an increasing impact on manufacturing and the way work is organized. For Bangladesh, this could be a preferred model, given the experience gained from the apprenticeship practices, and the solid foundation developed in the private-public partnership area.

Skills anticipation in Austria

At its core, Skills anticipation⁶⁰ in Austria consists of the Public Employment Service, Skills Barometer and the forecasting of skills demand undertaken on behalf of the Employment Service by the Austrian Institute of Economic Research as well as other research institutes. The Skills Barometer is an online tool, which provides information on trends in skills demand and provides detailed occupational profiles related to jobs in demand in the labour market. Its

⁵⁹ <https://www.bmbf.de/en/the-german-vocational-training-system-2129.html>

⁶⁰ https://skillspanorama.cedefop.europa.eu/en/analytical_highlights/skills-anticipation-austria

output is aimed at young people, careers counsellors, AMS advisers, educational institutions, employers, jobseekers, and policymakers Skills forecasting consists of a short- and medium-term perspective on the demand for skills in the labour market (using occupation as a proxy measure for skills).

Stakeholder involvement in Skills anticipation is underpinned by the relatively high degree of social partnership in Austria. Stakeholders, including social partners, are involved in the process of Skills anticipation through, for instance, their roles on the regional platforms and on the Committee for New Skills at the national level. Despite stakeholder engagement and a wide range of information relevant to Skills anticipation being available, there is a degree of uncertainty about the extent to which it is used to inform decisions within the education and training system; perhaps more so in higher education than in relation to VET/apprenticeships.

EU TVET associations (EfVET)

EfVET⁶¹, founded in 1991, is one of the leading European-wide professional associations which has been created by, and for, Vocational Education and Training (VET) providers. EfVET's policy and strategy is formulated by its member colleges and VET institutions. Its mission is to champion and enrich technical and vocational education and training through transnational co-operation by building a pan-European network of institutions. EfVET represents 187 members in 31 countries in Europe and beyond (USA, Russia, Turkey, Hong-Kong and Nigeria).

It collaborates with but is independent of all government and funding bodies. Its income is derived from membership subscription, grants and sponsorship. EfVET is engaged in the EU policies on formal and non-formal vocational education training and cooperates with European Union Institutions and many international and national NGO's. From 2016 to 2020, EfVET is presented in ET2020 working groups on VET.

In addition to the meetings with policy makers, EfVET tries to be present at other meetings/seminars and receives invitations to conferences, which they are all, opportunities to present EfVET's points of view. EfVET President, Vice-President, and Steering Committee Team were invited to participate and/or do presentations in thematic working groups, conferences and meetings.

European Credit System for Vocational Education and Training– ECVET

The ECVET is a European initiative, allowing for the accumulation and transfer of credits gained through the recognition of learning outcomes in vocational education and training achievements in vocational education and training, in formal, informal and non-formal learning. The ECVET was established by the initiative of the EU member states in cooperation with the European Commission. Every qualification in the ECVET system can be described by units of learning outcomes. It makes each qualification more understandable and more precisely defined which makes it easier to understand abroad, as well as in the particular Member countries. Students of secondary vocational schools can easily transfer from one education institution to the other or from one education system to another. It would be easy for them to declare the learning outcomes they already achieved and build on them while studying elsewhere.

⁶¹ <https://www.efvet.org/>

Workers or job seekers are able to more easily transfer their qualifications, or their parts, between their employers, various sectors and as well as between EU Member States. ECVET facilitates the transfer and recognition of learning outcomes achieved through formal, non-formal, as well as informal learning. EfVET and VET4EU2 are represented to the Working Group and User Group by Alfredo Garmendia (EfVET Spanish National Representative) and Annette Kay from ZBC SOSU Sjaelland College, Danish member of EfVET.

[European Qualification Framework – EQF](#)

The EQF Advisory Group has been set up by the Commission to support the implementation of the recommendation of the European Parliament and Council on the establishment of the European Qualifications Framework for Lifelong Learning in 2008. The Council Recommendation on validation of non-formal and formal learning 2012 delegates the follow-up of the implementation of the Council recommendation to the EQF Advisory Group. In 2015 Member States have mainly worked on the referencing of the national qualification frameworks to the European one, in partnerships with third countries and on the monitoring of the recommendation of implementation actions.

[European Quality Assurance in Vocational Education and Training – EQAVET](#)

The EQAVET is a community of practice bringing together Member States, social Partners and the European Commission to promote European collaboration in developing and improving quality assurance in VET by using the European Quality Assurance Reference Framework.

The scientific advisors support EQAVET and the European Commission in their work contributing in the formulation of up-to-date policy initiatives. VET4EU2 is represented by EfVET contributing to various events and activities.

3.8 Some lessons from South Asia

A major study, titled ‘Innovative Strategies in Technical and Vocational Education and Training for Accelerated Human Resource Development in South Asia. Manila (RETA-6337)’ was commissioned by the Asian Development Bank under a regional project in 2015 that analysed the state of TVET in selected countries of the South Asia region, and captured some of the lessons that have been learned from the practice of TVET in these countries, including Bangladesh. It may be worthwhile summarizing these lessons in the interest of this study:

- (i) All countries have seen a reduction in population growth rates but the size of the annual new entrants to the labour market is significant in all countries and still growing: 13 million in India, 2 million in Bangladesh, 450,000 in Nepal and 160,000 in Sri Lanka. The labour force is also growing faster than the population and majority are young. However, youth unemployment is generally much higher than overall unemployment by more than two times.
- (ii) The capacity to train is usually one fifth of the annual training need. In most cases (except for Sri Lanka), educational attainment of the labour force is still low, and training remains insignificant. Due to continued dropouts in primary and particularly secondary level, it is crucial to align skills training with the educational profile of the population accordingly until average years of schooling improve so that people are not excluded.
- (iii) Although poverty level is declining in all countries, it is still relatively high. Rural areas predominate: 86% in Sri Lanka, 81% in Nepal and 72% in Bangladesh although the share of urban population will rise sharply in the next few decades. Agriculture as a % of labour is quite high (75% in Nepal, 50% in Bangladesh and over 33% in Sri Lanka) although the share of agriculture’s contribution to gross domestic product has declined sharply in all these countries.

In all these countries the share of the labour force in the informal sector is very high (90% of Nepal, over 80% in Bangladesh; and over 60% in Sri Lanka). This means, skills training and employment strategies have to be aligned carefully to meet the current and future demand for skills.

(iv) TVET is characterized by mostly long term, pre-employment training, restrictive access requiring basic education in most cases, formal TVET is small in relation to secondary education (1% in Nepal; 3% in Bangladesh) and education spending (1.2% of education spending in Nepal, less than 5% in Bangladesh), the system is strongly centralized and there is fragmentation of public provision (23 ministries and departments involved in TVET in Bangladesh, 10 in Nepal, and 21 in Sri Lanka although the Ministry of Youth and Sports Development has consolidated skills development to a large extent).

(v) A major consequence of low investment in human capital development historically is that South Asian countries rank low in global competitiveness index. To correct this, large investments are needed in high quality schooling, targeted but large-scale skills development and strategic and targeted investments in higher education.

(vi) There is an absence of workplace curriculum that is current, accessible and able to be implemented in the workplace. Training curriculum lacks linkage with industry standards and required work practices. Employers who are dissatisfied with current training arrangements design their own training for their own particular labour force needs. These are often immediate which do not assist government and industry to address skills forecasts. Until recently there was little mechanism or provision for the registration of industry-based training providers.

(vii) In many other countries, a 'dual' model of apprenticeship training is offered. Apprentices attend a training provider on a regular basis, for example on 'day release' or on 'block release'. The arguments for such a system are that apprentices have a richer learning experience, a poorly equipped or staffed workplace is compensated for, and apprentices learn from other apprentices. The system also lessens the need for employers to provide theoretical training or to provide space and equipment for off-the-job learning. The responsibility for ensuring that an apprentice is skilled at the end of his or her term is shared among two parties – employers and training providers.

(viii) The absence of a well-developed national qualifications framework makes it difficult for vocational trainees to progress into higher level qualifications. Trainees that pass their tests (often determined by government training agencies without reference to employers) find themselves without integration into a national qualification framework with their certificates standing outside the formal educational system. In some cases, the certificate is recognized and linked to the schooling system in which a trainee would still have to complete schooling requirements to access higher education.

(ix) The role of state-owned enterprises is mostly underutilized in skills development. State owned enterprises continue to dominate national infrastructure development with little policy incentive to develop sector skills for downstream maintenance, succession planning, improvements to competitiveness or service delivery, or in preparation for efficiency measures including PPP or broader corporatization.

3.9 The context of SDGs and TVET in Bangladesh

Education, training, skills and employment have been featured prominently in the Sustainable Development Goals (SDG) 2030 adopted by UN in September 2015. Goal 4 on education⁶² and lifelong learning have two targets on “equal access for all women and men to affordable and quality technical and vocational and tertiary education” (Target 4.3) and substantial increase of “youth and adults who have relevant skills, including technical and vocational skills, for employment, decent job and entrepreneurship” (Goal 4.4).

Goal 8 is to “promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.” The targets under this goal includes “full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value (Target 8.5); substantial reduction by 2020 of youth “not in employment, education or training” (Target 8.6); and, by 2020, developing and operationalizing a global strategy for youth employment and implement what is called the “Global Jobs Pact of the International Labour Organization.” (Target 8.b) (UN 2015).⁶³

The SDG 2030 agenda pose the challenge and the opportunity for redoubled efforts to address the dilemma of matching and linking education, training, skills and jobs. SDG4 urged ensuring quality education for all. The Goal comprises 10 targets including three means of implementation. An exercise was undertaken by Centre for Policy Dialogue (CPD) to look at the degree of alignment between 7FYP and SDG targets. Apart from the 7FYP, two major sectoral policies, National Education Policy 2010 and the National Skill Development Policy 2011, were consulted for this exercise. A judgment about commonality or overlap between the two can be only tentative and indicative, subject to further elaboration and clarification, as noted in the comments column. The following matrix lists the SDG Goal 4 targets that are relevant to skills development, and corresponding or comparable targets of the 7th Year Plan, with comments:

Table 7: SDG, & FYP in relation to skills development

SDG Goal 4 (selected target related to skills development). Relevant target	7 th Five Year Plan	Remarks
4.3 By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university	By 2020, increase female enrolment in technical and vocational education to 40 per cent	Does not address quality and relevance issues of skills program. (Within present structure, target may not be realized and may not serve the goal).
4.4 By 2030, substantially increase the number of	Strengthening education and training programs to	Targets not quantified. Diverse skills opportunities,

⁶² SDG 4 is to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all and has seven targets and three means of implementation.

⁶³ Manzoor Ahmed and Mostafizur Rahaman. SDG4/Education 2030 and 7th Five-Year Plan of Bangladesh: Aligning National and Global Objectives Strategies and Indicators. Bangladesh Education Review 2016

<p>youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship</p>	<p>motivate the youth to complete education and to enable the working youth and the older workforce to acquire required skills</p>	<p>market responsive, private-public partnership approach needed, ensuring quality and relevance rather than expanding existing types of institutions</p>
<p>4.7 By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development</p>	<p>This is a catch-all target in the global agenda without specifying of quality and quantity dimensions. Similarly, in SFYP, no specific target – but some are implicit in other targets.</p>	<p>Both PFM and GED agenda adopted various targets for sustainable development promotion and action which implies education, awareness raising and behaviour change of population; educational implications should be made explicit and included in targets and indicators. Similarly, responsible citizenship, tolerance and respect for diversity can be explicit educational target.</p>
<p>4.c By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing States</p>	<p>Expand in-service training to teachers;</p>	<p>Neither the SDG nor the SFYP specifies indicators or strategy for in-service training in the skills/TVET area.</p>

It should be noted that the Government's SDG commitments in TVET are primarily focussed on increasing the quantity of training opportunities so there is equal access for all.⁶⁴ While that is a serious consideration for the TMED as reflected in the SDG Action Plan, an attention to quality, rather a balance between qualitative and quantitative aspect should be a major emphasis in the target setting, indicators and results framework for TVET in the context of SDGs. This should be also part of the scope and focus of SWAp related priorities. The policy dialogue for a SWAp in skills needs to factor-in these developments in policies and its potential impact in the skills arena. In the context of this study, especially with regard to SWAp, it is necessary that SDG4, 7th FYP and the sectoral activities in education are aligned and

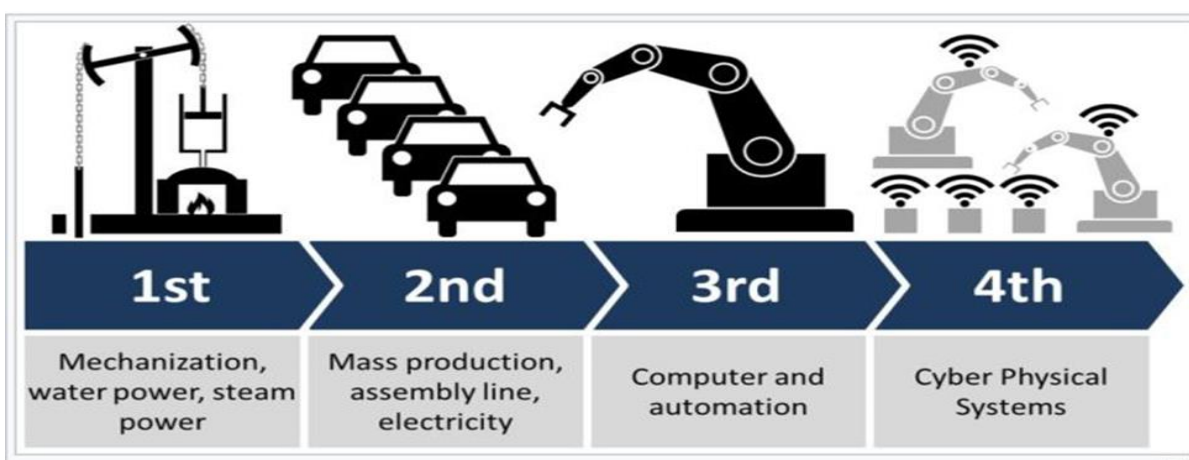
⁶⁴ ILO. David Lythe. 2018

constitute a coherent development program in the next five years and beyond, based on quality factors also.

The General Economic Division (GED) of the Planning Commission has undertaken a mapping of Ministries/Divisions by SDGs targets. This mapping exercise has resulted in the preparation of a final document in the form of a handbook that identifies the ministries and divisions by each SDG targets and the corresponding broad actions by each government ministry and division. For monitoring of SDG implementation in Bangladesh, GED has undertaken a data gap analysis to find out the availability, partial availability and non-availability of data with reference to the global indicators that have been prescribed for monitoring accomplishments of the SDGs.

3.10 The 4th Industrial Revolution: are we ready?

There is a growing interest in robots taking over the world of work with the advent of the 4th Industrial Revolution, thus leading to increased unemployment and associated socioeconomic issues. The 1st Industrial Revolution of mechanization using water and steam power and the 2nd relying on electric power increased productivity and raised living standards for the masses. The rapid changes experienced during the 3rd Industrial Revolution with the help of electronics and information technology are now moving into the sphere of Artificial Intelligence, the Internet of Things, quantum computing and more, thus setting the stage for human and machine interactions never seen before, except in science fiction. The 4th Industrial Revolution is building on the 3rd, the digital revolution that has been occurring since the middle of the last century. It is characterized by a fusion of technologies that is blurring the lines between the physical, digital, and biological spheres.



Source: image from internet (google image 4th industrial revolution)

Several reports have predicted shifting labour practices and job markets, potentially displacing workers who lack the knowledge and skills needed for the new world. According to the World Economic Forum (WEF), more than 5 million jobs could be lost by 2020 to disruptive labour market changes. Furthermore, 65% of primary school students will be working in jobs that do not exist today. Pearson's report on the Future of Skills looking at the employment landscape in the U.S. and U.K. presents a more positive outlook, for example, only one in five workers are in occupations that will shrink, and occupations can be re-designed to pair human skills with technology to boost demand for jobs. It must be acknowledged that there are substantial uncertainties in the analysis, and critics underlined the challenges of implementing public and private reforms amidst political and social instability. Proper planning, education, and training of the workforce must be in place to minimize the impact of displaced workers and the gaps

between those who have the knowledge and skills to adapt to the new world and those who do not.

TVET ought to play an important role in the 4th Industrial Revolution to equip the youth of today for jobs in the future. Apart from knowledge-based proficiencies, TVET students learn practical, hands-on skills aligned to the needs of the industries. At the same time, the 4th Industrial Revolution demands 21st century skills including critical thinking, creativity, adaptability, willingness to take risks, all attributes associated with entrepreneurship. The significance of entrepreneurship is the ability and determination to adopt challenges and devise solutions in an evolving environment. Developing entrepreneurship aptitudes in TVET offers a promising model for success in the Industrial Revolution. At the same time, potential threats to the labour market with the onset of the 4th Industrial Revolution are giving rise to quality assurance collaborations among TVET institutions.

3.10.1 The place for TVET and labour market in the 4th Industrial Revolution

Low-skilled and repetitive jobs are bound to be eliminated by robots and artificial intelligence under the 4th Industrial Revolution. This scenario will force TVET institutions to partner and collaborate to ensure that TVET remains relevant in the future. Once seen as the “last choice education” because of a perceived lack of quality, TVET these days is drawing attention for its growing role in helping the workforce of the future face the 4th Industrial Revolution. This is a global picture. Thus, we stand on the brink of a technological revolution that will fundamentally alter the way we live, work, and relate to one another. In its scale, scope, and complexity, the transformation will be unlike anything humankind has experienced before. We do not yet know just how it will unfold, but one thing is clear: the response to it must be integrated and comprehensive, involving all stakeholders of the global polity, from the public and private sectors to academia and civil society.

Like the revolutions that preceded it, the 4th Industrial Revolution has the potential to raise global income levels and improve the quality of life for populations around the world. To date, those who have gained the most from it have been consumers able to afford and access the digital world; technology has made possible new products and services that increase the efficiency and pleasure of our personal lives. Ordering a cab, booking a flight, buying a product, making a payment, listening to music, watching a film, or playing a game—any of these can now be done remotely. In the future, technological innovation will also lead to a supply-side miracle, with long-term gains in efficiency and productivity.

Transportation and communication costs will drop, logistics and global supply chains will become more effective, and the cost of trade will diminish, all of which will open new markets and drive economic growth. At the same time, the revolution could yield greater inequality, particularly in its potential to disrupt labour markets. As automation substitutes for labour across the entire economy, the net displacement of workers by machines might exacerbate the gap between returns to capital and returns to labour. On the other hand, it is also possible that the displacement of workers by technology will, in aggregate, result in a net increase in safe and rewarding jobs.

The scenario that is likely to emerge cannot be fully comprehended at this point in time. However, the scenario in the future will mean talent, more than capital, which will represent the critical factor of production. This will give rise to a job market increasingly segregated into “low-skill/low-pay” and “high-skill/high-pay” segments. In addition to being a key economic concern, inequality represents the greatest societal concern associated with the 4th Industrial Revolution. The largest beneficiaries of innovation tend to be the providers of intellectual and

physical capital—the innovators, shareholders, and investors—which explains the rising gap in wealth between those dependent on capital versus labour. Technology is therefore one of the main reasons why incomes have stagnated, or even decreased, for a majority of the population in high-income countries: the demand for highly skilled workers has increased while the demand for workers with less education and lower skills has decreased. The result is a job market with a strong demand at the high and low ends, but a hollowing out of the middle.

ILO's recent Global Commission on the Future of Work (2019) study report assert a positive picture for the labour market that dispels the misnomer arising from the 4th IR and the 'fear' of IR creating loss of jobs in the market. The study projects that technological advances – artificial intelligence, automation and robotics – will create new jobs, but those who lose their jobs in this transition may be the least equipped to seize the new opportunities. Today's skills will not match the jobs of tomorrow and newly acquired skills may quickly become obsolete. The greening of our economies, however, will create millions of jobs as we adopt sustainable practices and clean technologies, but other jobs will disappear as countries scale back their carbon- and resource-intensive industries. Changes in demographics are no less significant. Expanding youth populations in some parts of the world and ageing populations in others may place pressure on labour markets and social security systems, yet in these shifts lie new possibilities to afford care and inclusive, active societies.⁶⁵

Countries need seize the opportunities presented by these transformative changes to create a brighter future and deliver economic security, equal opportunity and social justice – and ultimately reinforce the fabric of societies.

⁶⁵ ILO. Work for a brighter future: Global Commission on the future of work. 2019

CHAPTER 4: SWAp for TVET in Bangladesh

4.1 The background of SWAp in the Bangladesh TVET sector

This section deals with the fundamental aspect of this exercise, essentially to arrive at a prioritized action plan, and elements and mechanisms towards the development of a SWAp for the TVET sector in Bangladesh.⁶⁶ The genesis of this exercise lies in a series of ground work that have occurred over the last two years, culminating in the formation of a SWAp Steering Committee, chaired by the Secretary of TMED, and the creation of the SWAp Taskforce in 2017 with full participation of the Development Partners' Skills Development Working Group (SDWG). The EU chairs the Task Force on SWAp, with the secretariat support from the ILO implemented Skills 21 project and with the active participation of the DPs.

The purpose of the Task Force on SWAp is to take specific steps that would lead to the identification of elements and mechanisms for the development of a SWAp in the TVET sector. It creates the opportunity for relevant development partners to coordinate their efforts, develop and share good practice and provide policy advice and direction in key areas, take responsibility to support the government to produce key documents which would lead to the development of a roadmap on SWAp for TVET. A study was undertaken under the Skills 21 project⁶⁷, as a preliminary sector analysis for a TVET SWAp in Bangladesh which was endorsed by the government and the DPs. Government's commitment for SWAp was reiterated through a formal workshop in September 2018 in Gazipur which established the TOR for the high level SWAp steering committee, chaired by the Secretary, TMED.⁶⁸ The TOR for the SWAp steering committee provides a clear guidance for the establishment of priority action areas for SWAp-1, and preparation of SWAp-2 as a longer-term target.

The current study is built on the background work done by the Skills-21 and other supportive works done by the major DPs in TVET sector. All these participatory activities are to facilitate the Government to implement a SWAp in TVET in ensuring a coordinated approach towards equitable access by the people in Bangladesh to quality public TVET.

The skills and TVET sector in Bangladesh is quite large and fragmented; therefore, Government's decision to start with the TVET sector as a warm fit within the National Qualification Framework (NQF), which can address the major labour market demand. Thus, the decision to embark on a TVET sector SWAp is quite practical and timely. However, the Task Force meetings of SWAp did recognize that a perfect full-blown SWAp might not be possible at this stage, as several legislative, institutional and governance need to be addressed over time. Notwithstanding this, the fragmented nature of interventions by DPs, and absence of coordination among the different ministries and technical agencies of the government do warrant a coordinated and harmonized approach in the TVET/skills sector. This could be addressed through a SWAP 1, as an early version of a full-fledged SWAp, similar

⁶⁶ The TOR for the consultant specified that there should be two separate reports, i. comprehensive situational analysis of the TVET sector; and ii. a report on the policy and strategy options for the development of SWAp. The consultant considered that instead of submitting two separate disintegrated documents, and in the interest of future institutional memory, the two reports could be brought under one unified umbrella. This will give a natural flow from the first to the second document, and will thus establish the premises on which the priority actions are proposed.

⁶⁷ David Lyth. 2018. Op cit

⁶⁸ Through a Government Order of 19 September 2018, a SWAp Steering Committee chaired by the Secretary TMED was formed for the implementation of the SWAp in TVET.

to PEDP 2, leading to a gradual transition to a model similar to PEDP 3 and 4. The consensus reached by the DPs, including the two large development financing institutions, i.e., World Bank and ADB were in favour of SWAp, rather than supporting separate plans of ministries.

The various gaps and weaknesses in the policies, legislations, governance, and linkages with the labour market that have been discussed in Chapter 2 and 3 of this report point to the need for the scope of the SWAp to be clear and transparent, as discussed in the SWAp task force meetings. Also, important, as the SWAp Task Force recognized, is that the SWAp need to align with the principles of Aid Effectiveness that highlight the need for ownership, harmonisation, alignment, results and mutual accountability. This essentially means increased ownership of the government to potentially enhance aid-efficiency and reduce the transaction costs of the Government in dealing with isolated donor-driven projects. The SWAp will help the donors to engage closely with the Government in policies and implementation and will lay the ground for ushering in a budget support complemented by a system of monitoring through a set of Disbursement Linked Indicators (DLIs). The TMED Action Plan⁶⁹ linked to SDGs which is a fully government owned plan, is indeed a good beginning that proposes a series of actions, that can be brought within the scope of the SWAp, linked to a set of results oriented DLIs.

4.2 The conceptual understanding of SWAp

Sector Wide Approach (SWAp) is regarded as an innovative approach in organizing development assistance provided to developing countries. SWAp requires development partners (DPs), including development finance institutions, to provide development assistance by adopting a common approach across the sector. SWAp is a process in which funding for any particular sector – whether internal or from development partners – supports a single policy and expenditure program under government leadership. It is generally accompanied by efforts to strengthen government procedures for disbursement and accountability. The approach has emerged in response to changes in the development sector over the last decade.⁷⁰

Key weaknesses in the traditional project approach in relation to aid effectiveness as well as education planning led to developing a new modality of development cooperation that transformed into what we know as Sector Wide Approach or SWAp. The motivation to develop SWAps in Bangladesh was driven in the past by the need to improve the impact and sustainability of aid and to develop a new paradigm for education planning and institutional development. Thus, a SWAp is a systematic approach allowing DPs to work together in partnership with a government by pooling resources to support sector/subsector-wide development in an integrated manner under the government's common policy framework. It requires good sector analysis, policy framework, and an expenditure plan.

Based on global experience, it is expected to be one of the best modalities when it is designed and implemented properly, as it should help increase efficiency in implementation by:

⁶⁹ TMED. SDG Action Plan through National Mid-term and Long-term Development Plan. 2018

⁷⁰ Given that different actors and writers interpret the term 'SWAp' in different ways, it is necessary to establish a clear definition which is used in the report. A SWAp is where all significant funding for the sector supports a single sector policy and expenditure program, under the government leadership, adopting common approaches, and relying on government procedures to disburse and account for all funds.

- (a) avoiding duplicative and piecemeal efforts, thus increasing synergies in achieving outcomes;
- (b) increasing harmonization of DP and government implementation procedures (e.g., procurement; accounting);
- (c) reporting; and a common Program management unit/implementation unit (PMU/PIU) integrated into the Executing Agencies' normal operations, rather than separate PIUs); and
- (c) encouraging the government and DPs to coordinate closely through special mechanisms for policy dialogue and fiduciary risk management led by the government, thus reducing transaction costs among DPs.

Experiences in some countries showed that SWApS tend to have high transaction costs at the beginning, which became lower only after key priorities were identified jointly by DPs and the governments.

As mentioned above, SWAp is closely linked to development effectiveness, and follows the five basic principles of development effectiveness, as per the Paris Declaration and Accra Agenda which were founded on the basis of decades of experience of what works for development and what does not. These principles have gained support across the development community changing the aid practice for the better.⁷¹

The five principles of the Paris Declaration, and their relevance to SWAp, are as following:

Ownership: Partner countries exercise effective leadership over their development policies and strategies, and coordinate development actions. SWAp offers number of advantages over standalone projects. It promotes higher level of ownership and leadership opportunity to the government.

Alignment: Donors base their overall support on partner countries' national development strategies, institutions and procedures. SWAp leads to the alignment of donor activities with government policies and national budget.

Harmonisation: Donors' actions are more harmonised, transparent and collectively effective. SWAp advocates enhanced transparency and predictability of aid flows. SWAp results in enhanced donor harmonisation and reduced transaction costs.

Managing for results: Managing resources and improving decision making for development results. SWAp offers greater opportunities to link sector support to national policies and plans greater focus on sector-wide issues affecting performance.

Mutual accountability: Donors and partners are accountable for development results. SWAp advocates the promotion of uniform disbursement rules, common indicators and joint reviews.

It is important to place SWAp in the context of the overall aid environment and the changes that have taken place in the last decade, such as:

- Greater consensus on goals: A wide consensus on the need to focus efforts on reducing poverty.
- New approaches to improve aid effectiveness: Policies, public expenditure allocations and moves towards greater harmonisation and alignment.

⁷¹ Paris Declaration on Aid Effectiveness, available at <http://apps.who.int/assessedon> 10th April 2017

- New aid instruments and approaches: Disillusionment with impact using traditional aid instruments has led to increased emphasis on program type support (Budget Support and Sector Program Support).
- Stronger partnerships: Increased emphasis is given on strengthening the role of governments and developing true partnership approaches (in which donor-government relationships are increasingly based on government ownership and leadership), broad participation, mutual accountability and long-term commitment.

4.3 Experience from the practice of SWAp in Bangladesh

SWAp modality came into practice in 1998 in Bangladesh, arguably, the first in the world, when the Ministry of Health and Family Welfare (MOHFW) realised the need to refine its then project implementation design. SWAp facilitated the alignment of funding and technical support around national priorities and improved the government's role in designing, as well as implementing projects, and at the same time improving DPs' coordination. Since the use of SWAp, notable systemic improvements have taken place in the country's systems with regard to Results Based Monitoring and Evaluation (RBM&E), procurement, and service provision. Implementation of SWAp has, therefore, contributed to an accelerated improvement in key health outcomes in Bangladesh over the last 20 years.

4.3.1 The Health sector SWAp

The health SWAp in Bangladesh offers an example of a successful adaptation of such an approach in a complex administrative structure.⁷²The government and development partners, primarily the World Bank, have been supporting the government's health sector SWAp since 1998, adopting a series of multiyear strategies, programs, and budgets (1998–2003, 2003–2011, and 2011–2016) for management and development of the sector, supported by both domestic and international financing. This marked the birth of SWAp in Bangladesh. In fact, the history goes far behind as World Bank has been a partner to the Government of Bangladesh in support of the health sector since 1975 and has supported the Bangladesh SWAp since 1998 through three investment financing operations. The most recent, the Health Sector Development Program (HSDP), with a total International Development Association (IDA) commitment of USD 508 million, supported the government's third sector program (2011–2016).

These operations have also provided platforms for significant pooled co-financing by other development partners; under the HSDP, this totalled USD 365 million. During the implementation of the HSDP, several fiduciary governance risks such as poor application of procurement procedures and insufficient financial management controls were documented. The result was an agreed Action Plan to strengthen fiduciary oversight and systems, with steps through the end of 2017. Implementation of the Implementation Fiduciary Assessment (IFA) Action Plan was undertaken, supported by additional financing to the HSDP, approved in June 2016 in the amount of USD150 million, which linked disbursement to achievement of the agreed actions. The HSDP, which will successfully be closed in June 2018, has supported substantial achievement of the IFA Action Plan.

⁷² Ahsan, Zunaid; Streatfield, Kim, Fifteen years of sector-wide approach (SWAp) in Bangladesh health sector: an assessment of progress in Health Policy and Planning available at <https://academic.oup.com> assessed on 1st July 2017

Despite the many positive outcomes from the Health sector SWAp, there has been some strong reservations from the DPs about the overall governance process of the SWAp implementation. Some of these limitations were also applicable to the subsequent SWAp also. A statement by a DP representative sums it all:

The purpose of SWAp was to bring the workplan and budget of all the stakeholders (private sector, NGOs, government) to one single place, so that the government could get a comprehensive picture of who is spending or contributing how much to the different aspects of healthcare. But this was never achieved because of a weakness in leadership. It was decided from the very beginning that the line director will head the coordination program. He will be assisted by the program director and assistant program director. Efficient officers would be deployed in those posts. Political or other considerations would not influence the process. We couldn't make the private sector even disclose information about their expenditures, ongoing activities, etc; even NGOs eventually stopped disclosing information.

4.3.2 Primary education SWAp

The Primary Education Development Program 3 (PEDP3) was the third in a series of large investments in Bangladesh's education sector over the previous twenty years, supporting a complex system of over 100,000 schools, 450,000 teachers and 16.5 million students. This program ended in June 2018 which was designed to promote accountability through a results-based program approach. It was to: i) focus on results rather than on the supply of learning inputs; ii) use the DLI approach to better align financial incentives with critical actions and their outcomes; and iii) use the SWAp approach for financial management, donor harmonization, and program scope. Earlier, the Second Primary Education Development Program (PEDP 2) was designed and has been under implementation as a SWAp for primary education in Bangladesh. It was launched in 2004 as a sequel to PEDP 1 with the aim of expanding access to quality primary education for all eligible children in Bangladesh. More than two dozen separate projects carried out under the umbrella of PEDP 1 had been regarded as suffering from weak coordination and duplication.

As reported in the World Bank Implementation Completion and Results Report (ICR; (paras 53 and 62; 2018), the PEDP3⁷³ design made extensive use of government financial management and monitoring systems as well as an agreed combination of government and DP systems for procurement and reporting. Under this SWAp model, DPs placed their contributions into a consolidated fund managed by the Ministry of Finance (MoF), where DP financing was integrated into funds from many sources. Financial processes followed regular government procedures, and PEDP3 was managed as any other government-funded program. For some tailored technical assistance, the design allowed DPs to provide funds and manage them directly. Extensive use of the government's own financial management and monitoring systems avoided parallel procedures, decreased transaction costs, and ensured

⁷³ The objectives of the Third Primary Education Development Program (PEDPIII) were to (i) increase participation and reduce social disparities in primary education, (ii) increase the number of children completing primary education and improve the quality of the learning environment and measurement of student learning, and (iii) improve effectiveness of resource use for primary education in Bangladesh. The proposed operation used a Sector Wide Approach (SWAp) to support implementation of the Government of Bangladesh's primary education program (PEDPIII). The Credit financed recurrent and development expenditures, up to capped amounts, covering the entire primary education sub-sector, and which fall under agreed program budget heads (PBHs). The activities financed were under the following categories: (i) improving the quality of the learning environment and the measurement of student learning; (ii) increasing participation and reducing social disparities; and (iii) improving program planning and management, and strengthening institutions.

that there was a single source of information not only for reporting purposes but, more importantly, also for the release of DLI and non-DLI-related funds. One of the positive areas relate to M&E which ensured that parallel information systems were avoided, and both government stakeholders and DPs relied on a single source when disseminating M&E information, using the same reports.⁷⁴

However, a number of issues also emerged that go against the spirit of SWAp. Coordination between the Ministry and Directorate of Education and other stakeholders was weak, as was the process of feedback, and synergy among them. Inordinate delays owing to the bureaucratic processes were also experienced which was no different to the traditional loan assisted free-standing capital investment projects of the government.

PEDP 2 and 3 worked well in terms of being a relevant modality, because it evolved as a natural step, in the early 2000s, based on the DPs' long-term experience of having close coordination in Primary Education, starting from the first investment cycle in 1990 through the project-type modality, and then in the second investment cycle in the late 1990s through the project-type modality within the GOB common policy framework. It was also regarded as an appropriate modality because it allowed the DPs to coordinate more closely using pooled funding resources and to engage the GOB to take the lead and drive the program for improving the PE subsector. It was also found to be an effective modality in achieving many access- and gender-related outcomes by jointly identifying key priorities to mainstream implementation arrangements, while some quality and institutional capacity outcomes were evolving with positive signs of progress. The PEDP 2 SWAp's strengths are as follows:

- (a) it had a single PMU (rather than separate PIUs as in the first two investment cycles), the activities of which were integrated into the EA's normal operations to ensure EA ownership and sustainable capacity after completion;
- (b) it enabled the DPs to have stronger coordination during implementation (compared with the modalities used in the first two investment cycles) through consortium meetings, with the project liaison unit (PLU) playing an active role in facilitating the process;
- (c) it allowed for regular joint reviews and monitoring; and
- (d) there was a consensus that the PEDP-II had enhanced GOB leadership and ownership and opened up many priority areas (e.g., inclusive education and decentralization) that had remained the country's big challenges to improving quality, institutional capacity, and equity in access for a long time.

One of the critical feedbacks from stakeholders, as recorded in the ADB review of PEDP 2 is that preparation for the SWAp in the form of institutional analyses (or a sector analysis) was not undertaken and appropriate technical assistance was lacking. The government, it appears, was doubtful about the modality of SWAp and was not enthusiastic about embarking on an uncharted course. On the DP's part, there was a lack of clarity and agreement on the most relevant technical assistance needed and identifying the appropriately qualified people for technical assistance.⁷⁵

Blurring of roles, responsibilities, expectations, and lack of mutual accountability among DP partners were identified as weaknesses in this cooperation modality. The expectation was

⁷⁴ World Bank. ICR; para 74.

⁷⁵ ADB. Education Sector in Bangladesh: What Worked Well and Why under the Sector-Wide Approach? Evaluation Study. 2008

greater harmonisation and alignment among DPs and between them and the government. The obvious contradiction was that the PEDP 2 and 3 SWAp were highly centralised in terms of implementation mechanism, with little scope for distributed or delegated responsibility and decision-making, in a program that aimed to break away from the customary over-centralised structure of governance and management of primary education.

An evaluation by ADB⁷⁶ mentioned that experience in the secondary education subsector was better, where ADB worked in concert with other DPs within the framework of a coordinated subsector development program, “not necessarily packaging all investments into one super-intervention.” The evaluation report concluded that the sub-sector development program modality proved particularly effective in this context.

4.3.3 Secondary education SWAp

For the Secondary Education sector, the World Bank initiated discussions with the Government for a next generation sector-wide approach (SWAp) program, as early as in 2009. The World Bank team played a leading role in promoting the dialogue and coordination with the client and relevant development partners, in particular ADB, for the formation of the SWAp in the secondary education sector. The collaboration with the ADB toward SWAp included (a) parallel missions, (b) preliminary joint discussion on the basic SWAp modality and sector review, and (c) undertaking studies for harmonizing interventions.

The rationale presented was that the SWAp modality in secondary education could offer an excellent case study on preparation for the transition from the project-based approach to SWAp. The Teaching Quality Improvement project-II and SESIP project were extended until 2018 and 2019 respectively, with an assumption that the Government would be ready for the transition to SWAp. In fact, the Government successfully initiated the sector-wide program from January 2018, after the completion of the Secondary Education Quality and Access Enhancement Project (SEQAEP) in December 2017, with participation of all the interested development partners. Since as early as 2014, the World Bank team had maintained close collaboration with the client and ADB to carry out various groundwork for the transition. Some of the lessons that could be drawn from the experience of SEQAEP, SESIP and TQI-2 for a successful transition to SWAp were the following: (a) start the dialogue early to allow adequate time for the preparation, (b) involve all the major partners of the sector in open discussion on sector analysis and SWAp modality to create shared vision and consensus, and (c) undertake analytical works on critical interventions to address technical complications for harmonization.

4.4 Lessons: How to Make SWAp Work Better

While the PEDP 2 and 3 SWAp had some inherent weaknesses, it also had some strengths that have contributed to achieving many evolving outcomes, ensuring GOB leadership and ownership, and mainstreaming important priorities for long-term sustainability. Thus, it can be considered as a relatively viable modality despite its weak implementation efficiency due to its large program size (although there should have been economies of scale from large programs) and complicated implementation arrangements. The following lessons are drawn as a guidance for the DPs on how to reduce the transaction costs under their ongoing or future SWAps in order to make them work better for the TVET sector⁷⁷:

⁷⁶ *ibid*

⁷⁷ *ibid*.

- (a) design the program size to be manageable, less cumbersome, and with full clarity with an appropriate number of DPs in relation to the extent of activities, depending on the DPs' availability of staff and resources, the extent of procedural harmonization, and the Executing Agency's (EAs) initial institutional and staff capacities;
- (b) provide support at the design stage to strengthen the EA institutional capacity prior to implementing a SWAp;
- (c) provide support for analytical studies and technical support to ensure efficient joint annual reviews;
- (d) focus on strengthening the Education Management Information System (EMIS) for improving the results framework to monitor and report on progress;
- (e) collectively strengthen the results framework to meet all the DPs' reporting needs so that a single report can be prepared annually, to assess progress and support policy dialogue;
- (f) adopt more stringent partnership agreements (including further harmonization of implementation procedures) among the participating DPs under GOB leadership;
- (g) set up the SWAp administrative unit within the resident mission of the lead DP, rather than outside, as in the PEDP-2 case, in order to avoid any confusion regarding the roles and responsibilities of the lead DP;
- (h) separate the consortium functions from the lead DP functions as a self-contained arrangement (as in the SWAp in the health sector) to enhance mutual accountability; and
- (i) include special arrangements to expeditiously address critical cases like corruption without jeopardizing regular implementation.

A few generic lessons can be learned from this and utilized in designing future SWAp modality with respect to TVET that forms the purpose of this discussion. The choice among different modalities, should depend on : a) the government executing agencies' institutional and staff capacities, b) DPs' availability of staff and resources, c) the complexity and the extent of project/program activities, and d) the key situations or issues within the particular subsector which must be addressed.

Many of the achievements in the overall education sector have been the result of DP partnerships among themselves and with the GOB through long-term continuity of support using appropriate modalities, with more focus and selectivity in a particular subsector, to create synergies and a critical mass of beneficiaries. These strengths should be replicated in the design of TVET SWAp. Some quotes from the recent round table meet organized by the Daily Star reflects the concerns and suggestions from the stakeholders with respect to TVET SWAp:

1. *“Coordination among the donors and also within the sector. It is very difficult to achieve coordination in the sector because there are numerous ministries. This type of problem was not there in the education and the health ministry. Sector wide approach for primary education started with PEDP 1 though it was only there in name. There was very loose coordination in PEDP 1. In PEDP 2, it was the first time that the DPs pooled funds. There were also parallel funds being implemented like projects. It was in PEDP 3 that the treasury approach was brought for the first time. This is being continued in PEDP 4. In Secondary SWAp, it was a unified budget approach. The challenge in the skill sector is huge. One of the challenges in skills SWAp is institutional arrangement. Skills development is not limited to the education ministry; the latter is only responsible*

*for academic institutions. But there are several skills development training centres within other ministries. So, we have to think about how to bring all these together. My suggestion is that we should start with a loose coordination mechanism among all the partners. Perhaps, it could take the form of a semi-SWAp project.*⁷⁸

2. *There are around 22 ministries that work for technical education and skills development. So, the question is: who will take the lead? That's why technical education was kept out of the SWAp approach in other branches of education-since it would take a lot of time and effort to coordinate among all these ministries.*⁷⁹
3. *PEDP 3 and PEDP 4 are not only SWAps but also results-based programs. When government achieved the results, development partners disbursed the funds on the basis of measurable results. PEDP 3 was a real SWAp, whereas PEDP 2 was a test case. PEDP 4 is more than a SWAp; it's a results-based program. Our SWAp experience so far has been positive. When it comes to SWAp, the GoB has to be in the driving seat. When the government sets the priorities, there are multiple considerations: experience, capacity, needs, future of the economy, etc. At the same time, there are political realities. That is how the policies and priorities are defined.*⁸⁰
4. *At this moment, the GoB has two very distinct documents: one is 2010 National Education Policy which has some clear guidelines about technical education and the 7th Five Year Plan. These two documents will play a key role in terms of setting priorities. There is the Education Local Consultative Group (ELCG) which is led by the Secretary of the GoB. The development partners, NGOs, and other stakeholders are a part of it. When the ELCG plays a role, coordination becomes easier. It's up to the GoB to decide how it wants to design technical education and how it plans to skill its youth. These are reflected in the program document approved by the Executive Committee of the National Economic Council (ECNEC) Development partners support only a part of the program, not the entire program. In case of PEDP 4, the GoB prepared the program document and development partners gave technical assistance. That's how SWAp is usually developed.*⁸¹

It is quite important that the lessons learned are brought to the fore to make the SWAp process a conduit for better aid effectiveness, better direction and better focus in terms of skills development processes.

4.5 Components & features for possible TVET SWAp in Bangladesh

Components

Three main components or phases in a SWAp are essential, based on global practices, especially where sub-sectors of a whole sector are involved.

1. An agreement between government and DPs around the direction of the sector and aid effectiveness (Statement of Intent);
2. A framework for cooperation around a common agenda for education reform; and

⁷⁸ Chowdhury Mufad Ahmed, former Additional Secretary, MOE and now Senior Education Adviser, UNICEF; <https://www.thedailystar.net/round-tables/news/way-technical-and-vocational-education-and-training-tvet-sector-wide-approach-swap-opportunities-and-1757722>

⁷⁹ Md. Alamgir, Secretary TMED in above

⁸⁰ Syed Rashed Al Zayed Josh, Senior Economist, The World Bank in above

⁸¹ *ibid*

3. A structured operational program/standard operating procedures (SOP), led and managed by governments and agreed by all parties (Memorandum of Understanding or Code of Practice).

Features:

Four common features of a SWAp also exist that may be relevant to TVET SWAp in Bangladesh:

1. A sustainable partnership, long-term vision and agreed targets for the reform of the education sector, TVET sub-sector incorporating all stakeholders: government, DPs, private sector, industries, NGOs and civil society organizations (CSOs);
2. A well-defined TVET sub-sector plan taking into account the macroeconomic environment, sector analysis and institutional and financial structures;
3. A forward-looking work program such as a medium-term costed sector strategy that fits within a wider public financial management (PFM) framework and incorporates common arrangements for the government and DPs; and
4. Strategic negotiation and annual sector performance review mechanisms that are agreed jointly between DPs and the government.

Focus:

The TVET SWAp needs to focus on:

1. Policy objectives – rather than operational activity; including the Development Cooperation Policy⁸²
2. Prioritized program areas and outcomes – rather than project inputs
3. Priority ministries, rather than a whole gamut of ministries and agencies
4. Broad budgetary support – rather than project input accounting
5. A national financing framework – rather than individual contracts
6. Sustained broad partnership – rather than individual ‘deals’
7. Review of sector performance – rather than project performance
8. Common management arrangements – rather than disparate systems.

The basic building block to move towards a SWAp is for the government, in partnership with DPs, private sector, civil society, the non-state sector, and NGOs, is to develop a comprehensive and realistically costed TVET sector strategic plan in support of the TVET sector policy, around which there is common ownership and consensus. At present, there is no costed strategies that need to be addressed by the sector. Thus, the NSDP needs to be reviewed, revised, updated and costed that should be the fundamental articulation of the needs and government’s commitment to be addressed by the SWAp. The current policy related exercise ILO is pursuing must address these issues as a preamble to the transition to SWAp. The National Development Cooperation Policy also needs to be pursued, and the next 8th FYP should also reflect government’s commitment to SWAp, with a view to meeting, *inter alia*, the SDG pronounced goals.

4.6 SWOT Analysis for SWAp for TVET in Bangladesh

The following is a desk analysis of Strength, Weaknesses, Opportunities and Threats (SWOT) of the TVET sector SWAp in Bangladesh that gives a quick overview of the challenges in

⁸² A draft Development Cooperation Policy is pending with ERD for a few years now that was developed under an Aid Effectiveness project of UNDP.

implementing SWAp for the TVET sector, and a food for thought for the eventual action plan that will be agreed on:

STRENGTHS	OPPORTUNITIES
<ul style="list-style-type: none"> • Consensus has been reached by GOB and major DPs. • A leadership role has been set up through the SWAp Committee and the SWAp Task Force. • Existence of a National policy • TMED's Action Plan articulates gaps and opportunities in the TVET sector for multi-pronged approaches in addressing these. 	<ul style="list-style-type: none"> • Coherence, complementarities, coordination and relevance of efforts. • Avoiding duplication and wastage. • Value for Money • Pool financing or better managed financing options • Effective monitoring and results-based management • Positive experience of SWAp in other sub-sectors.
WEAKNESSES	THREATS
<ul style="list-style-type: none"> • Lack of institutional capacity (technical, financial management, and leadership) • Lack of previous sector specific SWAp experience • Too many parties involved in the subsector, including over 22 ministries and agencies ⁸³ • NSDP has not been renewed, not costed and not supported by an action plan • No National Development Cooperation Policy that should reflect SWAp as a preferred modality of development cooperation 	<ul style="list-style-type: none"> • Unwillingness of some of the key stakeholders and DPs • Absence of government's commitment to create an enabling environment including policy and regulatory changes • Inadequate planning, implementation and financial management capacity • Limited involvement of the government during the preparation and planning of programs • Shifting priorities of GOB and the DPs during SWAp project implementation.

4.7 Suggested scope for TVET SWAp in Bangladesh

In a number of fora, an important aspect has emerged in discussions if the TVET sub-sector SWAp should start with a full-fledged scope and functions, similar to the PEDP or Health sector, or it should be an experimental, 'close to SWAp, but not quite so', or a SWAp 1 (pilot phase) involving a limited number of ministries and DPs. This fundamental issue needs to be discussed, and consensus reached before embarking on the SWAp framework and a financing and implementation, including a results framework. Regardless what option is chosen, the key driver that will determine the scope and the details of the implementation modality should be the SDG Goal 4, that specifically relates to employment, and human capital development. Also, the time to reach a consensus with regard to the SWAp implementation modality and prioritize the sectoral needs and gaps, should be devoted to dialogues with the Ministry of

Finance, and the Planning Commission to influence the process of the 8th FYP, that will be a step ahead in meeting the pre-conditions the SWAp modality for TVET.

A broad definition of skills development as a part of human capital development requires comprehensive and coordinated attention to the spectrum of skills comprising foundation skills, transferrable skills and job-specific skills. These are provided by formal and non-formal modes of learning through basic and general education institutions and occupation related training institutions and programs. This broad view of provisions and providers needs to be taken as the conceptual framework for exploring policies and actions for the TVET sub-sector.

The discourse and policy advocacy in relation to the National Skills Development Policy (NSDP) can be used to promote a holistic approach to skills and capability development. The National Skills Development Authority (NSDA), proclaimed by statute as the apex body, should enlarge its focus beyond formal and institutional skills development linked to formal employment, and devote to 'substantive coordination' of the sectoral actors, policies, and quality assurance mechanisms. The majority of workers and potential workers who are in the informal economy must come under the policy and action purview of NSDA, as the regulatory and coordinating body. Effective policy responses and actionable strategies are needed on important concerns, such as, adequate TVET financing, teaching quality, strengthening links to industry, applying quality standards in TVET delivery, effective assessment of competencies, and determination to implement the planned activities effectively.

4.8 The Consultative Workshop and proposed priority plan for TVET SWAp

The Consultative Workshop of 6 July 2019 hosted by the Skills 21 project featured a presentation by the author of this report on the situational analysis of the TVET sector and the possible opportunities and challenges with regard to the TVET SWAp. The three-hour workshop attempted to engage the stakeholders in a participatory discussion that could reveal answers to the following key questions, with a view to drawing up a list of priority areas that could address the following thematic areas:

Equitable access and participation; Quality; and Governance and Management.

A number of questions were posed for responses by the attendees:

- i. What do we understand by government's 'ownership' and 'leadership' in relation to SWAp?*
- ii. What should be the key priority areas that the SWAp should address?*
- iii. If a TVET SWAp or close to SWAp (Pilot) is installed, which are the core entities to be involved in the SWAp.*
- iv. What are the governance issues that must be addressed before and during the SWAp implementation?*

Although the response from the floor was rather limited with respect to the above questions, there were subsequent written responses shared with the consultant which were helpful in the consultant's understanding of the perceptions of the stakeholders, which can be summed up as follows. These reflect the opinion of the participants contributing to the discussions and do not necessarily reflect the independent views of the consultant:

1. Ownership and Leadership:

- The question to be settled is who is the 'government' for TVET and Skills Development sector. According to the Allocation of Business (Schedule 1 of Rules of Business 1996) TVET is the responsibility of TMED of the Ministry of Education. However, there are other Ministries dealing with both technical education as well as skills development.

- The biggest issue that has to be settled before initiation of any TVET SWAp is the institutional arrangement issue. A TVET SWAp encompassing all relevant Ministries and agencies is not a feasible option at this moment. But some coordination process may be started from TMED, MOE. They should lead the SWAp.
- In this process reaching some sort of agreement with NSDA and other important actors e.g. BMET, industrial skill councils will be essential. Otherwise there be hiccups during implementation.
- TMED quickly outline a draft broad institutional arrangement, where TMED will be the key executing agency and DTE the key implementing agency. DTE, BTEB, BMET, Industrial Skill's Councils etc. will be responsible for implementing different related components of the SWAp. A strong steering and coordinating committee could be there, where NSDA may be given an effective role. Making Secretary TMED and Executive Chairman of NSDA co-chairs of the Steering Committee could be one of the options. A high-level policy meeting is needed to explain this outline and reach some agreements.
- Apart from that there should be some loose coordination mechanism among other key agencies skill development activities. This coordination will be the responsibility of NSDA. There will be some sensitivities around these issues and should be handled carefully.
- It would be better to define the SWAp Pilot as something progressive and evolving.
- The SWAp Pilot should be a simultaneous two-tier initiative. At the core some coordinated activities among some key agencies. And at the outer layer a loose coordination mechanism among all other agencies dealing with skill. The Pilot will evolve into a better coordinated and effective Program, as has been the case with respective to PEDP.
- The ownership and Leadership of SWAp must be vested with Government for sake of uniform development and quick execution. With this end in view the Government has established NSDA under PM's chairmanship. They need to be involved in dialogues and in the coordination mechanism.

2. Key priority areas:

- There should be big paradigm change in the TVET sector. For technical education there should be an overhauling of the curriculum, shift from more theory to more practical based approach, effective and meaningful linkages with industries.
- At present, there are provision of industrial attachments for Polytechnic students. But this attachment does not effectively allow students to have hands on training in the industry. The period is also too small. It would be excellent if something similar to German-dual system could be initiated at least at a limited scale.
- Linking skill training with the skill demands abroad is crucial.
- Some efforts were initiated earlier for mutual recognition of skill certificate by migrant destination/ countries. There should be work in that line.
- Training people on some high demand jobs do not automatically guarantee jobs. Because job markets have some institutionalized systems of recruiting people, linking training programs with that system can guarantee jobs.
- The SWAp Pilot can contain a small social mobilization component to change people's perception about TVET for the better.

- Sensitization and awareness among the parents and guardians so that they send their children to technical and vocational education and acquiring skills.
- Emphasis on core life skills and social skills.
- Increase the number of Registered Training Organizations (RTOs).
- Increase the number of CVT trained Teachers and Industry Assessors by providing training in home and abroad.
- Development of world class Competency Based Standards (CS) and Competency Based Learning Materials (CBLM).
- Strict Monitoring and Supervision of the training institutes' activities.

3. Core entities to be involved in SWAp:

- Begin the SWAp Pilot (something similar to Secondary Sector Investment Program in the secondary education, which usher in the SEDP) with the entities which were successfully supported by previous TVET projects.
- TMED to lead. There could be a few components of the Program, implemented by different agencies. NSDA, DTE (Polytechnics, TSCs etc), BMET (TTCs), Department of Youth Development (Training Institutes); Industrial Skill Councils
- Bringing the ongoing projects in the TVET sector within the framework of SWAp is also crucial.

4. Governance issues that must be addressed for a SWAp to be installed:

- The biggest governance issues to be addressed are linked with institutional arrangements and mandates of various entities.
- Organizations will love to get support from the SWAp but would be keen have these issues settled:
 - i. Who would be the lead agency?
 - ii. Will there be any overlaps in work?
 - iii. What would be the relationship of the lead agency vis-à-vis other agencies involved in the SWAP?
 - iv. How will be the line of reporting?
 - v. What would be the financial arrangements including flow of funds?
 - vi. How the audit will be conducted?
 - vii. How the activities of different partners be coordinated at operational and policy level?

An analysis of the feedback received from the workshop; review of literature; review of the TMED SDG Action Plan; Medium Term Budget Framework (MTBF); TMED Action Plan; review of the sectoral issues and gaps as highlighted in this report; as well as the consultation process, led to the development of a prioritized action plan for the TVET SWAp following the themes of Equitable access and participation; Quality; and Governance and Management. This is contained in a matrix format in this report (4.10 below). Besides, the following covers aspects related to policy, systems and operational arrangements, which are being presented

separately as these are close to pre-conditions or essentials for launching a SWAp in the TVET area, even on a pilot basis.⁸⁴

Level	Priority actions	C	L	M	H
Policy level	Review and update NSDP to reflect new challenges and opportunities of the TVET and skills sub-sector.				
	Complete the development and rolling out of the NQF				
	Operationalize the NTVQF through government orders and through appropriate communication strategy.				
	Address the issues related to NTVQF certification (e.g. RPL) among the BTEB Act, NSDA Act and the NFE Act.				
	Provide appropriate level of resources (including human resources) to the public TVET providers motivating and empowering them to conduct local resource mapping, making localized/contextualized decisions including implementation of PPP in TVET.				
	Assign a single competent agency to lead on the management of the Labour Market Information System (both supply and demand) to be supported by other relevant agencies.				
Systems and institutional level	Introduce a results-oriented culture in TMED and DTE (RBM&E)				
	Develop efficient system including planning, budgeting and financial management to cope up with results-based financing approach.				
	Strengthen institutions in efficiently & responsibly manage allocated budget.				
	Develop and implement performance measurement and M&E system in TVET supported through a robust MIS system in TMED with multiple interfaces, including with DTE; BTEB; IMED and ISCs.				
	Develop appropriate systems and institutional arrangements for apprenticeship keeping in mind primarily the German Dual System and other systems that can be piloted initially.				
	Gradual implementation of the German Dual System, through integrating the Apprenticeship scheme.				
	Improve sector coordination by strengthening the existing systems and mechanism such as ELCG, SWDG etc.				

⁸⁴ Some of these policy, systems and operational level priorities are also included in the overall priority list contained in this document, and thus may appear duplication of statements.

Operational level	Recruit qualified TVET trainers (including female, ethnic minorities) and manage teachers' education and continuous professional development.				
	Revise the operational plans of TMED, DTE and BTEB to implement quality assurance, competency standards, assessing standards and learning outcomes, apprenticeship, RPL, industry linkages, enterprise development, workplace improvement, green jobs, environment consciousness, skills for migrants, and all forms of inclusion.				
	Operationalize Performance Based Management system (e.g. APA) and periodic sector performance monitoring.				
Codes: C: Continuous, L: Low priority, M: Medium priority, H: High/immediate priority					

4.9 Proposed Roadmap of SWAp for TVET in Bangladesh

The following Roadmap for TVET SWAp is being presented for consideration, followed by a priority action plan under Section 4.10.

The proposed roadmap and the prioritized action plan are based on the agreement by the government regarding the adoption of SWAp as a viable modality for TVET in Bangladesh (Gazipur workshop 2018 and the formation of the SWAp Committee), meetings of the SWAp taskforce, and the suggestions of the TVET SWAp roundtable discussions organised by the Daily Prothom Alo. This also takes into account the feedback received from the stakeholders attending the 6 July 2019 Consultative Workshop organized by Skills 21 in Dhaka.

Step and periodicity	Modality	Characteristics
Step 1 Year 1	SWAp 1 – modest start & flexible coordination	Establish priority action areas for SWAp 1 in the context of a long-term strategy to unify and strengthen the workforce development in Bangladesh; identify likely contributions to SWAp 1 from development partners and the government; draft the SWAp 1 action plan for approval by the government; form relevant technical working groups agreed through an MoU among all partners; overview the implementation of SWAp 1 action plan and the agreed overriding structure; among others; beginning of results based management. Leadership by a single nodal body (TMED); small number of DPs; focus more on coordination than on a unified TVET development program.
Step 2 Year 2	SWAp – pool financing	Coordinated sector plan, multi-year planning for technical assistance, pool financing with Disbursement Linked Indicators. Increased harmonization and wider strategic future focus.

Step 3 Year 3 and 4 and beyond	Results based SWAp	Full blown Results-based management and resource planning for the sector development through an established mechanism of delivery.
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4.10 Proposed priority action plan for SWAp implementation in phases

This indicative plan should be ideally revised, readjusted, and results indicators determined along with target dates for each of the thematic areas. This will be done through the joint consultation between the DPs and TMED/ SWAp Steering Committee, prior to the development of the SWAp program document. In most results areas, quantification of targets, output and outcomes need to be reflected eventually.

Theme and Target	Indicative action to support the target	Deliverables / Expected results	Indicative Timeline	Remarks
Quality			To be set/agreed	
Develop skilled human capital for domestic and international labour market	Developing qualification framework for teachers, teacher trainers and assessors	Qualification standards in place	Medium to Long-term	TMED SDG Action Plan supported
	Implementing/operationalising NTVQF through government orders, legislative adjustments as necessary, and awareness raising of the employers in considering the NTVQF certification	NTVQF fully operational in conjunction with the private sector; growing awareness of the value of a competency approach for workforce development established and recorded; the value of continuous quality improvement through implementation of the 5 quality assurance policy booklets of the	Immediate	Review of BTEB Act. and corresponding rules that may be necessary to effectively operationalize NTVQF. Changes may not be required but interpretation of rules to be agreed upon and documented for ready references. Ultimate results will be establishment of

		<p>BTEB; employment opportunities for skilled work force significantly increased (# target and %) increased in country and in abroad for migrant workers; remittance heightened as a result of this, which can be attributed to the successful implementation of NTVQF over a target time frame;</p> <p>X# Principals, x# Workers/Union Leaders, X# Industry partners and government officials oriented on National Skills Quality Assurance System, CSs development and implementation of NTVQ programs who are able to implement</p>		<p>the leadership of industry and professional bodies in the development and maintenance of qualifications; and implementation and expansion of a flexible, open, accessible and responsive workforce development system; and putting in place strong industry leadership across the whole economy.</p>
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		NTVQF fully as champion partners.		
	Imparting teacher training to have more TVET certified trainers	Teacher training through revised curriculum leading to certified trainers for private and public institutions; quality assurance mechanism established; tracer study and quality monitored for actual application of training results.	Continuous	TMED Action Plan supported
	Rendering professional training and Competency- Based Training (CBT) to teachers of technical education.	A host of (# to be decided) CBT qualified teachers; CBT established as a policy outcome.	Medium to long term; continuous	May require some exposure of DTE/TMED to overseas best practices, preferably in the region to understand this practice
	Introducing emerging trade and technology courses by modernizing curriculum (considers MRA, demand of the international labour market and 4IR)	Courses in new technology introduced gradually in conjunction with private sector	Medium to long term; continuous	Recognized by the private sector as a critical priority

		industries suitable to emerging needs. A critical mass of trainers trained in overseas settings, in line/conjunction with SEIP project activities, or as part of SEIP		
	Promoting industry linkages with TVET institutions so as to support an increase in student work experience/ internship	Expanded industry linkage with private sector, similar to the German model gradually introduced	Medium to long term	Recognized by the private sector as a critical priority
	Providing training of TVET teachers on green technology and transforming all TVET institutions into green institutions	Environmental Management Framework (EMF) formulated and approved; teachers' training institutionalized.	Medium term	Supported by TMED Action Plan
	Introduction of at least one technical subject in lower secondary level in 500 general schools and 500 madrasahs; Introduction of Pre-voc 1 and Pre-voc 2 in 200 madrasahs; Introduction of Dakhil vocational course in 10000 madrasahs by 2030; Introduction of SSC vocation course in 20,000 general secondary	Technical subjects in lower secondary and madrasahs introduced in the target institutions, as per TMED Action Plan.	Medium to long term	TMED SDG Action Plan refers. Actions are already underway by TMED. Needs collaboration with other line ministries, such as Ministry of Religious Affairs

	schools by 2030; Establishment of 3000 new vocational institutions for SSC Voc courses			also. A significant work is related to infrastructure as projected by TMED in the Action Plan.
	Introducing more distance learning and e-modules both for teachers, and students	Distance learning and e-modules introduced, including TVET App for teachers and students.	Medium to Long term	TMED SDG Action Plan refers
	Reforming the TTTC and offering training to TVET teachers and trainers in modern approaches to the delivery of workforce development	Reformed model TTTCs, modern pedagogy established with manuals and instructional aid.	Medium to long term	TTTC to be selective
	Developing the competency-based student assessment skills of teachers and trainers	Competency based assessment framework and supporting manuals rolled out	Medium to long term	Priority area as suggested by the workshop
	Upgrading infrastructure, equipment and teaching and learning resources in selected institutions	Infrastructure upgraded as per TMED's Plan	Short, medium and long term	Not all institutions to be upgraded. To be selected based on a needs assessment and location of institutions. Priority areas suggested
	Supporting the ISCs and the BTEB to develop a wider range of NTVQF	NTVQF advanced certificates and	Medium term	Priority suggested by both private and

	advanced certificates and diplomas (including the SSC and HSC Voc) to meet the needs of the economy	diplomas developed and fully rolled out, in conjunction with ISCs and BTEB.		public sector, and workshop participants.
	Supporting the BTEB to develop the capability of its staff to offer the full range of workforce development, regulatory, certification and support services in association with Ministries and ISCs	Plan developed reflecting BTEB's role re: workforce development support services. ISCs and various ministries satisfied with BTEB's role.	Medium term to long term	ISCs and TMED supported
	Assisting the NSDA in its national coordination of skills training and in establishing Skills Councils for the entire economy	NSDA fully functional as an apex body for inter-agency coordination; evidences of coordination meetings and other coordination reflected in reports with respect to SWAp.	Short to medium term	Common priority expressed in the workshop feedback, as well as in various reports.
	Moving progressively to unify the multi-Ministry TVET sector through rapid expansion of the NTVQF and rolling out of the NQF	NQF approved and rolled out in conjunction with the rolling out of NTVQF. Qualification recognized by private sector and in	Short term	High priority

		overseas employment.		
	Develop and manage Labour Market Information System (LMIS) through a web-based platform and conduct period research on supply and demand, tracer studies etc.	LMIS designed, installed in TMED; manpower recruited & trained	Medium term	TMED Action Plan refers to M&E and management information system; regarded as high priority by stakeholders' feedback
	Use the LMIS in minimizing the skills gaps between supply and demand through relevant courses, curriculum and industry linkages	As above; and use of data in policy and strategy development by TMED and other ministries within and outside SWAp	Medium term	High priority
	<p>Ensure decent work principles in the training institutions' subjects and in the TVET system which should include:</p> <ul style="list-style-type: none"> • Respect for rights of the workers; • Awareness among the trainers and teachers of the institutes about workers' rights, safety and working conditions; • Ensuring safe workplaces and respect for 	<p>Decent work principles integrated in the curriculum of TVET institutions and taught as integral part of the courses.</p> <p>Evidences gradually emerge in the practice of DW in industries.</p>	Medium term and continuous	Emerging issue recognized by stakeholders.

	minimum wages already prescribed by the Minimum Wages Board.			
	Curriculum development/revision for TVET institutes to include such issues as workplace security and safety, minimum wages issues, and rights of the workers.	Similar to above	Medium and continuous	A major priority area from the employees' perspective
	Ensure and maintain proper teacher-student ratio, with recruitment of teachers.	Immediate recruitment of teachers which has been a pending issue; uniform teacher/student ratio implemented across the country	Short term and continuous	A major area to address quality issue. Legal barriers need to be removed through TMED's interventions
Equitable access & participation				
Increased enrolment in TVET	Increasing TVET enrolment with emphasis on equity and equality through a combination of efforts including awareness campaign, media and marketing	Significant number of TVET enrolment of female, ethnic minorities, PWD increased resulting from campaigns & advocacy; tracer study conducted annually, and reports showed improvement and low dropout rate	Medium term and continuous	This cuts across quality and equity issues

	Provision of stipends and scholarships to eligible female-male students at different levels of Technical Education, similar to PEDP and SESIP/TQI	Stipends and scholarships to eligible students resulted in quality enrolment and better employment outcomes	Medium term	TMED's strong commitment and budgetary provision in place
	Establishing appropriate numbers of TVET colleges and Polytechnics prioritizing socially and ecologically disadvantaged areas, and migrant intense areas, with strong linkage with the private sector	Quality colleges and polytechnics established on a selective basis that can serve as model institutions; quality assurance system of TMED affirms quality of these institutions through regular checks	Medium term	TMED Action Plan proposes increasing number of institutions which need to be linked to a quality assurance process
	Lifting the participation of women and those traditionally disadvantaged in access to TVET in line with the SDG commitments	Increase in enrolment rate, and better outcomes in employment, as well as in self-employment/entrepreneurship areas	Short term and continuous	A major outcome to be achieved through SWAp in the area of equity
	Providing technical support to the Directorate of Madrasah Education in the TMED as it seeks to open skills training opportunities to students in around 9,000 institutions	Support towards introduction of Voc courses in Madrasah as per TMED Action Plan; employment	Short term and continuous	TMED Action Plan emphasizes this priority

		and entrepreneurship outcomes, including for female students of Madrasah; low dropout rate		
	Promoting an expansion of industry-based training, especially through formal and informal apprenticeships, so as to capitalize on the largely untapped resource of industry trainers and to rapidly expand the TVET system	Apprenticeship gradually taking the shape of the German Dual system; better employment outcomes in industries; decrease in the number of expat employees in private sector, replaced by local qualified trainers and technical manpower	Medium term	Also reflected in the quality area
	Increase women and PWD friendly TVET infrastructure	Similar to PEDP and SESIP/TQI2 projects, women friendly facilities created across all institutions; PWD friendly infrastructure gradually created over 2/3 years across the country, and maintained regularly	Short term	A major priority in the equity area that complements TMED's plan for increased infrastructure

	<p>Ensure flexibility in training calendar and training time to allow easy participation and access of the already employed workers in the various training programs.</p>	<p>A Government Order published to allow flexible training calendar to be adopted by TMED/BTEB/DTE; better results achieved in terms of participation of workers with employment outcomes</p>	<p>Medium term</p>	<p>A major priority from the employee/employer perspective</p>
	<p>Expand the currently limited apprenticeship system for job creation of young people. Also, ensure apprenticeship system to be in line with the provisions of the labour law namely:</p> <ul style="list-style-type: none"> • respect for the rights of apprentices, • reasonable compensation (i.e. payment) to the apprenticeship during the training period; • compliance with other important provisions such as safety and health at workplace, decent working hours. 	<p>Apprenticeship intake made mandatory by Government law for every industry operating under government license; apprenticeship expanded over 2 years and gradually transitioning to the German dual system</p>	<p>Medium term</p>	<p>Government law/order to be passed to make apprenticeship intake mandatory for the industries</p>

	Relaxing the entry barrier to TVET such as Grade-8 completion requirement using the RPL system to allow more workers to benefit from the current system.	RPL rolled out in full of no legislative hindrance currently experienced by DTE/BTEB; Entry barrier relaxed in specific conditions under a government order; # of RPL supported workers increased through a flexible RPL system	Immediate and continuous	A major priority for SWAp and TVET system reform
	Bring returnee migrant workers within the fold of RPL.	A significant number (target to be fixed) of returnee migrant workers' skills recognized under RPL; domestic employment outcomes increased; re-employment in overseas countries enhanced with better financial outcomes with recognition as skilled worker.	Short term and continuous	
Governance & Management				

<p>Improved TVET sector coordination and oversight mechanism</p>	<p>Increase planning performance measurement by periodic sector performance assessment</p>	<p>Sector performance measurement system designed and implemented by in conjunction with IMED; Corrective measures undertaken and published; TMED Medium Term Budget Framework reflects changes; BTEB and DTE reports to LMIS on a regular basis</p>	<p>Medium term and continuous</p>	<p>Closely linked to SDG Action Plan and monitoring system established by the SDG Office in PMO Office</p>
	<p>Implement Results-based M&E and apply the findings in decision making</p>	<p>Planning Division in TMED strengthened to including the M&E functions; quality training in M&E imparted; LMIS and MIS established and linked to AIMS in ERD</p>	<p>Medium term and continuous</p>	<p>Extensive capacity development work needs to be done in this area as a top priority</p>
	<p>Increase sector financing through result-based finding by the Government and by the DPs</p>	<p>MTBF fully implemented; budgets separated from the madrasah stream in the interest of clarity and transparency and results outcomes.</p>		
	<p>Conduct evidence-based research, evaluation of educational scheme,</p>	<p>TMED/DTE research capacity enhanced; #</p>	<p>Medium term and continuous</p>	<p>Good evidences</p>

	facilitate training and discussion through international and national seminars/workshops	research conducted as a follow up to researches, such as in areas related to job market, and job strategy.		exist in TED/TMED with regard to some past studies
	Ensure appropriate mechanism for the pricing of the TVET courses of both public and private providers.	Viable and uniform pricing established across all public and private institutions; major revenue gap in TVET financing addressed	Medium term	A major priority related to TVET financing issue
	Strengthening planning capacity of TMED significantly with adequate training and resource allocation	The Planning Section of TMED is staffed adequately by experienced officers who will remain until 3 years of SWAp implementation; major work on the SWAp DPP prepared by TMED internally; dialogues with Planning Commission, IMED and ERD established towards early approval of SWAp; Planning Section in	Short term and continuous	This is extremely important in the context of SWAp implementation

		TMED works in harmony with the LMIS section.		
	Non-legislative framework – motivating as well as delegation of authority to public TVET providers to initiate and implement PPP, RPL (RPL by BNFE),	Quality Assurance Framework established for Public TVET providers with implementation of PPP, RPL as Key Performance Indicators and monitored regularly; RPL rolled out.	Medium term; continuous	An essential part of the TVET Quality Assurance system
	Ensuring involvement of private sector and trade unions in the advocacy campaign to popularize TVET and support the government's efforts, as a unified approach	Advocacy campaigns fully embeds private sector and trade unions, as advocates, agents of change and champions.	Short term and continuous	TMED Action Plan proposes advocacy and campaign; NCCWE, BEF expressed strong interest in this key priority area.
	Strengthening ISCs with co-funding of resources with the private sectors; strengthening ISCs intellectual focus to contribute more effectively in training and curriculum development.	ISCs role strengthened; resources expanded through collaboration with SEIP project which already is working towards ISCs; ISCs fully involved in TVET	Short term and continuous	A priority area for SWAp although work in this area is in progress through Skills 21 and SEIP

		training & curriculum development		
	Effective coordination mechanism development for SWAp1 implementation	<p>TMED takes the lead with limited number of partner ministries/divisions (i.e, MOE, Ministry of Labour; Ministry of Expatriate Welfare and Overseas Employment); NSDA closely involved as Co-chair of Steering Committee and coordinates with other ministries and agencies, within a Framework of Coordination, MOUs, SOP etc</p> <p>Dialogues with the Ministry of Finance, Planning Commission held on a regular basis.</p>	Medium term and continuous	<p>This is a critical area of focus in SWAp 1. Unless a relationship is built with the Ministry of Finance and agreement reached with NSDA on coordination issues from the very beginning, the risk factors are likely to be high.</p> <p>Once the partners (Ministries and Development Partners) are known and the scope and focus of the SWAp I is determined, development of a detailed and agreed sector vision and strategy is important. That will result in the</p>

				preparation of a modest action plan for the sector or sub-sector in a Medium-Term Budget Framework for SWAp I. The context for that quite modest action plan will be the long term agreed (and inevitably very significant), sector vision; and bringing the Development Partners together with harmonised SWAp elements and mechanisms. ⁸⁵
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⁸⁵ David Lythe, op cit.

ANNEXURES

Annex 1: Medium Term Budget Framework (MTBF) for TMED 2019-2020

(separate document)

Annex 2: Ongoing apprenticeship initiatives in Bangladesh

(separate document)

Annex 3: Development Partners' Activities (DP Matrix)

(separate document)

Annex 4: Key Actors and Stakeholders in TVET/Skills sector in Bangladesh

(separate document)

Annex 5: References

(separate document)

Annex 6: Persons met

(separate document)

Annex 7: Consultative workshop agenda and list of attendees

(separate document)

END OF THE REPORT

Annex 1 : Medium Term Budget Framework (MTBF)

Technical and Madrasah Education Division

Medium Term Expenditure

(Taka in Thousands)

Description	Budget 2019-20	Projection	
		2020-21	2021-22
Operating Expenditure	5940,45,00	6534,50,00	7187,94,00
Development Expenditure	1513,15,00	1664,47,00	1830,91,00
Total	7453,60,00	8198,97,00	9018,85,00
Recurrent	5739,36,86	6205,40,81	6930,89,27
Capital	1713,88,14	1991,59,75	2085,89,46
Financial Asset	35,00	1,96,44	2,06,27
Liability	0	0	0
Total	7453,60,00	8198,97,00	9018,85,00

1.0 Mission Statement and Major Functions

1.1 Mission Statement

To create efficient and skilled human resources with moral values through combination of technical and vocational, science and technology-based education and training.

1.2 Major Functions

- 1.2.1 Conducting research, training, project formulation, implementation, monitoring and evaluation for improving the quality of technical and Madrasah education;
- 1.2.2 Formulation of administrative policy and conduct reform activities related to technical and Madrasah education;
- 1.2.3 Registration and recruitment of teachers for non-government educational institutions and provide financial support ;
- 1.2.4 Develop and update curriculum for different levels of technical and Madrasah education;
- 1.2.5 Printing and distribution of free textbooks for several levels of technical and Madrasah education;
- 1.2.6 Provide broad-band connections, multi-media books to educational institutions, ensuring use of ICT in class rooms and application of ICT in education management;
- 1.2.7 Implementation of recommendations of the Education Policy.

2.0 Medium Term Strategic Objectives and Key Activities

Medium Term Strategic Objectives	Activities	Implementing Departments/Agencies
1	2	3
1. Expansion of access to quality technical and Madrasah education.	<ul style="list-style-type: none"> ▫ Providing training to teachers, members of the School Management Committee (SMC) and others. 	<ul style="list-style-type: none"> ▫ Directorate of Technical Education (DTE) ▫ Directorate of Madrasah Education (DME) ▫ National Academy for Computer Training and

Medium Term Strategic Objectives	Activities	Implementing Departments/Agencies
1	2	3
		Research(NACTAR) ☐ Bangladesh Madrasah Teachers' Training Institute(BMTTI)
	☐ Conducting all public examinations and publishing the results in time	☐ Directorate of Technical Education (DTE) ☐ Directorate of Madrasah Education (DME)
	☐ Establishing new educational institutions in underserved areas	☐ Directorate of Madrasah Education (DME)
	☐ Constructing new and extending the existing buildings of educational institutions (Technical & Madrasah) and supplying furniture	☐ Directorate of Technical Education (DTE) ☐ Directorate of Madrasah Education (DME)
2. Ensure equity and equality at all levels of education	☐ Providing stipends and scholarships to eligible female-male students at different levels of Technical & Madrasah Education	☐ Directorate of Technical Education (DTE) ☐ Directorate of Madrasah Education (DME)
3. Generate skilled human resources for domestic and international labor market	☐ Imparting technical and vocational education and training	☐ Directorate of Technical Education (DTE)
	☐ Rendering professional training and Competency- Based Training (CBT) to teachers of technical education.	
	☐ Introducing emerging trade and technology courses by modernizing curriculum	
4. Strengthening governance in education management	☐ Conducting research , evaluation of educational Scheme, facilitating training and discussion through international and national seminars/workshops	☐ Directorate of Technical Education (DTE) ☐ Directorate of Madrasah Education (DME)

3.0 Poverty, Gender and Climate Change Reporting

3.1 Impact of Medium Term Strategic Objectives on Poverty Reduction, Women's Advancement and Climate Change

3.1.1 Improve access to quality technical and madrasah education

Impact on Poverty Reduction: Interventions, such as, establishment of technical schools and colleges, polytechnic institutes, model madrasahs and inspection of institutions etc. are expected to reduce existing disparity in quality of education and imbalanced competition in higher education. In addition, stipend/financial assistance to the students of technical and madrasah levels and Monthly Payment Order (MPO) to non-government teachers and staffs of technical and madrasah levels will help reduce poverty among the poor beneficiary families.

Impact on Women's Advancement: Improved quality and access to technical and madrasah education will increase participation of women at higher education. This will, in turn, create more opportunities for the women in labor market and economic activities.

Impact on Climate Change Adaptation and Mitigation: New secondary school buildings set up in areas affected by climate change can be used as emergency shelter during natural disasters. They can also be used as a permanent communication center for climate change preparations. Apart from this, water reservoirs, plantation and environment friendly infrastructure are being developed in educational institutions.

3.1.2 Ensure equity & equality at all levels of education

Impact on Poverty Reduction: Poverty level in poor families will be decreased by ensuring gender parity in income and education through providing stipend to poor students.

Impact on Women's Advancement: Providing stipends & scholarship to the female students of different levels of madrasah and technical education creates opportunities for the women to enter into income generating activities and also enhances their social dignity.

Impact on Climate Change Adaptation and Mitigation: No direct impact.

3.1.3 Generation of skilled human resources for domestic and international labour markets

Impact on Poverty Reduction: Imparting necessary vocational and technical skills to beneficiaries from the disadvantaged families annually will ensure employment opportunities and will increase access to both domestic and international job market. This has a direct impact on poverty alleviation.

Impact on Women's Advancement: Technical, vocational, professional and higher education will enhance skill and efficiency of women. They will enjoy social dignity by engaging themselves in different productive sectors.

Impact on Climate Change Adaptation and Mitigation: Providing technical, vocational and professional training creates opportunities for the expansion of climate resilient professions.

3.1.4 Strengthening governance in education management

Impact on Poverty Reduction: Promotion of good governance in education management will ensure quality education. This contributes in expanding skilled human resources and reducing poverty.

Impact on Women's Advancement: Good governance in education management ensures gender equality in different areas of education which has a supportive role in women's advancement.

Impact on Climate Change Adaptation and Mitigation: No direct impact.

3.2 Poverty Reduction, Women's Advancement and Climate Change Related Spending

(Taka in Thousands)

Description	Budget 2019-20	Projection	
		2020-21	2021-22
Poverty Reduction	2111,48,82	2532,21,76	2921,42,44
Gender	2274,91,24	2360,43,44	2623,17,21
Climate Change	83,19,92	94,60,56	99,52,56

4.1 Priority Spending Areas/Scheme

Priority Spending Areas/Scheme	Related Medium Term Strategic Objectives
<p>1. Improving quality of the Technical & Madrasah Education</p> <p>Key initiatives to improve the quality of education including various study, baseline survey, curriculum development, decentralization of the education management and establishment of new Technical & Madrasah institutions in underserved areas and creating more opportunities for secondary education ensures quality education. Hence,</p>	<p>□ Expansion of access to quality Technical & Madrasah education</p>

Priority Spending Areas/Scheme	Related Medium Term Strategic Objectives
this has been given top priority.	
<p>2. Modernization of existing technical and vocational institutions and establishing new ones</p> <p>Removing unemployment problem and creating productive human resources by imparting technical and vocational education are very important for our country. Hence it has been given priority.</p>	<p>□ To generate skilled human resources for domestic and international labour markets</p>
<p>3. Creating facilities for education and training in different need-based trades and technologies</p> <p>In order to respond to the demand of labor market for both home and abroad, traditional curriculum has been revised by introducing emerging trades/technologies. More new trades needs to be introduced in different technical and madrasah institutions. Therefore these activities have been given priority.</p>	<p>□ To generate skilled human resources for domestic and international labour markets</p>
<p>4. Development of physical infrastructure for Government and non-Government education institutions</p> <p>Construction of new buildings for different educational institutions (Technical and madrasah), repair and renovation of existing institutions and establishment of new institutions in underserved areas will directly contribute to the expansion of education opportunities. Hence, these activities have been identified as priority</p>	<p>□ Expansion of access to quality Technical and Madrasah education</p>
<p>5. Provision of stipends to female students at Ebtadai, secondary and higher secondary levels</p> <p>Stipend program for female students will contribute to reducing dropout rate and ensuring gender equality. Hence, this initiative has been given priority.</p>	<p>□ To ensure equity & equality at all levels of education</p>

4.2 Medium Term Expenditure Estimates and Projection (2019-20 to 2021-22)

4.2.1 Expenditure by Department/Agencies/Institutional Units

(Taka in Thousands)

Description	Budget	Revised	Budget 2019-20	Projection	
	2018-19			2020-21	2021-22
Secretariat	54,40,44	41,06,43	827,41,36	1139,75,52	1475,72,13
Head Office, Directorate of Technical Education	1266,37,90	1378,87,08	1747,72,08	1721,97,80	1879,27,91
Office of the Director (Vocational), Directorate of Technical Education	3,32,11	2,78,85	3,65,22	3,93,00	4,23,03
Offices of the Regional Director, Directorate of Technical Education	1,13,40	1,31,60	4,47,50	4,87,07	5,15,86
Engineering Colleges, Directorate of Technical Education	11,68,54	8,27,57	15,17,90	16,26,94	17,44,92
Technical Teachers Training Colleges, Directorate of Technical Education	8,29,03	8,50,11	9,14,25	9,64,69	10,08,26
Polytechnic Institutes	342,86,12	321,95,60	346,57,72	384,60,65	412,86,04
Technical School and Colleges, Directorate of Technical Education	192,17,86	193,71,80	224,86,99	238,30,32	251,82,41
Head Office, Bangladesh Madrasa Education Directorate	3796,80,83	3777,39,06	4248,80,74	4651,94,80	4932,52,66
Bangladesh Madrasa Teacher Training Institute	14,19,00	12,88,06	13,53,30	14,20,97	14,92,02
Government Madrasas, Bangladesh Madrasa Education Directorate	11,11,77	10,90,27	12,22,94	13,45,24	14,79,76
Grand Total :	5702,37,00	5757,66,43	7453,60,00	8198,97,00	9018,85,00

4.2.2 Expenditure by Economic Group

(Taka in Thousands)

Economic Group	Description	Budget	Revised	Budget 2019-20	Projection	
		2018-19			2020-21	2021-22
	Recurrent Expenditure					
3111	Wages and salaries in cash	458,83,52	406,66,85	418,39,19	438,88,41	461,08,67
3211	Administrative expenses	39,36,07	52,18,77	41,21,54	37,74,52	40,87,00
3221	Fees, charges and commissions	1,61,05	6,34,73	1,14,79	1,16,43	1,26,69
3231	Training	217,59,68	181,34,76	128,49,39	82,04,36	164,28,46
3241	Domestic travel and transfer	0	1,81,62	0	0	0
3242	Foreign travel and transfer	0	1,00	0	0	0
3243	Petrol, oil and lubricants	2,62,04	2,86,67	3,21,31	3,44,39	3,86,40
3244	Travel and Transfer	7,01,57	6,11,42	14,05,34	8,53,53	9,42,84
3253	Public order and safety supplies	1,00	1,90,65	0	0	0
3255	Printing and stationery	14,91,58	17,41,64	15,60,17	16,26,66	17,75,84
3256	General supplies and materials	22,41,82	22,67,93	35,76,90	27,08,59	29,78,39
3257	Professional services, honorariums and special expenses	23,59,79	37,14,48	27,21,94	22,63,17	23,08,50
3258	Repairs and maintenance	105,19,80	79,72,82	115,63,92	125,10,27	127,05,96
3631	Current grants	4226,19,34	4233,92,42	4807,02,86	5039,15,61	5278,06,99
3632	Capital grants	80,00	20,00	1,55,00	1,72,00	1,77,00
3821	Current transfers not elsewhere classified	206,32,45	267,78,99	117,21,48	91,26,87	95,73,53
3911	Reserve	5,75,00	4,20,88	12,83,03	310,36,00	676,83,00
	Total : - Recurrent Expenditure	5332,24,71	5322,35,63	5739,36,86	6205,40,81	6930,89,27
	Capital Expenditure					
4111	Buildings and structures	257,00,50	324,58,91	1194,12,02	1412,19,07	1439,79,60
4112	Machinery and equipment	87,73,79	80,78,64	158,10,12	184,35,54	389,85,73
4113	Other fixed assets	2,56,50	2,66,50	0	0	0
4141	Land	12,04,30	27,21,75	290,32,00	321,69,52	215,65,28
4911	Reserve	8,99,00	0	71,34,00	73,35,62	40,58,85
	Total : - Capital Expenditure	368,34,09	435,25,80	1713,88,14	1991,59,75	2085,89,46
	Assets					
7215	Loans	1,78,20	5,00	35,00	1,96,44	2,06,27
	Total : - Assets	1,78,20	5,00	35,00	1,96,44	2,06,27
	Grand Total :	5702,37,00	5757,66,43	7453,60,00	8198,97,00	9018,85,00

5.0 Key Performance Indicators (KPIs)

Indicator	Related Strategic Objectives	Unit	Revised Target	Actual	Target	Revised Target	Medium Term Targets		
			2017-18		2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8	9	10
Technical Education									
1. Student enrolment at secondary level (9 th -10 th grade)	1-3	%	4.07	4.11	4.16	4.23	4.35	4.47	4.59
2. Drop out at secondary level (9 th -10 th grade)	1-3	%	38.82	38.84	37.83	38-61	38.00	37.25	36.50
3. Ratio of male-female students at secondary level (9 th -10 th grade)	1-3	ratio	72:28	72:28	70:30	68:32	66:34	64:36	62:38
4. Enrolment of male-female students(11 th -12 th grade)	1-3	%	5.57	5.58	5.75	5.77	5.96	6.15	6.34
5. Drop out at higher secondary level (11 th -12 th grade)	1-3	%	29.35	29.53	28.80	28.76	27.99	27.22	26.45

Indicator	Related Strategic Objectives	Unit	Revised Target	Actual	Target	Revised Target	Medium Term Targets		
			2017-18		2018-19		2019-20	2020-21	2021-22
			4	5	6	7	8	9	10
6. Ratio of male-female students at higher secondary level (11 th -12 th grade)*	1-3	Ratio	71.5:28.5	71:29	70.5:29.5	70:30	69:31	68:32	67:33
7. Enrolment of male-female students in Diploma engineering of Polytechnic institutes	1,3,4	%	2.36	2.35	2.57	2.55	2.75	2.95	3.15
8. Ratio of male-female students at Technical Education	1-4	Ratio	75:25	75:25	70:30	69:31	68:32	67:33	65:35
Madrasah									
9. Student Enrolment at Dakhil level (6 th -10 th grade)	1,2,3	%	12.70	12.32	13.12	12.38	12.44	12.50	12.56
10. Drop out at Dakhil level (6 th -10 th grade)	1,2,3	%	44.55	45.45	43.03	44.84	44.23	43.62	43.01
11. Ratio of male-female students at Dakhil level (6 th -10 th grade)	1,2,3	Ratio	43:57	45:55	47:53	48:52	49:51	50:50	50:50
12. Student Enrolment at Alim level (11 th -12 th grade)	1,3	%	3.62	3.59	3.71	3.63	3.67	3.75	3.81
13. Drop out at Alim level (11 th -12 th grade)	1,3	%	28.68	28.90	27.45	27.89	26.88	26.02	25.00
14. Ratio of male-female students at Alim Level (11 th -12 th grade)	1,3	Ratio	51:49	51:548.5	51:49	50:50	50:50	50:50	50:50
15. Student Enrolment at Fazil level (13 th -15 th grade)	1,3,4	%	1.60	1.45	1.93	1.63	1.81	2.02	2.25
16. Enrolment male-female ratio in Madrasah Education	1,2,3,4	Ratio	48:52	48:52	49:51	49.5:50.5	50:50	50:50	50:50

* Enrolment rate of male-female students is calculated as percentage of total number of students of that age group of total population.

6.0 Recent Achievements, Activities, Output Indicators and Targets and Expenditure Estimates of the Departments/Agencies

6.1 Secretariat

6.2.1 Recent Achievements: On 30th November, 2016 the department was created as a separate division. Recruitment of manpower, procurement of furniture, computer equipment ,vehicle etc. were done for initiation of the activities as a newly created division. Necessary training including in-house training of officers and employees has been conducted. Digital Attendance of the staff of the division was introduced. TVET plan was approved in this period.

6.1.2 Activities, Output Indicators and Targets: Not Applicable.

6.1.3 Medium Term Expenditure Estimates by Institutional Unit, Scheme and Projects

(Taka in Thousands)

Name of the Institutional Unit/Scheme/Project	Related Activity	Actual 2017-18	Budget	Revised	Medium Term Expenditure Estimates		
			2018-19		2019-20	2020-21	2021-22
			4	5	6	7	8
Operating Activities							
General Activity							
1600101 - Secretariat		2,96,31	27,80,08	23,10,07	346,59,08	649,97,98	1017,07,17
Total : General Activity		2,96,31	27,80,08	23,10,07	346,59,08	649,97,98	1017,07,17
Special Activity							
120000801 - Loans to Government Employees		0	0	0	35,00	1,96,44	2,06,27
120001508 - Grants to Newly Recognised Non Government Institutions		0	0	0	282,00,00	282,00,00	282,00,00
120001514 - Special Grants to Students, Teachers and Educational institutions	1,3	0	2,00,00	2,00,00	4,00,00	4,00,00	4,00,00

Name of the Institutional Unit/Scheme/ Project	Related Activity	Actual 2017-18	Budget	Revised	Medium Term Expenditure Estimates		
			2018-19	2019-20	2020-21	2021-22	
1	2	3	4	5	6	7	8
120001601 - Repair and Rehabilitation of Govt Educational Institute		0	0	0	2,45,00	2,45,00	2,45,00
120001602 - Repair and rehabilitation of Non-Govt. Educational Institute		0	0	0	50,00,00	50,00,00	50,00,00
120001603 - Repair and Rehabilitation of Technical Educational Institution		0	0	0	50,00,00	50,00,00	50,00,00
Total : Special Activity		0	2,00,00	2,00,00	388,80,00	390,41,44	390,51,27
Support Activity							
135002200 - Girls Guide Association		0	75,00	85,00	1,50,00	2,76,00	3,44,00
135002400 - Bangladesh Scouts		0	1,25,00	1,50,00	2,00,00	5,50,00	6,00,00
Total : Support Activity		0	2,00,00	2,35,00	3,50,00	8,26,00	9,44,00
Total : Operating Activities		2,96,31	31,80,08	27,45,07	738,89,08	1048,65,42	1417,02,44
Development Activities							
Annual Development Program							
221000160 - Reserve for unapproved project Technical & Madrasah Education Division, Ministry of Education	2-4	0	8,99,00	0	71,34,00	73,35,62	40,58,85
Total : Annual Development Program		0	8,99,00	0	71,34,00	73,35,62	40,58,85
Total : Development Activities		0	8,99,00	0	71,34,00	73,35,62	40,58,85
Total :		2,96,31	40,79,08	27,45,07	810,23,08	1122,01,04	1457,61,29

6.2 Department of Technical Education (DTE)

6.2.1 Recent Achievements: Enrollment in technical education has been increased from 1% to 15.09. Under the 'Skills and Training Enhancement Project', 2000 trainees and 581 teachers were provided pedagogy / subject-based trainings in Singapore and China respectively and 30021 trainees were provided apprenticeship training. In the diploma phase, 5,82,772 people have been given Tk 800 and 4,37,598 have been given semester-wise stipend of Tk 1650. 27400 people were trained through 'Bangladesh Skills for Employment and Productivity' Project. Under the 'Skills and Employment Program in Bangladesh' project 33924 people have been given KPTP-based and 15285 were provided industrial-based training. In China Scholarship, 428 students have been sent to China for diploma / equivalent education.

6.2.2 Activities, Output Indicators and Targets

Activities	Output Indicator	Related Strategic Objectives	Unit	Revised Target	Actual	Target	Revised Target	Medium Term Targets		
				2017-18	2018-19	2019-20	2020-21	2021-22		
1	2	3	4	5	6	7	8	9	10	11
1. Providing training to teachers, members of the School Management Committee (SMC) and others.	Trained Teachers	1	person	8500	8700	9000	9000	9500	10000	10000
2. Conducting all public examinations and publishing the results in time	Time spent for SSC examination and result publication	1	Day	60	60	60	60	60	60	60
	Time spent for HSC examination and result publication	1	Day	60	60	60	60	60	60	60
3. Constructing new and extending the existing buildings of educational institutions (Technical & Madrasah) and supplying furniture	Constructed Classrooms of institute	1	Number	15	15	20	20	22	25	26
4. Providing stipends and scholarships to eligible female-students at different levels of Technical & Madrasah Education	Students received stipend	2	Person (Thousand)	206	240.72	206.5	206.5	207	207.5	208
5. Imparting technical and vocational education and training	Trained students	3	Person (Thousand)	71	85.25	77	77	80	83	85

Activities	Output Indicator	Related Strategic Objectives	Unit	Revised Target	Actual	Target	Revised Target	Medium Term Targets		
				2017-18	2018-19	2019-20	2020-21	2021-22		
1	2	3	4	5	6	7	8	9	10	11
6. Rendering professional training and Competency- Based Training (CBT) to teachers.	Trained teacher	3	Person	250	260	300	300	350	400	400
7. Introducing emerging trade and technology courses by modernizing curriculum	Emerging trade & technology course introduced	3	Number (cumulative)	15	15	10	10	11	12	12
8. Conducting research and evaluation of educational Scheme, facilitating training and discussion through international and national seminars/workshops	Conducted Research	4	Number	4	10	5	5	6	7	8
	Conducted Workshops	4	Number	12	22	14	14	15	16	17

6.2.3 Medium Term Expenditure Estimates by Institutional Unit, Scheme and Projects

(Taka in Thousands)

Name of the Institutional Unit/Scheme/ Project	Related Activity	Actual 2017-18	Budget	Revised	Medium Term Expenditure Estimates		
			2018-19	2019-20	2020-21	2021-22	
1	2	3	4	5	6	7	8
Operating Activities							
General Activity							
1600201 - Head Office, Directorate of Technical Education	1-8	7,29,35	12,37,90	10,24,14	11,04,21	11,93,66	12,91,21
1600202 - Office of the Director (Vocational), Directorate of Technical Education	1-8	0	3,32,11	2,78,85	3,65,22	3,93,00	4,23,03
1600203 - Offices of the Regional Director, Directorate of Technical Education		0	1,13,40	1,31,60	4,47,50	4,87,07	5,15,86
1600204 - Engineering Colleges, Directorate of Technical Education	6-7	2,16,77	11,68,54	8,27,57	15,17,90	16,26,94	17,44,92
1600205 - Technical Teachers Training Colleges, Directorate of Technical Education	1-7	6,77,46	8,29,03	8,50,11	9,14,25	9,64,69	10,08,26
1600206 - Polytechnic Institutes	2,4,5,6,7	264,30,83	342,86,12	321,95,60	346,57,72	384,60,65	412,86,04
1600207 - Technical School and Colleges, Directorate of Technical Education	2,4-7	154,52,49	192,17,86	193,71,80	224,86,99	238,30,32	251,82,41
Total : General Activity		435,06,90	571,84,96	546,79,67	614,93,79	669,56,33	714,51,73
Special Activity							
120001506 - Grants to Non-government Technical Colleges (Business Management)	1,3	222,90,53	246,83,00	256,13,12	261,63,98	287,80,38	316,58,41
120001507 - Grants to Non Government Secondary Schools (Vocational)	1,3	42,81,14	227,64,00	222,07,10	241,29,84	265,42,82	291,97,10
120001511 - Grants to Non-Government Madrasas (Vocational and Business Management)	1,3	1,00,05	5,84,00	6,43,72	6,19,05	6,80,94	7,49,04
Total : Special Activity		266,71,72	480,31,00	484,63,94	509,12,87	560,04,14	616,04,55
Total : Operating Activities		701,78,62	1052,15,96	1031,43,61	1124,06,66	1229,60,47	1330,56,28
Development Activities							
Annual Development Program							
223003300 - Skill and Employment Programme in Bangladesh (SEP-B) (01/07/2015 - 30/06/2020)	1,5,6	0	48,42,00	39,24,00	57,54,00	0	0
223003400 - Bangladesh Skills for Employment and Productivity (01/01/14-31/12/18)	1,5,6	0	15,00,00	15,00,00	0	0	0
223035600 - Skills 21: Empowering Citizens for Inclusive and Sustainable Growth	6,7,8	0	0	25,00,00	40,00,00	0	0
224104800 - Establishment of Technical School of 100 Upazila. (01/01/2014 - 30/06/2018)	1,3	26,91,45	245,26,00	295,28,00	350,00,00	400,00,00	405,00,00
224104900 - Skills and Training Enhancement Project (STEP) (01/07/10-30/06/16) (01/07/10 - 30/06/2019)	1,3	179,70,66	430,00,00	456,00,00	1,00	0	0
224105000 - Establishment of Engineering College at Barishal (01/07/10 - 30/06/2019)	1,3	3,37,76	1,00	12,41,00	0	0	0
224133700 - Establishment of Four Mohilla Polytechnic Institute in Sylhet, Barishal, Rangpur and Mymensingh (01/01/2018-30/06/2020) Approved	3	0	10,00,00	10,00,00	100,00,00	120,00,00	105,32,15

Name of the Institutional Unit/Scheme/Project	Related Activity	Actual 2017-18	Budget	Revised	Medium Term Expenditure Estimates		
			2018-19	2019-20	2020-21	2021-22	
1	2	3	4	5	6	7	8
224133800 - Development of Infrastructure for Creating Facilities in Existing Polytechnic Institutes for More Additional Students Admission (01/07/2017-30/06/2020) Approved	3	0	20,00,00	20,00,00	350,00,00	60,00,00	75,00,00
224231800 - Strengthening Land Survey Education in Bangladesh		0	5,00,00	5,00,00	50,00,00	100,00,00	75,00,00
224261500 - Establishment of Engineering College in Chittagong, Khulna, Rajshahi and Rangpur Division	1	0	0	3,72,00	110,00,00	170,00,00	205,00,00
224273300 - Establishment of Polytechnic Institute in 23 Districts	3	0	0	2,34,00	170,00,00	300,00,00	385,00,00
Total : Annual Development Program		209,99,87	773,69,00	883,99,00	1227,55,00	1150,00,00	1250,32,15
Total : Development Activities		209,99,87	773,69,00	883,99,00	1227,55,00	1150,00,00	1250,32,15
Total :		911,78,49	1825,84,96	1915,42,61	2351,61,66	2379,60,47	2580,88,43

6.3 Directorate of Madrasah Education

6.3.1 Recent Achievements: Madrasa Education Directorate has been established for the purpose of updating and modernization of madrasa education. The implementation of 'Development of Selected madrasahs (1800 madrasah)', 'initiation of multimedia in 653 approved madrasahs' has started. The Bangabandhu corner has been established in all the madrasa libraries. 35 model madrasahs have been established. Labs have been set up in 31 madrasahs. Honors courses have been started in 52 Model Madrasahs under Islamic University and Islamic Arabic University.

6.3.2 Activities, Output Indicators and Targets

Activities	Output Indicator	Related Strategic Objectives	Unit	Revised Target	Actual	Target	Revised Target	Medium Term Targets		
				2017-18	2018-19	2019-20	2020-21	2021-22		
1	2	3	4	5	6	7	8	9	10	11
1. Provide training to teachers, members of School Management Committee (SMC) and others.	Trained Teachers and trained Students in Arabic proficiency	1	Person	1000	1000	1500	1500	1800	2000	2000
2. Conducting all public examinations and publishing the results in time	Dakhil Examination and publication Result	1	Day	60	60	60	60	60	60	60
	Alim Examination and publication Result			60	60	60	60	60	60	60
3. Establishing new educational institutions in underserved areas.	Construction classrooms and Expansion	1	Number	25	0	30	5	32	33	33
4. Constructing new and extending the existing buildings of educational institutions (School, College & Madrasah) and supplying furniture	Construction classrooms in Madrasah	1	Number	25	0	30	5	32	33	33
	Supply of Furniture in Madrasah			800	800	2800	800	800	900	1000
5. Providing stipends and scholarships to eligible female-male students at different levels of Technical & Madrasah Education	Stipend benefited Students	2	Person	2000	0	3000	0	400	500	600
	Scholarship Benefited Students			33975	33975	33975	33975	34000	34500	35000
6. Conducting research and evaluating educational Scheme; facilitating training and discussion through international and national seminars/ workshops.	Research Conduct	4	Number	2	0	2	1	2	2	2
	Workshop	4	Number	3	3	3	3	4	4	4

6.3.3 Medium Term Expenditure Estimates by Institutional Unit, Scheme and Projects

(Taka in Thousands)

Name of the Institutional Unit/Scheme/ Project	Related Activity	Actual 2017-18	Budget	Revised	Medium Term Expenditure Estimates		
			2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8
Operating Activities							
General Activity							
1600301 - Head Office, Bangladesh Madrasa Education Directorate		4,24,60	40,15,85	6,86,99	41,78,03	42,00,43	42,28,06
1600302 - Bangladesh Madrasa Teacher Training Institute	1	2,17,08	14,19,00	12,88,06	13,53,30	14,20,97	14,92,02
1600303 - Government Madrasas, Bangladesh Madrasa Education Directorate	1	9,70,87	11,11,77	10,90,27	12,22,94	13,45,24	14,79,76
Total : General Activity		16,12,55	65,46,62	30,65,32	67,54,27	69,66,64	71,99,84
Special Activity							
120001410 - Junior Dakhil Certificate Examination	1	0	15,03,91	18,50,00	19,00,00	20,00,00	21,00,00
120001509 - Grants to Ebtedayee Madrasas	1	16,83,21	31,73,94	27,13,94	28,13,94	28,63,94	29,13,94
120001510 - Grants to Non-Government Madrasahs	1	3336,31,74	3685,68,13	3685,68,13	3945,62,77	4120,19,05	4300,10,66
120005500 - Research Activities		0	50,00	0	0	0	0
Total : Special Activity		3353,14,95	3732,95,98	3731,32,07	3992,76,71	4168,82,99	4350,24,60
Total : Operating Activities		3369,27,50	3798,42,60	3761,97,39	4060,30,98	4238,49,63	4422,24,44
Development Activities							
Annual Development Program							
224121000 - Establishment of Modrasah Education Management and Information system in the Directorate of Modrasah Education		0	8,13,00	6,77,00	1,00	0	0
224133600 - Establishment of Multimedia Classroom for Modrasah in Bangladesh		0	15,56,00	13,77,00	14,25,00	0	0
224264100 - Development of Selected Madrasahs	3,4	0	0	18,66,00	200,00,00	441,11,38	540,00,00
Total : Annual Development Program		0	23,69,00	39,20,00	214,26,00	441,11,38	540,00,00
Total : Development Activities		0	23,69,00	39,20,00	214,26,00	441,11,38	540,00,00
Total :		3369,27,50	3822,11,60	3801,17,39	4274,56,98	4679,61,01	4962,24,44

6.4 National Academy for Computer Training and Research

6.4.1 Recent Achievements: In the last 3 years, computer training was provided to 5468 person . At the same time 241 persons were provided with CEOs training, 312 persons with web page design, 95 persons with database management systems , 300 persons with graphics designs, 501 persons with freelancing and SEO courses, 628 persons with special Basic courses, 353 persons with C programming, 1804 persons with Advanced Certificate Course on computer courses. In the fiscal year (2017-18), 855 teachers of government, non-government secondary and higher secondary level of 8 divisions were given training in ICT.

6.4.2 Activities, Output Indicators and Targets

Activities	Output Indicator	Related Strategic Objectives	Unit	Revised Target	Actual	Target	Revised Target	Medium Term Targets		
				2017-18		2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8	9	10	11
1. Providing training to teachers, members of the School Management Committee (SMC) and others.	Trained Teachers at School Level (ICT)	1	Person	610	654	680	780	785	795	800
	Trained Teachers at College Level (ICT)		Person	230	201	320	180	195	200	200
	Trained Young People (ACC)		Person	673	673	700	600	735	750	760
	Trained Young People(Freelancing)		Person	640	760	672	840	850	860	870
	Special Basic Course		Person	360	240	400	280	300	310	320

6.4.3 Medium Term Expenditure Estimates by Institutional Unit, Scheme and Projects

(Taka in Thousands)

Name of the Institutional Unit/Scheme/ Project	Related Activity	Actual 2017-18	Budget	Revised	Medium Term Expenditure Estimates		
			2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8
Operating Activities							
Support Activity							
131004700 - National Computer Training and Research Academy	1	2,96,88	13,61,36	13,61,36	17,18,28	17,74,48	18,10,84
Total : Support Activity		2,96,88	13,61,36	13,61,36	17,18,28	17,74,48	18,10,84
Total : Operating Activities		2,96,88	13,61,36	13,61,36	17,18,28	17,74,48	18,10,84
Total :		2,96,88	13,61,36	13,61,36	17,18,28	17,74,48	18,10,84

6.5 Bangladesh Madrasah Teachers' Training Institute (BMTTI)

6.5.1 Recent achievement: 111 trainees were provided with B.M.ED Course. 5 computer labs with 81 laptops and 66 desktops, 8 classrooms with smart boards and smart TVs and multimedia enrichment, 1 science lab were established. A public awareness rally, human chain and discussion meeting against militancy and terrorism were organized. Special motivation programs have been taken to establish a corruption-free society.

6.5.2 Activities, Result indicators and Targets

Activities	Output Indicator	Related Strategic Objectives	Unit	Revised Target	Actual	Target	Revised Target	Medium Term Targets		
				2017-18		2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8	9	10	11
1. Providing training to teachers, members of the School Management Committee (SMC) and others.	Trained Teacher (Chief of Ebtedayee)	1	Person	272	448	200	290	210	220	230
	Trained Teachers (Dakhil Level)		Person	861	1428	1400	1400	1420	1450	1480
	Trained Teachers (Superintendent /Asst. Superintendent at Dakhil Level)		Person	371	555	350	300	360	380	400
	Trained Teachers (Lecturer/ Asst. Professor of Senior Madrasah)		Person	106	245	270	250	280	300	320
	Trained Teachers (Principal / Vice-Principal of Senior Madrasah)		Person	24	86	180	160	190	200	220

6.5.3 Medium Term Expenditure Estimates by Institutional Unit, Scheme and Projects: Not Applicable

Annex 2: Ongoing apprenticeship initiatives in Bangladesh

Ongoing apprenticeship initiatives				
Name of the program	No. of trainees	Duration of the courses	Agency responsible	Details
Formal apprenticeships				
Traditional type of apprentices (several enterprises) as per the labour law	359	3 years and 1 year	BMET	The total of number of trainees shown here is for the period 2010-14 from BMET records. The figure changes over time. This type of program is being delivered as per the country's formal apprenticeship law. The process is managed by BMET which registers the apprentices, monitors the progress with the employers, and issues certificates upon successful completion of the apprenticeship period. Although no record of post-training employment is kept by BMET, the employability of the apprentices is very high since the credibility of training is high.
Leather sector (25 enterprises) Supported by TVET reform project and SDC	11 944	1 year	ISC Leather, COEL	This is a program strongly backed by the employers in the leather sector through the ISC Leather organization. The number of trainees shown here is the total figure from 2011 to 2015 for a single occupation, namely machine operator. This is widely considered as a successful initiative and supported by several partners and external donors. Employability of the trainees is very high – more than 99%. Training is conducted through a combination of 3-month classroom training at COEL training facility and 9 months workplace training.
Furniture sector Supported by B-SEP project	250	6 months	ISC Furniture Sector	This program has commenced recently (November 2015) in two factories with the full backing and participation of the Furniture ISC organization. Though training is still ongoing, the likelihood of employment for most of the trainees upon completion of the training is very

				high. This program is a part of B-SEP program that trains 12 400 apprentices (6 200 formal and 6 200 informal).
Informal apprenticeship				
STAR (13 trades) Implemented by BRAC (supported by ILO, UNICEF and BNFE)	6 000	6 months	BRAC	The training figure is for three years (2012-15). It has been a successful program with good results. The employment rate for the graduates is almost 99%. More than 50% of the trainees are disadvantaged women (mainly school dropouts) and 8% are PWDs. 3000 MCPs have also been trained which created a large pool for further training.
Construction sector ILO/Japan Way Out of Informality Project	1 602	6 months	ILO and MOLE	This program is supported by an ongoing ILO program which plans to eventually train approximately 3 500 persons by 2016. The program is cost-effective and supported by the government and construction sector trade union. Once the program is completed, lessons learned and sustainability issues will be addressed.

Source: BMET (2010); ILO (2014).

DP Matrix

Projects	Core elements 1: Quality								Core elements 2: Equitable access and participation							Core elements 3: Management, Governance and Financing						
	Strengthen Curriculum	Introduce Green Curriculum	Teacher recruitment and deployment	Teacher Education	Continuous professional development of teachers	ICT in TVET education	Entrepreneurship competences training	Assessment of acquired competency	Need based infrastructure	Women	Persons with disabilities	Ethnic and other minorities	Migrants	Skills in the informal sector	Communication and social mobilization	Data system and decision making	Institutional strengthening	Monitoring	Strengthening budgeting	Financial management	DPs coordination	Sector Policy
STEP/WB & GAC (2010-19), USD225M	X		X	X	X				X					X	X	X	X			X	X	
SEIP/ADB & SDC (2014-21), USD1.07B, USD 270M	X					X		X	X	X	X	X					X	X		X	X	
SUDOKKHO/ DFID & SDC (2015-20, 2015-21) USD22M GBP22.43 M	X							X		X	X			X	X		X	X	X	X		
B-SEP/GAC (2014-18), CAD19.5M	X	X		X				X	X	X	X			X	X		X			X	X	X
B-SkillFUL/ SDC (2015-19), USD 4.5M	X									X	X	X		X	X		X	X		X		X
Skills 21-EU (2017-20), EUR23,M	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
KOICA (2015-19 & 2019-2023), USD8.5& USD8.5	X			X		X		X	X	X	X	X				X	X	X	X	X	X	
JICA (2019-2022) 500 Mil Yen IOM (2017-18), USD 200,000				X			X									X						
								X				X				X	X					

Projects	Core elements 1: Quality								Core elements 2: Equitable access and participation							Core elements 3: Management, Governance and Financing						
	Strengthen Curriculum	Introduce Green Curriculum	Teacher recruitment and deployment	Teacher Education	Continuous professional development of teachers	ICT in TVET education	Entrepreneurship competences training	Assessment of acquired competency	Need based infrastructure	Women	Persons with disabilities	Ethnic and other minorities	Migrants	Skills in the informal sector	Communication and social mobilization	Data system and decision making	Institutional strengthening	Monitoring	Strengthening budgeting	Financial management	DPs coordination	Sector Policy
IOM (2015-18), USD 200,000			X										X		X							X
HCDP 21					X				X	X	X				X	X	X	X	X	X	X	X
New EU Youth Employability Programme (EU- tbc)							X															
ASSET/WB (2021-25), USD 500M [Proposed]	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
UNFPA (2017-2020), US\$ 300,000	X							X	X	X	X					X	X				X	
UNICEF 2017-2020	X			X				X	X	X	X			X	X	X	X				X	X
British Council	X		X	X	X				X	X	X			X								
Skills for Economic Growth and Prosperity-partnering with Under Privileged Children's Education Program, DFAT (2019-2022), AUD12m								X	X	X	X			X	X							X
Skills Development Program (SDP) of BRAC supported under the Strategic Partnership Arrangement (SPA) between DFAT, DFID and BRAC (2016-2020)									X	X	X	X		X	X							X
UNESCO 2017-2019	X			X		X			X	X				X	X	X	X				X	X

Focus	Main Outputs / Result Areas	Quality and Certification	Matrix		Sector	Types of Training	Capacity Development	Policy
			Public	Private				
33 trades using BMET, BTEB and private sector conventional curriculum	<ul style="list-style-type: none"> Improve quality and relevance of training Innovations in TVET Institutional capacity development for BMET, DTE and BTEB 	BTEB and BMET conventional certification; RPL certification is through the BTEB CBT Cell	X	X		• Short courses certificate training		
6 priority economic sectors in Tranche One; 3 more sectors in Tranche Two	<ul style="list-style-type: none"> Market responsive inclusive skills training Quality assurance system strengthened Institutions strengthened 	Project carried out quality and certification with industry associations where possible; BTEB has not been involved.	X	X	1. Garments and textile, 2. Leather and footwear, 3. Construction, 4. Light engineering, 5. IT and nursing and health technology 6. Ship building, 7. Agro-processing, 8. Motor driving and 9. Hospitality/tourism	• Short courses certificate training	SDC: British Council will complete 50 competency standards (CSs), 18 competency-based learning materials (CBLMs) and 50 assessment tools by 2019. ADB: 87 competency standards developed, among which 50 were developed by the British Council and 40 have so far been approved by BTEB.	
Private training providers and industries	<ul style="list-style-type: none"> Affordable quality training that enhances employability Supporting private sector industries to develop and operate industry-led training facilities 	Quality and certification are managed by the project		X	1. RMG 2. Construction	• Short courses certificate training (1-2 months, certificate by Sudokkho)	12 curriculum developed with BTEB (additional 2 in progress)	X
Assist GOB in implementing TVET reforms to secure a better trained, qualified and competent workforce with increased economic opportunities	<ol style="list-style-type: none"> Skills funding, planning and support services Competency based training and assessment, quality and relevance Industry skills development Improved access to skills training 	NTVQF	X	X	1. Agro-food 2. Tourism & Hospitality 3. Pharmaceuticals 4. Ceramics 5. Furniture	• Short courses certificate training	Curriculum developed liaison with BTEB	X
B-SkillFUL aims to develop skills of 40,000 poor and disadvantaged men and women in demand-driven occupations and place them in gainful employment. The focus is on five districts in Bangladesh.	Developing capacity of private training service providers who will train 40,000 poor and disadvantaged men and women in 18 occupations, mostly in the informal sector and create awareness amongst small, micro and cottage industries on making work places safer with decent work practices.	Managed by project		X	1. RMG 2. Construction 3. Light engineering 4. Furniture 5. Electrical and electronics 6. Automobile repairs 7. Other informal sectors	3 months courses which include two months' in-classroom training and one month workplace based training	Capacity development of 23 training service providers	X
TVET	<ol style="list-style-type: none"> National Qualification Framework (NQF), Center for Excellences and IMDC Seven TVET model institutions and industry linkage TVET SWAp and improved governance Mechanisms leading to development of SWAP for the skills sector 	NTVQF	X	X	1. Electrical installation and maintenance work 2. IT-computer application/graphic design 3. Welding and fabrication 4. Plumbing and pipe fitting 5. Refrigerator and air conditioning 6. Auto mobile/driving 7. Carpentry/wood working machine operator 8. Swing machine operator 9. Care occupation	Certificate training CBT Training of Trainers, managers, Master Trainer, RPL	Capacity building of Youth, Public TVET institutes, CSEs, private sector (IMAB), Teachers/managers/assessors. Total 17500 in 9 TVET institutes, 10500 youth and 3500 enterprenureship, 3500 RPL, 1500 Trainers and assessors, 280 master trainer, 1200 online material development.	X
TVET	<ol style="list-style-type: none"> Enhancing training programme of TTC Rajshahi Better Employment with Competency-based Skills Training (BEST) 	NTVQF	X		1. TVET education, 2. Transportation, 3. Public Health & 4. ICT Governance	• Short courses certificate training	X	
Improvement of Technical Education for Industrial Human Resource Development including TVET	<ol style="list-style-type: none"> Development of educational materials for practical lessons Promote linkage between technical education and industry in Bangladesh. 	X		Technical Education	teacher training	X		
Enhance capacity of MoEWOE and BMET to collect and disseminate information on employment opportunities in targeted destination country from overseas employers; implement a pilot model of Recognition of Prior Learning (RPL) for 100 Bangladeshi migrant workers employed construction sector of a selected destination country.	<ol style="list-style-type: none"> Efficient and ethical recruitment practices are promoted through increased availability of information and data on recruitment and job opportunities. Bangladeshi Migrant workers gain skilled employment based on newly completed qualifications 	Quality assurance and certification of 100 migrant workers is carried through NTVQF Level 1 and 2 in Construction Sector		X	1. Construction			

Matrix								
Focus	Main Outputs / Result Areas	Quality and Certification	Public	Private	Sector	Types of Training	Capacity Development	Policy
migration specific components from the NSDP; engage migrants to actively shape the training process of the system; build closer relations with selected overseas employers	1. The Ministry of Expatriates Welfare and Overseas Employment is able to coordinate the implementation of Chapter 18 of the National Skills Development Policy 2011 through its line agencies and training centres 2. Labour migrants increasingly take advantage of tailored services of the National Skills Development System 3. National Skills Development System is more responsive to the demand of overseas labour markets	NTVQF	X			• Short courses certificate training (6 NTVQF level-4 return migrant worker, RPL SKILLS CERTIFIED ASSESSOR UNDER BTEB)		
Primary education (including pre-primary education) and Technical Vocational Education and Training (TVET)	1. Improved quality, relevance and efficiency of the primary education and TVET subsectors; 2. Improved and equitable access to primary education and TVET services, and 3. Improved management and governance of the subsectors.	Quality assurance through accreditation of training providers, curriculum development, examinations, and certification.	X		pre-primary, primary, secondary and tertiary, TVET, non-formal education	curriculum development, teacher training	X	X
TBC								
Employment, Polytechnics, Short-courses, Public-private partnerships, underserved population, informal sector, industry linkage	1. Improving the employability of Graduates 2. Train workers through public and private partnership 3. Increase the number of unemployed youths trained 4. Increase satisfaction of employers regarding the trainees	BTEB and BMET conventional certification; RPL certification is through the BTEB CBT Cell NSDA certification mechanism	Several ministries	Employers, associations, NGOs	multisectoral project including education, skills, ICT, migration, health, youth, manufacturing and services and priority areas of SDGs	• Short courses certificate training • Diploma courses • Industry led training	Areas of capacity development to be identified	To be worked out
Setting standards for life skills training in TVET	1) To develop life skills standards and manuals for TVET programmes. 2) To increase the capacity of training institutes to integrate life skills in TVET.	Competency standards and competency based learning materials (curriculum) for life skills will be developed. These standards will be used by different TVET programmes to certify the completion of the TVET course.			Soft/life Skills for TVET	Curriculum development, Training of Trainers	X	
Foundational and Transferable (soft) skills, Employability skills, Alternative Learning Pathways, Promoting platform for youth skills and employment	Skills embed in education curriculum, pedagogy, textbooks and materials, assessment and teacher's education. Facilitating skills acquisition using formal and non-formal approach both for in-school and out of school adolescents and youth. Demonstrating and scale up Alternative Learning program linked with employment. Public-Private-DP-CSO	Skill (transferable) assessment toolkit, Continuous, skill and competency based assessment, Certification for Alternative Learning Program	X		Secondary Education and Skill		X	X
Primary Education (teacher's capacity development), Higher Education (professional development of faculty member) Non-formal education (focusing on women and girls)	1. English language and core skills development of teachers of the primary and secondary schools, 2. Professional development of the faculty members of the higher education institutes) 3. Adolescent girls from marginalised communities are able to make more informed and independent life choices, as is their right, in order to contribute more fully to the family, the economy and society.	Managed by project	X	X	1. Primary & Secondary 2. Higher Education 3. Non formal 4. Skills (through our involvement in Shudokkho project and SD3 component of SEIP project)	Teacher training TOT Short courses	X	X
Technical Vocational Education and Training (TVET) for most marginalised and poor children and youth from the urban and semi-urban areas of Bangladesh. UCEP provides second chance education to the drop-out students a pathway from primary education to TVET system for the better future.	1. Technical and Vocational training provided to youth through the pathway from primary education to TVET for the drop-out students from the most marginalised and poor community ensuring the inclusive access; 2. Job-placement and apprenticeship services provided to vocational skill training graduates; 3. Institutional strengthening of the organisation by developing internal	1. NTVQF (also some of the courses are waiting for the approval on RPL from govt). 2. UCEP is a registered training provider under GoB and issues GoB certificates.		X	TVET, non-formal education	1. Skills training provided to youth for 3-6 months. 2. Entrepreneurship Training.	X	X
BRAC Skills Development Program (SDP) provides few courses targeting the most marginalised and vulnerable adolescents and youth from all over Bangladesh. BRAC's focus and strategic vision for 2020 ensures inclusive and sustainable market development and promotes opportunities for youth, in line with the National Skills Development Policy 2011.	1. BRAC provides apprenticeship based skills trainings for some selected training courses. 2. BRAC runs an activity under SDP, promoting Decent Workplace / Environment - promoting and raising awareness, like safe environment for women, workplace health and safety issues, standard workhours and inclusiveness in the team for both employers and employees.	1. BRAC follows NTVQF standards to design and conduct the courses. 2. BRAC is not a govt, registered training provider. The graduates only receives BRAC certificates. However, BRAC facilitate the process for graduates to appear for the govt. certification exam.		X	TVET, non-formal education	1. 3-6 months training, youth and adolescents to train under master crafts persons in 25 different demand-driven trades. 2. Entrepreneurship Training.	X	X
Development of Non-Formal Education Programme; Master Plan for ICT in Education, ICT in Literacy and livelihood skills, Equivalency Education between formal and Non-formal Education including TVET	Teaching- learning materials developed on Prevoc I, ICT in literacy piloted in Rangpur, a situation analysis report prepared, Guidebook on ICT in Literacy, teachers training guidebook on learning material development including video clips and Digital content prepared; Master Plan for ICT in Education Reviewed and finalized; Study report on Digital Kids Asia Pacific conducted in Bangladesh and report prepared. the focused areas are Digital literacy, digital safety and	Equivalency Education Framework and guideline for assessment and accreditation mechanism, Standardization of teaching personnel for NFE sub-sector.			Non-Formal Education and Secondary Education		X	X

Annex 4 :Key Actors/Stakeholders

Followings are the key actors, providers and stakeholders in the TVET and skills development sector which includes the ministries and agencies delivering TVET to public and skills training to public officials:

Ministry of Education (MOE) – MOE is responsible for the overall development, management and policy formulation for the whole education sector including the TVET and skills development. The key actors of the TVET sub-sector - Technical and Madrasah Education Division (TMED), Directorate of Technical Educate (DTE), Bangladesh Technical Education Board (BTEB) and all technical colleges, polytechnic institutes, and teacher training institutes are overseen by the MoE.

Technical and Madrasah Education Division (TMED) – it has been established in November 2016 within the MoE, among others, to:

- improve access to quality TVET
- improve the quality and expand the overall technical, vocational, business education and training
- establish equity and equality policies in all fields of TVET
- develop skilled human resources suitable for domestic and international labour market
- enhance good governance in education system

Directorate of Technical Education (DTE) – the directorate works under TMED with following main functions: managing human resources management, development activities, supervising academic programs and connecting with domestic and international organizations related to technical education. Main functions of DTE are (i) Managing human resources, (ii) Development activities, (iii) Supervising academic programs and (iv) Connecting with domestic and international organizations related to technical education. A total of 119 TVET institutions are under DTE (49 polytechnics, and around 64 Technical Schools & Colleges).

Bangladesh Technical Education Board (BTEB) - is the apex body responsible for quality assurance through accreditation of training providers, curriculum development, examinations, and certification. BTEB also works under TMED and its major functions are: (i) Setting the curriculum, (ii) Developing learning materials, (iii) Accreditation of technical and vocational courses, training providers and trainers, (iv) Governing admissions, (v) Conducting examinations and (vi) Award of certificates and diplomas.

National Skills Development Authority (NSDA) – established through the NSDA Act 2018, as an autonomous apex body to develop skills development policies and strategies, provide overall sector coordination and leadership for the quality improvement in TVET and skills training.

Polytechnic Institutes - a technical institute offering technical, vocational education and training in many trades, industrial arts and applied sciences. There are both public and private polytechnic institutes in Bangladesh.

Technical Education Colleges - provide technical education covering SSC (Voc) and HSC (Voc), training, vocational degrees, and certificates.

Vocational Teachers' Training Institute (VTTI) – provides teacher training to improve the quality and efficiency of the TVET teachers targeting the international standard through competency-based training (CBT) to improve skill, knowledge and attitude with the linkage industries and proper researches.

Private Training Centres – private training centres provide demand based and market-oriented training courses recovering full cost from the course participants.

Registered Training Organization (RTO) - RTOs are those training providers registered by Bangladesh Technical and Education Board (BTEB) to deliver technical and vocational education and training (TVET) services.

Industry Skills Council (ISC) – ISC is the apex industry body on skills development which will act as the one-point service centre for the respective sector in relation to skills development. It brings together the major enterprises and industry bodies within an industry sector to discuss skill development issues affecting their sector. There are

currently 12 ISCs supporting the sector and 10 more ISCs are in the process to start their operations. Some of the key roles of ISCs are to: (i) Monitor and review skill development practices in industry sectors; (ii) Provide leadership and strategic advice to government on skill development needs; (iii) Support the delivery of industry relevant training and/or professional development programs for instructors and trainers; and (iv) Improve partnerships between industry and public and private training organizations.

Centre of Excellence (CoE) – an industry-driven training and support services to facilitate the sector with required knowledge and skills for product innovation, quality and compliance. This will implement certified training following the NSDP 2011. There are currently three COEs in operation – in leather (COEL), in RMG (RMG COE) and in agro-food (CEAFS) industry.

Bangladesh Employers' Federation (BEF) - facilitates labour market efficiency and skills development for enterprise sustainability and national economic growth. BEF is an all-country organization representing all sectors, industry, trade, banking, insurance, etc. The main objective of BEF is to provide guidance and assistance to employers in the field of industrial relations and to bring their concerted views on labour matters to the attention of the Government.

National Coordination Council for Workers' Education (NCCWE) – is a united platform of 14 major national trade union federations in Bangladesh who represent the maximum number of workers and employees of the country. It is affiliated with several international bodies.

Skills Development Working Group (SDWG) - The Government of Bangladesh (GOB) and its development partners (DPs) meet regularly to discuss development issues in Bangladesh through the Local Consultative Group (LCG) mechanism. The Skills Development Working Group (SDWG) is one of the working groups under the Education Local Consultative Group (ELCG). The objective of SDWG is to contribute to the effective and coordinated implementation of the National Skills Development Policy, skills reform plans and programs through collaboration, joint results targets and a monitoring framework. One of the specific objectives is to promote harmonization and alignment of

activities to enhance aid effectiveness, avoid duplication and encourage complementarities in skills development programming.

Bangladesh Bureau of Statistics (BBS) – BBS is the centralized official bureau in Bangladesh for collecting statistics on demographics, the economy, and other facts about the country and disseminating the information. It conducts Labour Force Survey (LFS) and other relevant statistical research on a regular basis.

Bangladesh Bureau of Educational Information and Statistics (BANBEIS) - BANBEIS is the only government organization in the education sector of the country responsible for collection, compilation and dissemination of educational information and statistics. It is attached to the Ministry of Education.

Ministry of Expatriates Welfare and Overseas Employment (MoEWOE) – involved in creating skill manpower by providing training according to the demand of the overseas labour market.

Bureau of Manpower Employment and Training (BMET) – operated under the MoEWOE with specific purpose of meeting the manpower requirement of the country and abroad. Major functions, among others, are: (i) Institutional training through Technical Training Centres; (ii) Establishment of new training institutes through development projects; and (iii) Conducting informal and special training courses.

Created in 1976 to regulate private recruitment agencies, the BMET is the executing agency of the Ministry Expatriates' Welfare and Overseas Employment (MoEWOE) in respect to processing labour migration. Since the promulgation of the Emigration Ordinance of 1982, it has been working as the implementing agency of the Ordinance. The Ordinance is now replaced by the Overseas Employment and Migrants' Act, 2013. Currently, BMET is involved in regulating recruitment agents, collecting and analyzing labour market information, registering job seekers for foreign employment, providing emigration clearance to job seekers, developing and implementing training programs in light of specific labour needs in national and international labour markets, implementing apprentice and in-plant programs in existing industries, organizing pre-departure briefing sessions, resolving legal disputes and managing the programs of the Wage Earners'

Welfare Fund. BMET has offices at the district level (DEMOs), currently in 42 out of the 64 districts in Bangladesh (Siddiqui, 2010). In terms of recruitment, private agents/agencies are the major actors.

Ministry of Labour and Employment (MoLE) – one of the major functions of the ministry is to provide skill development and employment-oriented training both in government and non-governmental sectors. It aims to improve the welfare of labourers, through socio-economic development of labour, create a skilled work force and increase employment and productivity.

Ministry of Youth and Sports – major functions of the ministry are (i) to turn the youth into skilled human resources and integrate them into mainstream development through implementation of training, development and welfare oriented activities; and (ii) to create self-employment opportunities for the unemployed youth and encourage their voluntary participation in development activities. To reward successful youth entrepreneur and provide donation to youth organizations.

Department of Youth Development – through 29 youth training centers, provides skill development training (74 trades), micro-credit, support for self-employment and entrepreneurship development.

Ministry of Social Welfare – provides education, training and rehabilitation services to the destitute, orphans, helpless children and persons with disabilities.

Department of Social Welfare – runs programs for poverty reduction and human resource development and provides training and rehabilitation of the socially disadvantaged women, orphan and vulnerable children.

Ministry of Women and Children Affairs (MoWCA) – through the **Department of Women Affairs (DWA)**, provides women technical, vocational and income generating training, equipment for production and microcredit to facilitate self-employment.

Ministry of Industries (Mol) – involved in the improvement of labours' skill and productivity through entrepreneurship and industrial management training.

Ministry of Agriculture (MoA) – provides agricultural extension services and training to farmers and women in order to transform them into educated and skilled workforce.

Ministry of Civil Aviation and Tourism – one of the major functions is development and marketing of tourism products, conducting research to expand tourism industry, modern management and creation of skilled manpower.

Ministry of Communication – the **Road Transport and Highway Division** of the ministry provides training men and women on denting, painting, welding and driving through 3 Training Institutes and 16 BRTC Training Centers.

Ministry of Railways – supports women engagement in running train and in various skills-oriented activities including technical works in the workshops.

Bangladesh Railway – prepares courses and syllabus for the Railway Training Academy.

Ministry of Local Government, Rural Development and Cooperatives (through RDGD) – with the aim to create skilled human resources, imparts motivational and income generating training to women and cooperative's members and other training to officers, public representatives and NGO workers involved in rural development works.

Bangladesh Rural Development Board (BRDB) – provides short courses and training on agriculture extension, income generating activities targeting poor and women, and the training academy provides training to BRDB staff on rural development and other relevant issues.

Ministry of Textile and Jute - In order to ensure improved and quality textiles and jute goods production, involves in creating skilled manpower for textiles, weaving, sericulture and jute sector. Training are provided by **Department of Textiles, Bangladesh Sericulture Research and Training Institute** and **Bangladesh Jute Mills Corporation (BJMC)**.

Ministry of Defence - through **National Defence College (NDC)**, delivers training to selected senior military and civil officers from home and abroad on national and

international security related fields as well as to mid ranking military officers of Bangladesh on war studies.

Ministry of Power, Energy and Mineral Resources – through **Bangladesh Petroleum Institute (BPI)**, meets the training need of the personnel of different organizations engaged in exploration, production and distribution of Oil, Gas and Mineral Resources within country.

Ministry of Fisheries and Livestock – provides training with the objectives to develop human resources and create employment opportunities in fisheries and livestock, navigation and marine engineering.

Ministry of Health and Family Welfare – through the **Directorate of Health** and the **Bangladesh Nursing and Midwifery Council (BNMC)**, the ministry imparts education and training to nurses, community-based midwives, paramedics, field workers and other women health workers.

Ministry of Science and Technology – the training institute of the **Bangladesh Atomic Energy Commission** provides various courses on atomic energy for the development of human resources in the area of nuclear science and technology.

Ministry of Posts, Telecommunication and Information Technology – through Bangladesh Computer Council (BCC), develops Human Resource in the field of ICT and organises manpower export to the international market.

Bangladesh Computer Council (BCC) - Leveraging ICT for Growth, Employment and Governance Project (2013-2018) was executed by Bangladesh Computer Council (BCC) under the Ministry of Posts, Telecommunication and Information Technology. One specific objective of the project was to develop 34,000 skilled manpower for IT and IT Enable Service (ITES) sector.

Ministry of Shipping – through its **Department of Shipping** and the associated maritime training academies and institutes, the ministry provides maritime education and training.

Ministry of Environment, Forest and Climate Change – major functions include research and training in forestry.

Ministry of Primary and Mass Education (MoPME) – through DPE, NAPE and PTIs, MoPME delivers staff training and teacher training, and through BNFE, MoPME provides productive skills, life-skills, job training, education, and opportunities to individuals who have not received a formal education.

Bureau of Non-Formal Education (BNFE) is a government bureau responsible for providing job training, education, and opportunities to individuals who have not received a formal education. It is the national level public body responsible for non-formal education, adult and youth literacy and lifelong learning to assume the mandate of the primary education.

Ministry of Chittagong Hill Tracts Affairs (MoCHTA) - provides technical education and training to young men, women and ethnic people on income generating activities, livelihoods and healthcare.

Ministry of Commerce – the ministry has several institutes to provide education and training on accounting, business and trade related issues.

Bangladesh Small and Cottage Industries Corporation (BSCIC) – provides counselling and training for entrepreneurship development.

Bangladesh Industrial and Technical Assistance Centre (BITAC) – its mission is to upgrade the skills of the industrial personnel in technical and managerial fields for improved productivity. With a2i program, BITAC develops technological skill and creates jobs for unemployed youth, and BITAC and a2i jointly develops skilled manpower for 100 economic zones in Bangladesh.

Bangladesh Parjatan Corporation (BPC) – mission includes develop human resource in tourism sector and encourage pro-poor tourism industry for their economic betterment and empowerment.

Bangladesh Chemical Industries Corporation (BCIC) – Training Institute of Bangladesh Chemical Industries (TICI) of BCIC develops technical knowledge and skills related to production, maintenance, control engineering and quality control activities of the chemical industries.

Bangladesh Association of International Recruiting Agencies (BAIRA) - BAIRA is an association for co-operation and welfare of the migrant workers and the member agencies. It promotes manpower export through its member agencies.

Bangladesh Association of Software and Information Services (BASIS) - is the national trade body for Software & IT Enabled Service industry of Bangladesh and involved in IT training and capacity building efforts for different target groups.

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Annex 6: Persons Met

Consultative Meeting Schedule

29 April 2019

- Mr. Md. Matiur Rahman, Team Leader, B-SkillFUL, Swisscontact Bangladesh
- Mr. Erling Petersen, Team Leader, Shudokkho,

30 April 2019

- Ms. Tahsinah Sultana, Executive Director, UCEP

2 May 2019

- Mr. Nurul Islam, Director, Training Operation, BMET
- Mr. Asif Saleh, Executive Director, BRAC
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- Mr. Faruque Hossain, Executive Chairman, NSDA



**Consultation Workshop on situation analysis of Bangladesh TVET sector
as a background work for prioritizing Sector Wide Approach (SWAp) in TVET**

Venue: Meghna, Pan Pacific Hotel Sonargaon

Date: 06 July 2019



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