Government of the People's Republic of Bangladesh

Secondary and Higher Education Division

Ministry of Education

STUDY

on

"Exploring need of Technical and Vocational Education and Training for employability of youth in adversity in the selected districts of Bangladesh"

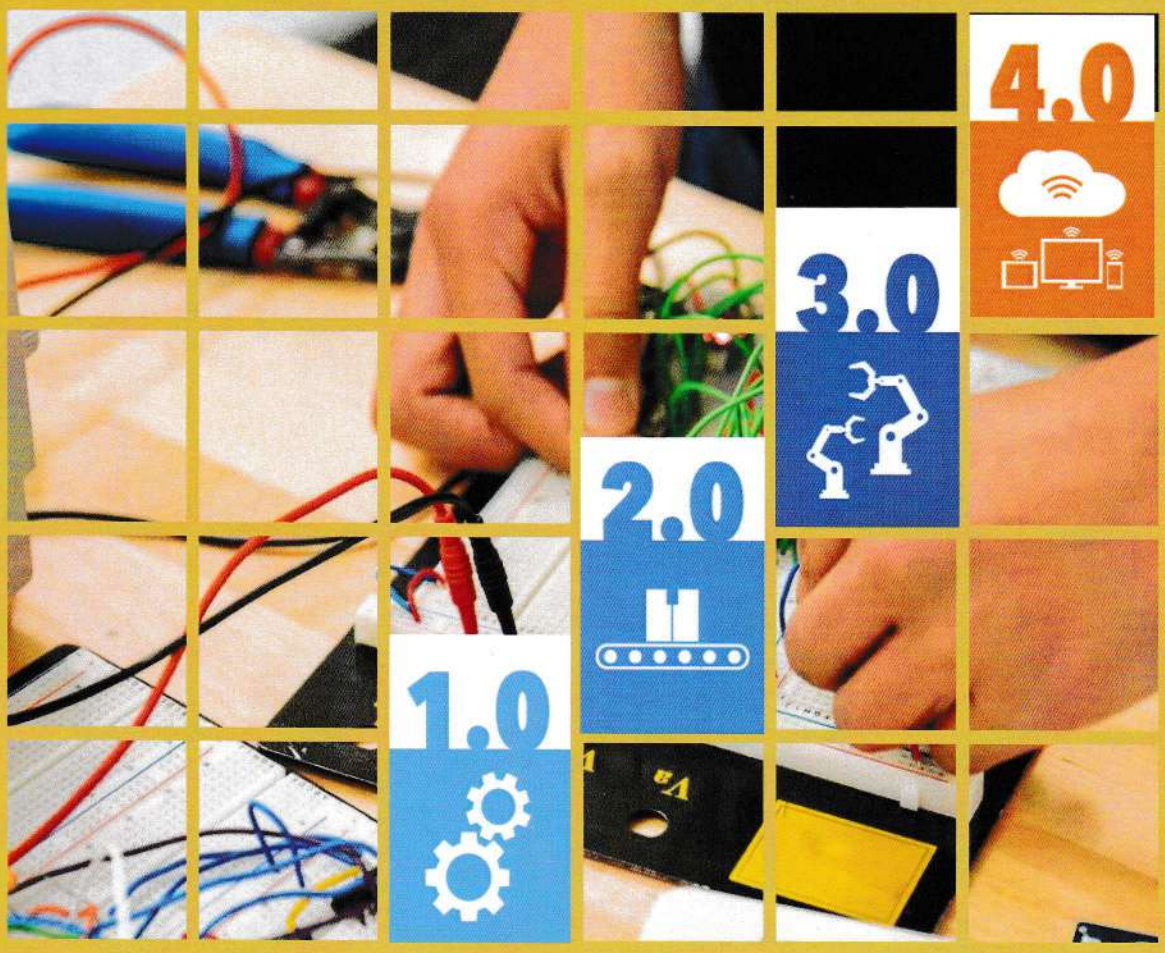

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Table of Contents

Chapter 1: Introduction 4

1.1 Background of the Study 4

1.3 Objectives of the Study 5

1.4 Organization of the Report 5

Chapter 2: Literature Review 7

2.1 Introduction 7

Chapter 3: Methodology of the Study 19

3.1 Introduction 19

3.2 Selection of Sample 20

3.2. Selection of Respondents from the Field 20

3.3.1 Samples for Qualitative In-depth Investigation 22

3.3.2 Data Collection 22

3.3.3 Study Design at a Glance 24

3.3.4 Data Analysis 26

3.3.5 Analysis Plan 27

3.3.6 Tabulation Plan 27

3.4 Study Implementation 27

3.4.1 Review of the Project Documents 27

3.4.2 Developed Inception Report including Data Collection Instruments 28

3.4.3 Workshops/Meeting 28

3.4.4 Recruitment and Training/Orientation 28

3.4.6 Pre-testing of Questionnaire and Checklists 29

3.4.7 Field Operation and Data Collection 29

3.4.8 Monitoring and Supervision of Field Work 29

3.4.9 Field Editing.....29

3.4.10 Quality Control.....30

3.5 Data Consolidation and Analysis.....31

3.6 Detailed Activities of the Study by Phases.....31

Table-7 : Detailed Work Plan with Time Duration.....32

3.7 Challenges and Limitations of the Study.....34

Chapter 4: Results/Findings and Analysis.....36

4.2 Socio-demographic information about the respondents.....36

4.3.Tyes of TVET Institution Covered.....38

4.4. Objective 2: Reflect on the school, to work transition readiness of existing courses 47

4.6.1 Key Findings of FGD.....60

4.6.2 Key Findings of KII.....61

4.7 Scope of TVET for PWD in the studied areas.....69

References.....75

List of Annexes.....75

List of Acronyms

4RI	Fourth Industrial Revolution
8FYP	Eighth Five Year Plan
AC	Air Conditioner
ADB	Asian Development Bank
AEOSIB	Association of Export Oriented Shipbuilding Industries of Bangladesh
BACI	Bangladesh Association of Construction Industry
BANBEIS	Bangladesh Bureau of Educational Information and Statistics
BASIS	Bangladesh Association of Software and Information Services
BBS	Bangladesh Bureau of Statistics
BGMEA	Bangladesh Garment Manufacturers and Exporters Association
BTMA	Bangladesh Textile Mills Association
DWCP	Decent Work Country Program
FGD	Focus Group Discussion
FYP	Five Year Plan
GO	Government Organization
Ha	Hector
HSC	Higher Secondary School Certificate
HSC (BM)	HSC (Business Management)
ICT	Information and Communication Technology
ILO	International Labour Organization
ILS	International Labour Standard
IT	Information Technology
KII	Key Informants' Interview
LFS	Labour Force Survey
LQA	Lot Quality Assurance
LQAT	Lot Quality Assurance Techniques
N/A	Not Applicable
NEET	National Eligibility cum Entrance Test
NEP	National Education Policy
NGO	Non-Government Organization
NSDP	National Skills Development Policy
NSDP	National Skill Development Program
NTVQF	National Technical and Vocational Qualifications Framework
NTVQF	National Training and Vocational Qualifications Framework
PPP	Public-private partnership
PPS	Probability Proportional to Size of Sampling
PWD	Persons With Disability

QAQC	Quality Assurance and Quality Control
QCBS	Quality Cost Basis Selection
QCO	Quality Control Officer
SDG	Sustainable Development Goal
SEIP	Skills for Employment Investment Project
SEIP	Skills for Employment Investment Program
SPSS	Statistical Package for Social Science
Sq km	Square Kilometer
SSC	Secondary Schools Certificate
STEP	Skills Training for Employment Program
TMED	Technical and Madrasa Division
TNA	Training Need Assessment
TOR	Terms of Reference
TSC	Technical School and Colleges
TTC	Technical Training Center
TTTC	Technical Teachers' Training College
TVET	Technical and Vocational Education & Training
UK	United Kingdom
VTTI	Vocational Teachers' Training Institute

EXECUTIVE SUMMARY

The Bangladesh Bureau of Educational Information and Statistics (BANBEIS) is an attached department of the Ministry of Education and is mainly responsible for providing educational information and statistics for planning, management and decision making process in the education sector. BANBEIS is now focussing on qualitative survey and socioeconomic research in addition to regular quantitative survey activities.

INTERACTION, was selected as a consultant to conduct the research/study titled, **"Exploring needs of Technical and Vocational Education and Training for employability of youth in adversity in the selected districts of Bangladesh".** Initially the study planned to be completed within six (6) weeks, but due to time constrain and uprising Covid19 severity across the country, the study/research was finally decided/agreed to be completed with five (5) weeks from the date of commencement (agreement signed).

The study/research was conducted using various tools (approved by BANBEIS after presenting the Inception Report in an workshop where various experts have given their valuable inputs. This report is prepared based on the findings using the approved study instruments. The findings were again presented in a "Draft Report Presentation to BANBEIS" through another similar workshop.

Major objectives of the study were to explore the current status and scope of technical and vocational education and training in selected Haor areas of Bangladesh (names are mentioned below) and identify key actions under the leadership of TMED and associated agencies. The specific objectives were to

(i) Identify key TVET services available in selected districts of Bangladesh;
(ii) Reflect on the school to work transition readiness of existing courses;
(iii) Identify potential short courses to promote school to work transition (both job market and entrepreneurship development); and
(iv) Identify potential actions to be taken under the GO-NGO Collaboration.

Relevant Data were collected from the representative sample areas covering ten (10) Upazillas under six (6) districts covering Haor Region in Bangladesh to fulfil the requirements of the major and specific objectives of the assignment. The study was conducted following specific methodologies and approaches (Literature Review, In-depth Interview, FGDs and KII) which were reviewed and approved through an online (webinar) workshop with the expert participants of relevant government and non-government organizations. The sample size was selected/determined following scientific (statistical) formula which is commonly used.

Objective wise findings show the existing available TVET services, appropriateness of the existing course considering the current and future market demand. It also reflects the future thinking for transition from the existing courses, most demanded short courses available and suggested to be introduced/expanded keeping in mind the future job market both home and

abroad as far as the rapid expansion of industrialization in Bangladesh keeping in mind the concept of 4th Industrial Revolution are concerned.

Key findings are;

a) During the survey, in 6 selected districts, a total of 18 Institutes/TVET, 27 other training service providing organizations (Dept. of Social Welfare, Dept. of Women Affairs, Dept. of Youth Development), i.e. a total of **51** training institutes, were surveyed out of which 88.24% were government institutes and 11.76% were private (formal and informal) training institutes/organizations.
b) From the study, it was found that total 85% of training institutes are located at district level and in the plain land areas, 10% are located in hill areas and only 5% of the total institutes are located in the *Haor* areas.
c) The gender segregated data provided a feature about the current demand of the different training trades by male and female respondents. From the question on multiple choices, it shows amongst the ongoing technical/vocational and skills training, following percent have expressed as the preferred skills;
    - Tailoring/Garments works chosen only by the Female Participants (100%).
    - Livestock and poultry farming, male 66.7%, female 33.3%.
    - Electrical works shows interestingly that 28.6% female respondents preferred this course where 71.4% male have expressed as their choice.
    - Similarly 25% female and 75% male respondents reported as their choice.
    - More interestingly, no female preferred mobile phone repairing and fashion designing as her choice.

To explore the effectiveness of the TVET in terms of creating opportunities for job in the existing labor market of Bangladesh, the study attempted to assess the trend of employment after completion of TVET from different government and non-government institutions. Study findings reflects that illustrated that around one-third (32.7%) of the TVET Graduate found job while among the SSC/HSC completed respondents nobody reported to receive a job. For example only 10% who received training on “computer and networking” got job, 8% of the trainees who completed training on livestock got job. No one who completed training on electrical works either got any job in that field or not working on this skill received.

Interestingly, more than half of the respondents replied that they took no steps after their training. On the other hand, those who attempted to create employment, the highest percentage started “Training Related Business” (31%). Some also did other type of Job (6%) and Business (6%) which was not related to their training. Those who could not utilize knowledge and skill gained through the training or those who started type of business and jobs other than their received training trade, 85% (not mentioned in figure) of them claimed that they did not find demand of the training in the existing market.

Among the studied graduate and current trainees, three-fourth of the respondents mentioned Certificate Course as level of their courses while the respondents mentioned HSC/Diploma (15%) followed by SSC (9%). It indicated that among the trainees, the demand of Certificate Courses is higher than that of other courses. The reasons behind receiving certificate courses by a wide range of respondents were that the short duration of the courses, flexibility in terms of conditions, e.g., educational background, multiple courses in a year, etc.

While asked about the duration of the courses, to assess which duration of the courses are mostly demanded by recipient in the studied areas. Data revealed that the highest portion of respondents received the training which is 3-month long courses (27%) although the 1-week and 6-month long courses hold the same demand (23%) from the recipients.

As tool of the study Focus Group Discussions (FGD) were conducted in all studied districts. Mainly community people including stakeholders from different socio-cultural background including farmers, teachers, students, TVET graduates were participated and shared their knowledge and opinions regarding employment opportunities of young people, skills, and labor market demand, scope of skill developments, etc.

Similarly, across the spectrum, the respondents have reported that technical and vocational education and training is very important for achieving the Vision 2021 and Vision 2041, and for increasing foreign currencies.

A huge portion (83% of the non-TVET youths interviewed) of locales in Sylhet in particular, are interested in going abroad. This makes it all the more important for them to have technical skills training. There are a number of training institutes and offices in Sylhet district: a Regional Directorate's office under the Directorate of Technical Education, two separate technical training centers for men and women, Sylhet Technical School and college for vocational course, Sylhet Poly-technical institute for diploma courses, and TTC for 3 months to 6 months courses. Apart from that, there also are four other non-government Polytechnic institutes. In addition to these, 79 (seventy-nine) non-government institutes/organizations are running vocational courses, business management and other short courses like driving and computer skills. Encouraged by the support of the government and its commitment to this ground these institutes are trying hard to develop expected level of skills through training to the trainees. Trainees are doing their own income generating initiatives after getting their training from government institutions and private workshops.

Most of the participants from all areas generally opined that local and broader labor market is mostly requires skilled labor where people with traditional occupations or lacking modern-day skills and knowledge are likely to experience less scopes, unemployment, low-wages, heavy work, work in unhealthy environment, etc.

Conducting the study, especially data collection was not easy due to closure of all education institutions, strong movement restrictions, restrictions on arranging meetings/workshops etc. due to the Pandemic Situation. With the necessary cooperation from BANBEIS and experienced team members were able complete the tasks smoothly. We will provide more detailed and interesting findings focusing the study objectives in our final report as soon as the Covid19 related restrictions are waived out.

Chapter 1: Introduction

1.1 Background of the Study

The Bangladesh Bureau of Educational Information and Statistics (BANBEIS) is an attached department of the Ministry of Education and is mainly responsible for providing educational information and statistics for planning, management and decision making process in the education sector. BANBEIS is now focussing on qualitative survey and socioeconomic research in addition to their regular quantitative survey activities. Accordingly, INTERACTION was selected as the service provider (Consultant Organization) for a research work through open Tendering Project (QCBS Method). Initially, the duration of the assignment was set for 6 (six) weeks, but due to time constraints, mainly caused by the Covid19 restrictions, it was reduced to 5 (five) weeks.

1.2 Overall Approach and Strategy of the Study

To ease the whole survey process, tilted **"Exploring need of Technical and Vocational Education and Training for employability of youth in adversity in the selected districts of Bangladesh"** assigned to INTERACTION, constant and continuous communication with Director of BANBEIS and its officials and with other knowledgeable and influential leaders in this sector, has been maintained by the firm throughout the study. This section describes the technical aspect of the methodology and sampling strategies of the study in detail. In line with this, the section also provides a comprehensive description of the methodology for ensuring Quality Assurance and Quality Control (QAQC) measures for conducting quality data collection, recording, cleaning/storing and analyzing all generated data.

The consultant's strategy, approach and methodology of the study was practical and achievable, keeping in mind the obstacles and challenges of Covid19 Pandemic, and was free from ambiguities to ensure high quality and on-time delivery of the outputs/deliverables. The strategy, approach and methodology and tools for implementing the study are described in the following paragraphs.

The study of the project was designed promptly after signing of contract with BANBEIS. This involved development of instruments that is study tools-questionnaires for study and guidelines for focus group discussions. In doing this, the key indicators were selected and then agreed upon by the clients BANBEIS). In line with the questionnaires for quantitative survey the checklist for focus group discussions were developed. Questionnaires and checklists were field-tested (and sufficient copies were produced). The study design was also included finalization of the work program in consultation with the client.

An initial meeting between the authorized representatives of INTERACTION and BANBEIS authority was held, and agreement was made on sample framework and study instruments.

A comprehensive survey was conducted to generate the stipulated primary data. Prior to generation of primary data, relevant secondary information related to the study including documents/reports of BANBEIS authority were obtained and reviewed. Accommodative attempt was taken to develop the useful and appropriate study instruments, And to reveal the inherent characteristics of various dimensions of the study and its contribution to the education database to the stakeholders' needs, the secondary data was carefully scanned and collated with the study-generated data afterwards. For generating the desired primary data, the proposed census and sample study was conducted using an appropriate sampling design and a study instrument (questionnaire).

The conceptual framework for the assignment was developed based on the meticulous reviews of the available literature/documents on the project and based on understanding of the TOR provided by BANBEIS. While analyzing the TOR, special focus and thought was put on understanding the objectives, the scope of work, the suggested approach and methodology and the time allocated to undertake the assignment. The consultants have had substantial interactions with selected respondents, and directly approached to the sample respondents in 10 (ten) selected Upazilas at six (6) districts in addition of FGDs and KIIs. The consultant maintained close contact with all relevant stakeholders whose advice and cooperation made the study successful.

1.3 Objectives of the Study

Major objectives of the study were to explore the status and scope of technical and vocational education and training in the selected *Haor* areas of Bangladesh (names are mentioned bellow); and identify key actions under the leadership of TMED and associated agencies.

The specific objectives were to:

(i) Identify the key TVET services available in the selected districts of Bangladesh;
(ii) Reflect on the school to work transition readiness of existing courses;
(iii) Identify potential short courses to promote school to work transition (both job market and entrepreneurship development); and
(iv) Identify potential actions to be taken under the GO-NGO Collaboration

Relevant Data were collected from the representative sample areas (covering different areas of *Haor* Region) in Bangladesh to fulfil the requirements of the major and specific objectives of the assignment.

1.4 Organization of the Report

This report is organized in five (5) main chapters excluding the Table of Contents and Executive Summary at the beginning. References and Appendices are added at the end of the report. Followings are the main parts of the report.

The first chapter **Introduction** is the beginning of the main report. It provides the background of the research topic, the key objectives of the research and organization of the report. The primary objectives in writing this chapter are (a) to provide a brief overview of research topic; (b)

to identify and describe the key components, elements, aspects; (c) to provide the reader with an understanding of potentials of skill development within the specific context.

The second chapter **Literature Review** has presented the summary findings of reviewing, analyzing and discussing the existing body of knowledge particularly the existing literature, e.g., scientific articles, technical reports including the reports on policies, strategic plans, etc. This chapter tells the reader everything that is known, or everything that needs to be discovered about the topic and where the gaps and justification of the research exists.

The third chapter **Methodology of the Study** described how the study was implemented to achieve the objectives of the study. It specifically presented the methods followed in different stages of the research, e.g., qualitative and quantitative methods, sample size distribution, methods of collecting primary data, implementation strategies, data analysis and report writhing, etc.

The fourth chapter **Results/Findings and Analysis** presented the collected and analyzed primary data. To keep the data understandable for readers, the data have been analyzed in respect of research objectives and both qualitative and quantitative data have been presented under each relevant objective following the integrated approach. Therefore, this chapter has been further divided into five subsections according to the objectives and focuses of the research.

The fifth chapter **Conclusions and Recommendations** concluded the whole report by presenting a summary of discussions, conclusions, and the specific recommendations those were produced based on the empirical findings of the research. In addition to that, this chapter also describes the limitations of the research, the challenges the research team faced in different stages and how the challenges were overcome by the team to reach a successful completion of the study.

Chapter 2: Literature Review

2.1 Introduction

INERACTION has done a selective literature review in line with the objectives of the research/study assignment. In order to formulate the research questions, the literatures were reviewed containing the process and extent of vocational and technical education facilities, Bangladesh Technical Education Policy, and its reform, Master Plan of *Haor* area development. Questions also were set in light with the fourth industrial revolution (4RI) concept and keeping in mind the demand-driven employment in local, national and overseas markets. Thus the literature review follows:

2.2 Master Plan of *Haor* Areas

Following the Master Plan of *Haor* Areas (Ministry of Water Resources, Bangladesh *Haor* and Wetland Development Board, April 2012) a review of *Haor* areas in Bangladesh can be made.

*Haor*s with their unique hydro-ecological characteristics are large bowl-shaped floodplain depressions located in the north-eastern region of Bangladesh covering about 1.99 million ha (19,998 sq km) of area and accommodating about 19.37 million people. There are 373 *Haor*/wetlands located in the districts of Sunamganj, Sylhet, Habiganj, Mauluvibazar, Netrakona, Kishoreganj and Brahmanbaria. These 373 *Haors* cover an area of about 859,000 hectors, which is around 43% of the total area of the *Haor* districts. It is a mosaic of wetland habitats including rivers, streams, canals, large areas of seasonally flooded cultivated plains and beels. Table 1 gives the number of *Haors* with areas in the seven *Haor* districts.

Table 1: District-wise number of *haor* and their area

District	Total Area in hector	Haor Area in hector	No. of Haor
Sunamganj	367,000	268,531	95
Sylhet	349,000	189,609	105
Habiganj	263,700	109,514	14
Mauluvibazar	279,900	47,602	3
Netrokona	274,400	79,345	52
Kishorganj	273,100	133,943	97
Brahmanbaria	192,700	29,616	7
Total	1,999,800	858,460	373

The physical setting and hydrology of the *Haor* region have created innumerable opportunities as well as constraints for the inhabitants of the *Haor*. The region has distinctive hydrological characteristics. Annual rainfall ranges from 2200 mm along the western boundary to 5800 mm in its north east corner and is as high as 12000 mm in the headwaters of some catchments extending to India. The region receives water from the catchment slopes of the Shillong Plateau across the borders in India to the north and the Tripura Hills in India to the south-east. Flash flood is the main disaster in the *Haor* area which engulfs the primary production sector (e.g., agriculture) and thus threatens the lives and livelihoods of the people. Excess rainfall in the upstream hilly areas and subsequent runoff, sedimentation in the rivers, deforestation and hill cuts, landslide, improper drainage, unplanned road and water management infrastructure and the effect of climate variability can be viewed as the main reasons for the devastation caused by flash floods.

The *Haor* region has long been lagging behind mainstream national development although the economic development of Bangladesh is moving steadily at a moderate pace. The government has taken many initiatives including the preparation of national and regional strategies to steer economic growth and has accordingly prepared plans over the years to boost the country's development. It is difficult to foresee the country's overall progress without the development of the *Haor* region as it covers a major part of the country and population which deserves special development initiatives. The future challenges in the context of climate change are also a major concern for the sustainable development of the region.

The total population of the seven *Haor* districts is 19.37 million (projected from BBS, 2011 census). The overall population density in the *Haor* districts is 987 per sq km which is lower than the average national population density of 1142 per sq km.

By the year 2030 the population may increase to 22.92 million. The population growth rate per annum for the overall *Haor* area is 1.09% which is lower than the national rate. It might decrease further from 1.09% to 0.63% by the year 2030, while the overall national growth rate might also decrease from 1.31% to 0.84% over the same period.

The objectives of the Master Plan are to develop the resources of the area as rapidly as possible so as to promote the welfare of the people, provide adequate living standards, social services, and opportunity, and aim at the widest and most equitable distribution of income and resources without degradation of the *Haor* ecology and biodiversity. Implicit in the plan is an increase in production and distribution of all kinds of goods and services which together generate and sustain healthy growth towards a modern economy.

This Master Plan (2012–2032) is a framework plan for developing the *Haor* areas through optimal utilization of natural and human resources for the next 20 years (up to FY 2031-32). The Plan has been formulated following the principles of the IWRM. It will be implemented on the short, medium and long term basis with the provision of updating and incorporating rationale changes in demand. It has been formulated in an integrated manner envisioning mainly flood management, environmental sustainability, production of crop, fisheries and livestock, expansion of education, settlement and health facilities, road communication, navigation, water supply and sanitation, industry, afforestation, tourism, use of mineral resources and generation of power and energy.

The Master Plan of *Haor* area has been formulated to achieve the following six national goals:

- Á Economic development
- Á Food security
- Á Decent standard of living for the people
- Á Poverty alleviation
- Á Public health and safety
- Á Protection of the natural environment

2.3 Bangladesh Technical Education Policy and Practices

In the following a review of Technical Education Policy and Practices in Bangladesh can be made.

The development of the National Skills Development Policy is a major achievement for Bangladesh. The comprehensive policy can guide the skill development strategies of both public and private sectors and facilitates improved coordination of all stakeholders involved in education and training in Bangladesh.

This `National Skills Development Policy' provides the vision and direction for skills development over the coming years, setting out the major commitments and key reforms that government will be implementing in partnership with industry, workers and civil society. The policy extends and builds on other major government policies such as the Industrial Policy 2009, Education Policy of 2010, Non-Formal Education Policy of 2006, Youth Policy of 2003, National Training Policy of 2008 and the NSDC Action Plan of 2013.

The policy is the result of the collective efforts of government agencies involved in TVET and skills training, employer and worker organizations and private training providers and NGOs, all with the common goal of reforming Bangladesh's skills development system. The policy was approved by the Cabinet in January 2012.

The implementation of the National Skills Development Policy will play a key role in Bangladesh's goal of becoming a middle-income country by 2021. The policy will provide a clear way forward for skills development in Bangladesh, ensuring a focus on demand driven, flexible and responsive training provision, nationally recognized qualifications, and competency based training and assessment, industry and private sector involvement, flexible institutional management, promotion of workplace learning and recognition of prior learning.

A revised and detailed National Skills Development Policy Action Plan has been developed and is currently being implemented. This builds on the previous Action Plan outline, clearly identifying the roles and responsibilities of all stakeholders and setting measurable, time-bound targets for effective implementation of the National Skills Development Policy. This has also been adopted in the 8th Five Year Plan of Bangladesh.

The Skills Development System in Bangladesh can be classified into five main segments:

Figure 1: Skills Development System in Bangladesh

Each of these segments offers a wide variety of formal and non-formal skills development programmes using different approaches to training and assessment.

2.4 Status of Government Technical Education Institutions in Bangladesh

Following the Annual Report 2017-18 and the website of Directorate of Technical Education the status of Government Technical Education Institutions in Bangladesh may bereviewed.

In Bangladesh, there are altogether *119 government Technical Education Institutes* out of which there is 01 (one) Technical Teachers Training College, 04 (four) Engineering Colleges, 01 (one) Vocational Teachers Training Institute, 49 (forty nine) Polytechnic Institutes which provide diploma level technical education and 64 Technical School and College which provide certificate level of technical education.

Currently out of above-mentioned 49 (forty-nine) Diploma level Technical Education Institutes in Bangladesh, there are 05 (five) such Institutions in 06 districts proposed as our study area. Following are the details about the existing diploma level Technical Education Institutes under said districts.

Table 2: List of Diploma Level Technical Education Institutions under the proposed study areas

Division	District	Name of Institute and location
Chittagong	Brahmanbaria	**Brahmanbaria Polytechnic Institute, Islampur, Brahmanbaria.**
Sylhet	Sylhet	**Sylhet Polytechnic Institute, Borai Kandi, Sylhet**
	Habiganj	**Habiganj Polytechnic Institute, Gopaya, Habiganj**
	Mawluvi Bazar	**Mawluvibazar Polytechnic Institute, Matar Kapon, Mawluvi Bazar**
	Sunamganj	**Nil**
Mymensigh	Kishorganj	**Kishorganj Polytechnic Institute, Karimganj, Kishorganj**
	Netrokona	**Nil**

Source: Directorate of Technical Education website (Last updated on 24 March 2021)

Out of above-mentioned 64 (sixty-four) *Technical School and Colleges* in Bangladesh, there are 09 (nine) such institutions in our 6 proposed districts (study areas). Following are the Division and District-wise details about the Technical Education Institutes.

Table 3: List of Certificate Level Technical Education Institutions under proposed study areas

Division	District	Name of Institute and Location
Chittagong	Brahmanbaria	Bancharampur Technical School and College, Bancharampur, Brahmanbaria.
		Brahmanbaria Technical School and College, Khoiasar, Brahmanbaria.
Sylhet	Sylhet	Sylhet Technical School and College, Sylhet
	Habiganj	Habiganj Technical School and College, Habiganj

Division	District	Name of Institute and Location
	Mawluvi Bazar	Mawluvi Bazar Technical School and College, Mawluvi Bazar.
	Sunamganj	Chatok Technical School and College, Sunamganj.
		Sunamganj Technical School and College, Sunamganj.
Mymensigh	Kishorganj	Bhairob Technical School and College, Bairob, Kishorganj.
	Netrokona	Netrokona Technical School and College, Netrokona.

Source: Directorate of Technical Education website (Last updated on 24 March 2021)

2.5 Decent Work Country Program (DWCP) of ILO

In the following a review of Decent Work Country Program (DWCP) of ILO can be made.

The Bangladesh Decent Work Country Programme (DWCP) was developed in close collaboration with ILO's tripartite constituents: the Government, Bangladesh Employers' Federation and the National Coordination Committee for Workers Education. This DWCP is result-oriented, focused and well-coordinated with the national policy documents and global development initiatives such as the Sustainable Development Goals (SDGs).

It was being implemented for the period 2017-20 focusing on the four key priorities and their outcomes which can contribute to help to reach the goals and 'core targets' of the 7th Five Year Plan (FYP).

Priority	
1	Effective employment policies to enhance employability through skill development including green growth.
2	Promotion of safe and clean working environment for all workers in compliance with the core international labour standard.
3	Promotion of fundamental principles and rights at work through social dialogue under tripartite consideration.
4	Promotion of social protection for all workers and vulnerable groups specifically against climate change.

Outcome	
1 Employment and Skills	1.1 Effective employment policies to enhance employability through skill development including green growth. Bangladesh job strategy formulated for skills development and job creation with higher productivity and in green industries especially for young men and women. **1.2** Accessibility of TVET system enhanced in alignment with the National Skills Development Policy (NSDP) especially for women, disadvantaged groups, people with disabilities and ethnic groups and in view of introducing skills in emerging technologies relating to climate resilient green growth.
2. Compliance	2.1 International labour standards (ILS) especially the eight core conventions are promoted and constituents' capacity enhanced for their better implementation. 2.2 Implementation of policies, laws and programmes promoted to ensure occupational safety to improve working conditions and ensure a just transition to a climate resilient and green economy through the application of ILO guidelines for a just transition towards environmentally sustainable economies and societies for all.
3. Social Dialogue	3.1 Employers' and Workers' organizations' capacity developed to strengthen freedom of association, collective bargaining and sound industrial relations. 3.2 Capacity of labour administration enhanced leading to good governance in the labour market.
4. Social Protection	4.1 Employment injury social protection schemes for select sectors developed and implemented. 4.2 Laws and policies for protection of migrant workers, domestic workers, child labourers and indigenous workers developed and implemented.

The implementation of the DWCP will be based on 'partnership' among the tripartite constituent and the ILO Country Office. Current Technical Coordination (TC) projects of ILO as well as some new ones which will be mobilized during the span of the DWCP will play critical roles in achieving the outcomes of the DWCP.

2.6. The 8th Five Year Plan of Bangladesh (July 2020 - June 2025)

Bangladesh government has recently (December 2020) approved its 8th Five Year Plan. The age-wise population structure of Bangladesh is still "young" which will be ageing very fast in the next several decades. Following Oizumi (2013) and others, a society is referred to as "ageing" if 7 per cent of the total population is 65 and above. A society is transition to an "aged" stage when the share of 65 and older population in total population is 14 per cent. The time required

for Bangladesh's shift from an ageing to an aged society following the above definition is shown in Figure 10.2. Bangladesh will transition to ageing in 2029, just 9 years from 2020. It will take only 18 years from "ageing" to shift to an "aged" society (i.e. in 2047). The speed at which Bangladesh is likely to transition to "ageing" to "aged" stage in 18 years (i.e. 2047-2029) that is faster than Asian advanced countries and rich European countries (see Figure 10.3). This is by far one of the fastest speeds of ageing compared with both historical (e.g. France, UK, Germany, and Sweden) and contemporary data of other countries. The above statistics also suggest that Bangladesh may experience transition at a much lower stage of development compared to the Asian advanced countries and European rich countries where transition took place at significantly advantage stages of their development.

The 8th Five Year Plan expresses that human 'capital' refers to a set of skills or abilities, which a worker possesses through education, training, and experience that can be 'rented out' to employers. Higher investments in human capital increase worker's productivity with a resulting positive effect on economic growth. The relative demand of these skills and abilities determine how much is paid for it - the labour wage. As the structure of an economy changes with technological changes, certain workers become redundant while others with different skills set become high in demand. This is why, as a country transitions from one type of economy to another its further development requires better 'human resources' with higher skills and abilities. While during the preliminary years of development basic education may be sufficient for the economy, that does not hold true as the economy expand and interact in the global arena. To achieve sustained economic growth, the country's human capital base has to grow and this is done by developing the education system, updating pedagogy, and equipping the graduates with training and experience to acquire new skills and abilities that the growing economy needs. Knowledge and skills are acquired in three-stages. In the first stage, acquisition of human capital is mostly done passively, through the actions of others. Family environment, social norms, culture, and early schooling all impart human capital including basic verbal and numerical skill, attitude towards learning, etc. However, the importance of cognitive and behavioral development at this stage is crucial. In the second stage, young adults actively absorb knowledge and skills from schools, universities, vocational training centres, etc. In the third phase, adults enter the job market and accumulate human capital through learning-by-doing, work experience, part-time programmes, training schemes, night schools, etc. The education policy of Bangladesh necessarily seeks to encourage participation in all these three phases.

Application of new technology change production process that make some workers redundant in the short run and, creates 'technological unemployment'. An updated TVET sector with proper industry linkage can help the displaced workers learn the necessary skills. More importantly, TVET provides an alternate option to those individuals who may not be comfortable in a traditional education institution or could not continue school/college due to family or other reasons. The perspective plan (2010-2021) and the 7th Five Year Plan emphasizes the role of expansion and modernization of TVET for building a skilled workforce. One sub-goal under SDG-4 is about ensuring equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university. Studies have shown that the return from TVET education is higher than from regular schooling for a below average student. For Bangladesh's transition towards an upper-middle income country, increased investment in TVET will be crucial. Global experiences suggest that TVET sector expands with level of development of a country. The academic streams will not be able to absorb all the children (who are over one-third of the population currently) and importantly it will not be able to provide every necessary skill that will be demanded in the future. In Bangladesh, formal TVET consists of SSC, HSC, and Diploma courses, HSC (vocational), SSC (vocational), and HSC (BM). The

courses are offered by Engineering Colleges, Polytechnic Institutes, Technical School and Colleges (TSCs), Technical Teachers' Training College (TTTC), Vocational Teachers' Training Institute (VTTI), Business Management Colleges and other technical and vocational institutes.

Bangladesh has gradually transformed from an agriculture-based to an industrial and service-based economy. Low and less skilled workforce with basic education served this transition well so far. But to achieve upper middle income status by 2031 and particularly to take advantage from the fourth industrial revolution, up-gradation of both hard skills (job specific skills such as project management, cloud computing, computer technology, data analysis, marketing etc.) as well as soft skills (abilities such as communication skill, problem solving, work ethics, interpersonal skills, team management, creativity, time management, adaptability etc.) will become crucial. Unfortunately, the existing education system including TVET gives relatively less emphasis on developing these particular skills. Hence the skill levels and productivity of the workers have not increased sufficiently. Private sector consistently identifies lack of relevant skills they require. According to LFS 2016-17, Bangladesh has a working-age youth population (between the age of 15 and 29) of 41.25 million. Among various age groups of the labour force, unemployment among the youth is the highest. The unemployment rate of young people in the country is 10.7 per cent and this accounts for 79.6 per cent weight in total unemployment. Moreover, almost 30 per cent of the youth population was not in NEET (not in employment, education or training) in 2017. Among this group, 97.8 per cent of male and 98.7 per cent of female in age group 15+ did not have any access to training. Those who got training were mostly short courses of two weeks duration. According to Bureau of Manpower, Employment and Training (BMET), there were 13 million Bangladeshis working abroad at the beginning of 2020, most of whom are less or semi-skilled. A more skilled pool of migrant workers from Bangladesh would readily translate into higher remittance for the country.

The enrolment rate in TVET increased from 1 per cent in 2009 to 16 per cent in 2018. The number of TVET institutions more than doubled between 2008 and 2018 (Figure 11.3). Public institution contributed 335 and 866 institutions out of these; the rest were private. During the same period, the number of students increased from around 464,000 in 2008 to 1,067,000 million in 2018 (Figure 11.4). For public institutions, this rise was 123,000 to 329,000. The rest were from private institutions. The ratio between students and teacher slightly decreased, from 22:1 to 21:1. However, NEP 2010 suggests that this ratio should be around 12:1. (*Source:* BANBEIS 2019).

A major problem in the TVET sector is low-female participation. As discussed already, there has been a rapid rise in the absolute size of enrolment in TVET in the last decade. This is true for both male and female enrolment. However, growth rate in female enrolment has been on par with the growth rate in male enrolment. As a result, the gender-mix ratio has stagnated at around 25 per cent female students in the last 10 years. This represents a gender-imbalance that remains to be addressed. Achieving SDG target 4.3 of gender equality will require ensuring equal access for all women and men to TVET and in University by 2030.

The Government has implemented the National Education Policy (2010) and National Skills Development Policy (2011) to improve the TVET system and address the issues of the sector. To address the skill-gap, the Government initiated the TVET Reform Project of 2008-15, the National Skills Development Project 2011 (NSDP 2011) and the Skills Training for Employment Program (STEP). The government has also substantially stepped up the institutional arrangement for skills development (Table 11.3). These institutional reforms are expected to bring about a major transformation in the delivery of skills for Bangladesh. In addition, under the NSDP, the National Technical and Vocational Qualifications Framework (NTVQF) has been

designed to standardize the technical and vocational qualifications. The framework is comprehensive and is coherent with international top practices. ADB is helping the government to implement the NSDP2011 with a major skills enhancement program called the Skills for Employment Investment Project (SEIP) which has partnered with a number of industry associations such as BASIS, BTMA, BGMEA, AEOSIB and others to impart vocational training with globally recognized skills certifications where appropriate. The Technical and Madrasa Division (TMED) has also been created in the Ministry of Education to introduce TVET into the Madrasa stream

In the 8th Five Year Plan, Bangladesh Government emphasizes the following for skills development;

- **Introduction of Pre-VOC and VOC in secondary level education**: Pre-VOC and VOC courses in different trades will be introduced in secondary level education so that students would complete their secondary level education with some vocational skills. Already piloting is completed in 640 schools and all the secondary students will be enrolled in such courses by 2023.

- **Improve the reputation of TVET stream**: In Bangladesh, the weak reputation of TVET largely prevents enrolment in it. The first step would be to introduce TVET courses at a very early age, from the primary level. Demonstrating a clear path to the students and their families from TVET education to reputable and gainful employment can be one mode of improving the social acceptance of TVET. In many developed countries, in Switzerland for example, from around age 16, more than two-thirds of students stop full-time education and start vocational education programmes in which, one-third of companies in the country participate. Students gain early and direct understanding of the job market demands and can make better decisions for their future. With a more immersive experience, all students naturally consider both their options (technical or higher education), midway through their secondary experience, and when time comes, make an informed decision based on their relevant and practical experiences. This is an example of the secondary education and TVET working in tandem. A similar set-up will be introduced in Bangladesh where students are encouraged to undertake internship/apprenticeship programmes to learn computer technology and other hard skills. This will create a better and firmer linkage between industries, institutions, and the students. Continuous communication between them will also facilitate early detection in skills shortages and course-revisions. Early exposure to the workspace will also change the mind-set of students and their parents that it is not the particular education streams that provide degrees or a certificate but skills that allow one to perform well at a job.

- **Better industry-academia collaboration:** Despite the importance of it, some structural rigidities and lack of incentives are limiting the development of a formal framework for industry-academia collaboration. Fiscal incentives for industries, stipends for students, and recognition for TVET institutions for placing their students in industries will be adopted to overcome this. Labour Law 2013 states that all industries that employ at least 50 workers must have at least 10 per cent of apprentices. To make this law effective, the 8FYP will provide incentives to the industry. A similar support for the TVET institutions will be provided to help them expand technical and vocational training to the local level. The government will also provide subsidized training program with employment counseling to attract youths in skill training program.

- **Addressing the Skills constraint to accelerate growth under the Fourth Industrial Revolution (4IR):** The 4IR has transformed the process of production, which changed the patterns of skill demand across occupations in countries around the world. As artificial intelligence is replacing routine/repetitive jobs mostly performed by the low and semi-skilled workers, many developing countries including Bangladesh will lose their comparative advantage in low-skilled labor-intensive production process as a result. The fourth industrial revolution will make a structural transformation towards a knowledge-based society where the demand for high-income cognitive jobs, low-income manual jobs, and jobs that involve operating and maintenance of artificial intelligence, will be in greater demand. This implies that adapting to the 4IR will require workforce that is equipped with hard and soft skills. For combating the challenges of 4th industrial revolution, ICT specialist skills and basic programming are no longer enough. For instance, advanced engineering and experience with machine learning are increasingly important. In addition, ICT specialists also need domain-specific knowledge, given the potential applications of ICT in business, health, education and industry. There is a need to rethink the curriculum and pedagogy to make graduates more comfortable with critical thinking, collaboration, ability to continuously learn and adapt, and be prone to picking up the other necessary soft skills along the way.

The role of TVET: TVET can be useful to utilize some of the potential benefits of the fourth industrial revolution. However, a revision of the TVET curriculum is crucial for this. The curriculum will be updated by including new courses, which can train the workforce with the higher order cognitive skills needed for example project management, cloud computing, computer technology, data analysis, marketing among other activities. The change in mind-set is also an important factor in this context, to enroll 'good' students at this stream. The government is rightly aware of this challenge. The TVET Reform Project of 2008-15,the NSDP 2011 and the adoption of the STEP and SEIP projects are all aimed at addressing this concern. In addition to modernize and update the education curriculum of TVET, importance would be given to up skilling and re-skilling workers and creation inclusive digital infrastructure as planned in the 8th Five Year Plan.

- **Government and private sector collaborations:** Public-private partnership (PPP) plays a vital role to develop market driven skills system and professional skills according to industries' demand. Both NEP 2010 and NSDP 2011 espouse the idea that PPPs are imperative in the establishment and management of new TVET institutions. Currently there are hundreds of large and small NGOs which are offering short, non-accredited training courses with duration of 4-6 months. Due to institutional constraints, their enrolment capacities are small. The 8FYP will undertake polices in this context and to strengthen the partnership between GO and NGOs.

- **Increase the number of training institutions**: Continuous training of the trainers will help develop a dynamic TVET system. There are only two major public teachers training centres with 37 teachers in Bangladesh as opposed to more than 50,000 teachers employed in various TVET institutions around the country. The 8FYP will take steps to increase the number of training institutions for trainers.

2.7. Youth Survey 2018 entitled "Youth of Bangladesh, Agents of Change?" (BRAC)

Youth constitute a third of Bangladeshi population. Also, currently the share of working-age population (15-59) is larger than non-working age population (>15 and 60+) in Bangladesh, that has a potential to fuel our economic growth with our youth at the forefront. Although there is widespread interest in the youth of Bangladesh, there is very limited comprehensive information on their status. Ensuring bright future for the children and asset accumulation are two most important life-goals for the poorer youth with limited education. For the richer, educated youth, it is quality education, government job and establishing their own business. For the female youth, ensuring children's bright future is most important; for the male youth, it is getting a government job. Overwhelming majority of the students, both male and female, mentioned government job. Almost no one mentioned any other type of job. As per the findings of the survey, very few youths have no formal education, very few also have higher education – seven percent male and four percent female youth. Only 14% overall have any kind of vocational education. Very few youths are confident about their English language and computer skills; female youth and youth with limited education are even less confident. Only 40% have access to internet; female and rural youth have much less access compared to male and urban youth. Only about a fifth believed that their education would help them get a job.

For male youth who are not students, engagement in earning activities is about 90% with education level HSC and below; it goes down considerably with higher education. For female youth, engagement in earning activities is lowest among those with education between class 5 and HSC, which is more than twice as much with those with higher education.

About 20% of the youth, mostly male, are interested to work overseas and a third of them are actively planning. Even though their average education level, vocational training, English and computer skills are better than the overall rates, these are still quite low. In terms of perceived freedom of choice, male youth reported enjoying consistently high freedom of choice across different domains: choosing educational institution, friends and occupation, moving freely and spending money. Female youth reported far lower levels of freedom in all these areas, particularly in choosing occupation, moving freely and spending money. Only 40% women reported freedom to move freely, half that of male youth. The youth believe high-quality and job-oriented education are the two most important drivers of the country's development, followed by political issues such as stability and governance. And, the youth are primarily concerned about two issues – gender-based violence (e.g. child marriage, dowry, sexual harassment and rape) and drug issues (drug use and drug business).

As already described, we see a wide gap between male and female youth in all aspects – skills and education, income earning activities and freedom of choice. We also see a deep divide between poorer and richer youth. Youth from poorer socio-economic status have much lower level of skills – education including vocational training, English and computer skills. Even if poorer youth are interested to migrate, they are much less likely to actively plan for migration and have much lower levels of skills. They have much lower access to internet. Their goals and aspirations are also not related to personal development. All these indicate an existence of a strong poverty trap. Most of the youth do not believe that they can be actively involved in different aspects of development – education, employment and overall development. Those who believe they can, do not have a clear idea about how they can be involved. Comment from the findings of the assessment/study is that the youth of Bangladesh are far from ready to take the

opportunities offered by the 21st century and their potential remains vastly unrealized. This is especially true for female youth and youth from poor socio-economic background.

Indeed, there is a positive correlation between economic growth and the size of working age Population. But whether a country can take advantage of the demographic dividend depends on the effectiveness of the social, economic and political institutions in place and the types of policies taken. Countries such as Thailand, South Korea and Ireland managed to accelerate economic growth by investing heavily in education, incentivizing foreign investment and domestic industries and creating right conditions for businesses while going through this crucial phase of demographic transition. But many countries are struggling to use their demographic dividend. The Commonwealth measures a Global Youth Development Index (YDI) using 18 indicators across five domains: education, health and well-being, employment and opportunity, political participation and civic participation. Most worse performing countries in YDI 2016 also have a large young population, which means that these countries are unable to use their demographic dividend. Bangladesh is also one of the worst performing countries as per YDI, with a large share of young population. It is noteworthy; most of the worst performers in YDI 2016 are also struggling economically.

Demographic dividend seems to be a one-time opportunity. In many of the countries that once took advantage of demographic dividend – Japan, a glaring example –high life-expectancy resulting from growth is already shrinking the share of young population and, consequently, growth. In Bangladesh too, increasing life expectancy, in commensurate with economic growth, is also increasing the share of 60+ population (Figure 1 a). This will eventually reduce the share of working age population, closing this one-time window of opportunity. We must make the most of demographic dividend for as long as it lasts. So, youth issues have rightly become central amongst development actors. Sustainable Development Goals (SDGs) acknowledge youth as one of the key target groups. Several SDGs have specific targets for youth development, such as relevant skills for employment, decent jobs and entrepreneurship (SDG 4.4) and full and productive employment and decent work (SDG 8.5). Bangladesh government is committed to develop the youth. The government wants to ensure the fulfillment of the youth potential and youth empowerment to develop a moral, humane and forward looking youth, capable of boosting the prosperity and the glory of Bangladesh, as per the Bangladesh Youth Policy 2017.

Chapter 3: Methodology of the Study

3.1 Introduction

According to the instructions mentioned in the TOR, INTERACTION provided the list of deliverables with delivery schedule in respect to fulfilling the conditions and completion of the research/study. It also prepared Approach and Methodology (Mixed Method), Work Plan, Organization and Staffing schedule separately for this assignment. INTERACTION have had prior consultation with BANBEIS regarding the research design, tools, and dummy tables and focused areas (items) for the report. Thereafter INTERATION obtained the formal consent on the tools and reporting template from BANBEIS before launching the survey in the field. INERTACTION also arranged presentation on the draft findings and reports with BANBEIS in due course.

The study was conducted covering 6 (six) districts out of 7 (seven) districts under *Haor* region of Bangladesh, i.e. 4 (four) districts of Sylhet division (Sylhet, Mauluvibazar, Habiganj and Sunamganj), 1 (one) district of Mymensingh (Kishorganj) and 1 (one) district of Comilla (Brahmanbaria). **Table-4** (maps in **annex 5**) depicts division, district and Upazila-wise proposed study areas clearly.

Total population of our 10 target Upazilas is 22,12,480, where number youths within the age group of 15-29 are 5,75,245 (estimated as 26% of the total population are in this age group). Table 4 depicts the target Upazila-wise population.

Table 4: Target Upazila-wise population

District	Upazila	Total Population	Youth 26% (Estimated)
Brahmanbaria	Nasirnagar	234,090	**60,863**
Kishorganj	Mithamoin	108,204	**28,133**
Sylhet	Sylhet Sadar	554,412	**144,147**
	Zokiganj	174,038	**45,250**
Sunamgaj	Dirai	202,791	**52,726**
	Sulla	101,298	**26,337**
Hobiganj	Azmiriganj	86,810	**22,571**
	Baniachong	268,691	**69,860**
Maulvibazar	Razanagar	242,769	**63,120**
	M'Bazar Sadar	239,378	**62,238**
Total Population		**2,212,481**	**575,245**

3.2 Selection of Sample

Various countries, organizations and institutions use different age-ranges to define the youth. The National Youth Policy 2017 of Bangladesh defined youth as individuals aged 18-35 years, while the Bangladesh Bureau of Statistics considered individuals aged 15-29 years as youth in its Bangladesh Labour Force Survey. Looking outside Bangladesh, the United Nations identified the youth as individuals aged 15-24 years. The International Labour Organization (ILO) also followed the same age range to define the youth. There are many other agencies/institutions that defined the age-range of the youth slightly differently. For example, the European Union refer to individuals aged 15-29 years as youth, while the age-range used by the African Union is 15-35 years. To make age-based definition of the youth as of the Youth Survey 2018 all-inclusive, a youth is defined as individuals aged 15-29 years.

The total number in 10 target Upazilas was approx. **2,212,481,** where it was estimated that the number of youths under age-group of **15** to **29** were total **575**,**245** (estimated 26% of the total population of the mentioned areas). And as per the scientific formula, the sample size was **384** with **5%** Confidence Interval. Distribution of Upazila-wise respondents was done following the Probability Proportional to Size of Sampling (PPS) approach.

For sample size selection, following statistical formula was followed;

$$n_0 = \frac{(1.96^2)(0.5)(0.5)}{(0.05)^2} = 384\ (n)$$

Then, (knowing that N = **575**,**245** in intervention areas),

$$n = \frac{N \times 384}{N+384} = 384$$

However, in order reduce errors; we have the sample size of **400** for semi-structured and in-depth interview.

For the qualitative data collection, details procedures are described in later sections A (iv).5.

3.2. Selection of Respondents from the Field

A multistage sampling technique was applied to get the required respondents both for quantitative and qualitative data collection. As mentioned above that the study covered 10 Upazilas exposed to *Haor* zones under six (6) districts. Moreover, the data from both government and non-government technical/vocational education institutes were collected mainly from district levels.

The proposed stages are described in Figure 2.

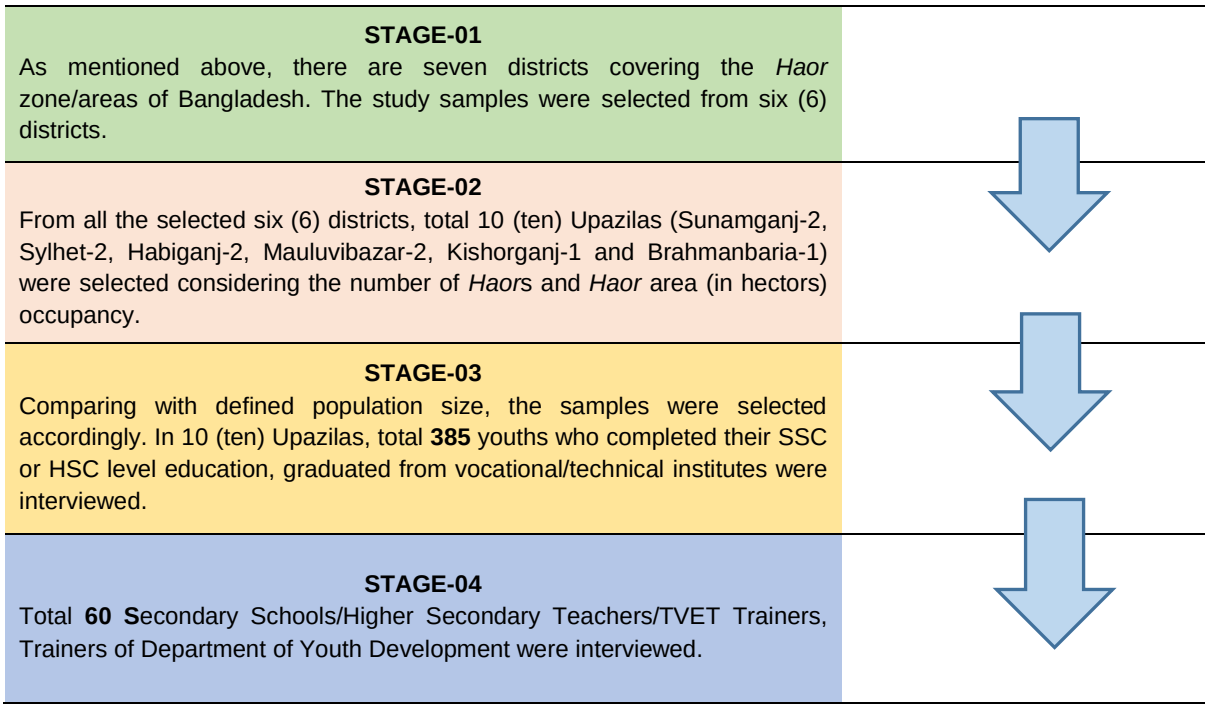


Figure 2: Selection of Respondents

The number of Upazilas has been selected based on the *Haor* area (land) coverage (including number of *Haor*s in the district) per district. However, the selected Upazilas were finalized during the preparatory phase (Inception Report Period) in consultation with BANBEIS.

Table 5: Distribution of Sample Respondents by Districts, Upazila

District	Upazila	TVET Youth-Questionnaire Survey		Non-TVET-Questionnaire Survey		(Youths) (PWD)		Faculty / Teachers		FGD		KII	
		Target	Actual	Target	Actual	Target	Actual	Target	Actual	Target	Actual	Target	Actual
B' Baria	Nasirnagar	20	30	20	10	0		6	6	1	1	4	4
Kishorganj	Mithamoin	10	13	10	7	0		3	3	1	1	2	2
Sylhet	Sylhet Sadar	50	52	40	38	3	2	20	15	1	1	13	13
	Zokiganj	15	15	15	15	3	1			1	1		
Hobiganj	Baniachong	20	19	20	16	3	2	9	12	1	1	6	6
	Azmiriganj	10	13	10	7	3	1			1	1		
Maulvi Bazar	Raznagar	25	25	20	20	2	1	16	13	1	1	10	10
	M'Bazar Sadar	25	34	20	11	2	1			1	1		
Sunamganj	Sullah	10	13	10	7	2	1	6	4	1	1	5	5
	Derai	15	21	15	9	2	1			1	1		
Total		**200**	**235**	**180**	**140**	**20**	**10**	**60**	**53**	**10**	**10**	**40**	**40**

3.3.1 Samples for Qualitative In-depth Investigation

(i) In-depth Interview: (385): Applying both coded structured questionnaire and semi-structured interviews (SSIs) including using Likert scale survey was conducted with three different categories of respondents, which were the youths (total 340 in 10 Upazilas), Teachers of Technical Institutes (60 in 6 districts) and senior officials of institutes.

(ii) Key Informants Interview-KII (35): A total 35 Key Informant Interviews were conducted during the field work such as: KII with TVET/VTI Teachers/Instructors, employers/business persons, Government Officials (Upazilla, District and national level), local government representatives, etc.

(iii) Focus Group Discussion-FGD (10 groups in 10 Upazillas): Focus Group Discussions (FGDs) were conducted by using a guideline with youth groups and the parents. A total of 10 FGDs were conducted in 10 Upazilas where 150 participants attended to provide their views. The participants were selected both from male and female groups.

3.3.2 Data Collection

Data collection activities emphasized on the key aspects mentioned below:

- Ensured data quality through recruiting competent and experienced field enumerators, Trained-up them, pretested the data collection tools. Supervision of data collection, monitoring and spot-checking randomly for data quality assurance were done.
- Ensured comprehensive and valid data collection, obtained respondents' consent, gained respondents' empathy and reliability.
- Ascertained respondent's anonymity and confidentiality of data that would be used for the research purposes only.

Table 6 depicted the methods of data collection, samples and instruments of data collection:

Types of Investigation and Data Collection	**Data Collection Methodology and Sample**	**Instruments used**
For Quantitative Data Collection		
Assessment of Scope of Technical Education for the Youths in selected districts	• **385** Youths (10 selected Upazilas under 6 districts covering *Haor* areas) were interviewed. • **53** technical education teachers were interviewed.	Pre-tested, structured and Standardized Questionnaire were used.
For Qualitative In-depth Investigation		

A thorough literature review of all available documents, publications, policy and database on Technical Education	Thorough review was conducted	Standardized Checklist was used
Key Informants Interview	**40** Key Informants associated with and experts on technical education including government officials were interviewed.	Standardized Checklist was used
Focus Group Discussion (FGD)	**10** Focus Group Discussions (FGDs) was conducted where 150 participants will be attending to provide their views.	Standardized Checklist and guideline was used

Table 6: Methods wise samples and instruments of data collection

3.3.3 Study Design at a Glance

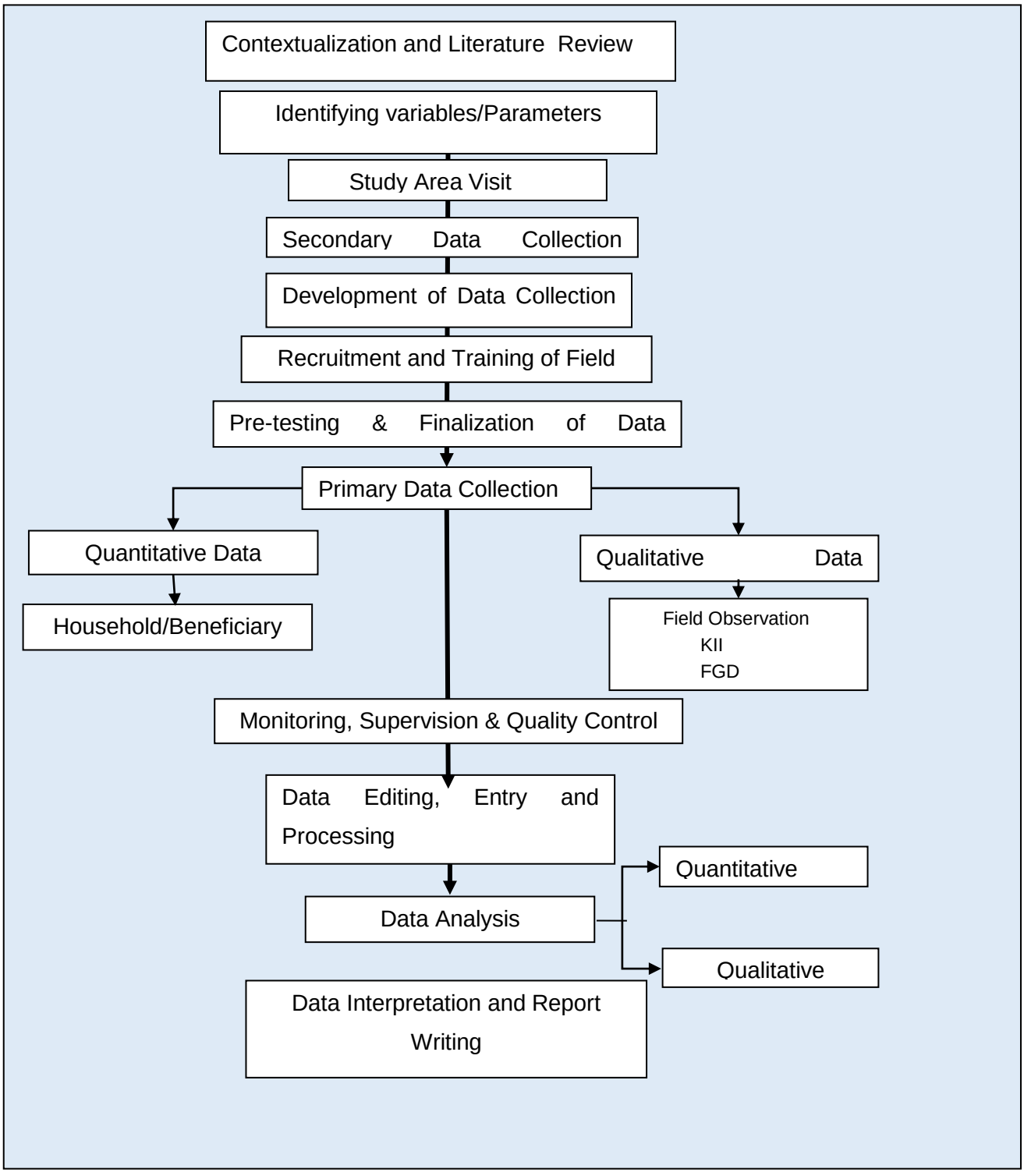


Figure 3: Study Design

(i) Data Consolidation and Processing: Every fill-in questionnaire was thoroughly checked and edited before the schedule was coded for computer entry (in SPSS). Data consistency checks were run generating frequency distribution using SPSS. Data processing work consisted of registration of all completed schedules and editing, coding, cross check, data entry and matching of data. Researcher-4 under the overall supervision of the Team Leader (Statistician) supervised the data processing activities.

(ii) Registration of Documents: There was one registration unit in the office, and the main responsibility of this unit was to keep track of the filled-in interviewing documents, information schedules, field staff movement records, performance reports and other necessary information.

(iii) Data Editing: The formation collected during fieldwork was scrutinized 100% of each interviewer's interview schedule to check the quality of the raw data. The Supervisors and Quality Control Officers were involved to edit data at field level.

(iv) Coding: Coding system was developed and all data were coded. The experts developed individual coding manual/guideline for individual questionnaire.

(v) Data Entry: Data entry was conducted by data entry operators under the supervision of Researcher-4 who were in close contact with the Team Leader (Statistician).

(vi) Data Cleaning: Data cleaning is an important procedure during which the data were inspected and erroneous data were corrected. Data cleaning was done during the stage of data entry.

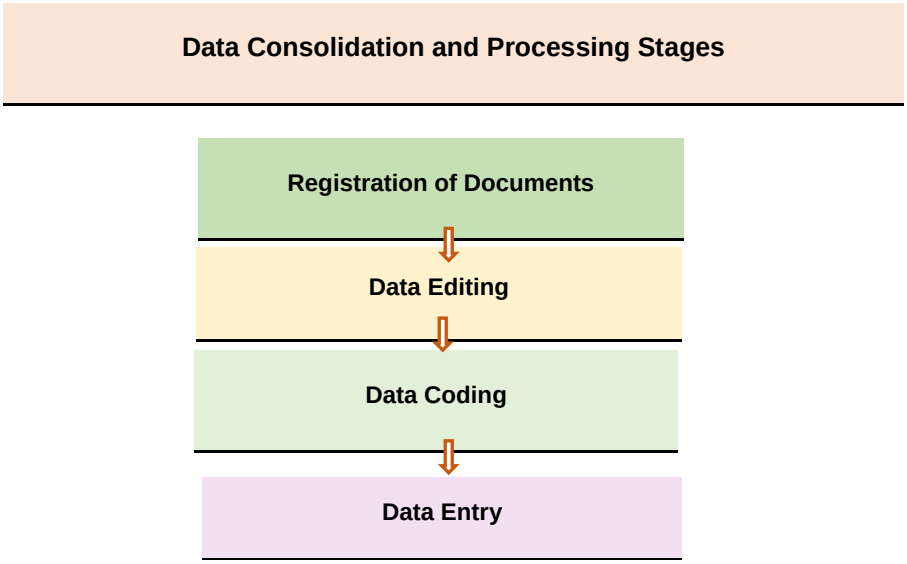


Figure 4: Data Consolidation and Processing Stages

3.3.4 Data Analysis

Data analysis was done after rigorous editing, transfer of data through coding and data entry into the computer using SPSS programme using statistical tools both bi-variety and multi-variete analysis to meet the objective level indicators of the assignment.

The ~~analysis of~~ qualitative research involves to explore, unfold and/or understand the big picture using the data to describe the phenomenon and what this means. Qualitative data refers to non-numeric information such as interview transcripts, notes, video and audio recordings, images and text documents. For this research assignment, both **Narrative analysis method and Framework analysis method were done.** The narrative analysis method involves the reformulation of stories presented by respondents taking into account the context of each case and different experiences of each respondent. In other words, narrative analysis is the revision of primary qualitative data by researcher and the Framework analysis consisted of several stages such as familiarization, identifying a thematic framework, coding, charting, mapping and interpretation.

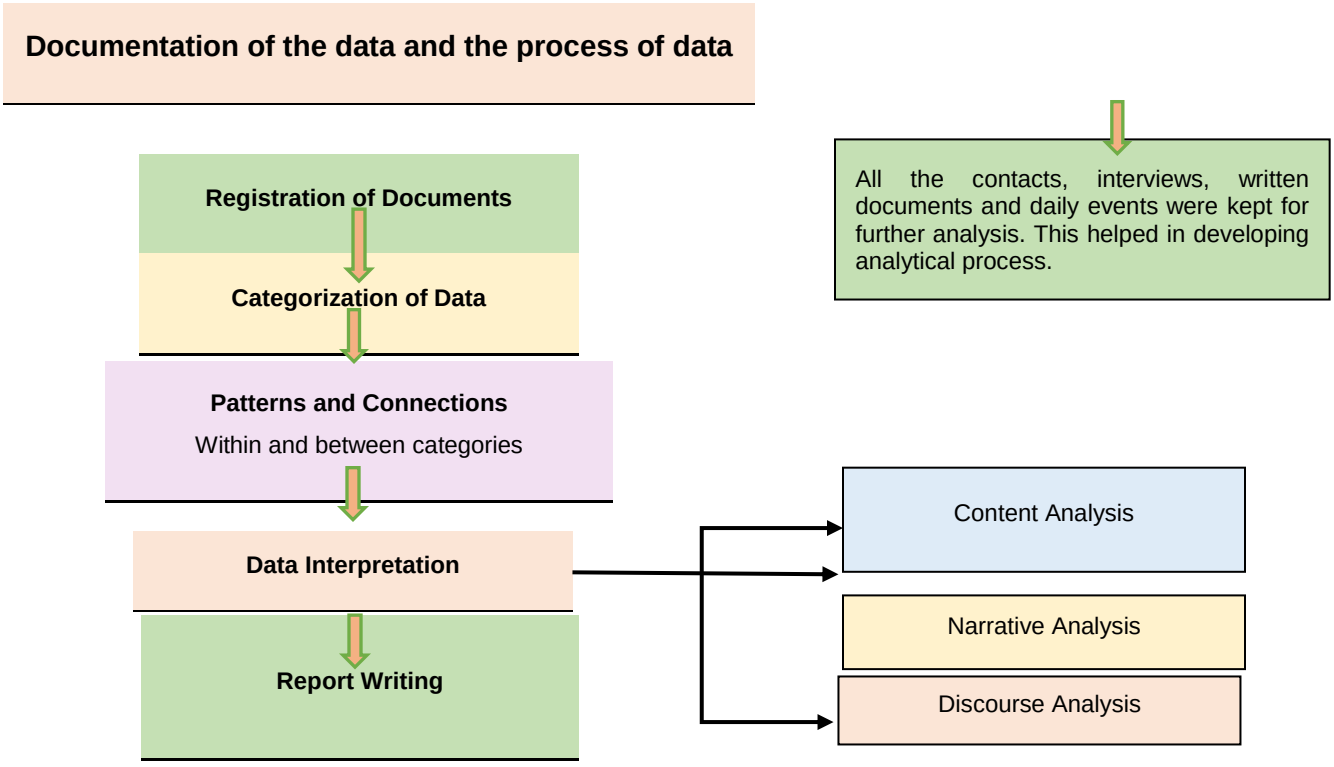


Figure 5: Data processing and analysis techniques

3.3.5 Analysis Plan

Basically, two types of analysis techniques were followed, namely;

(i) Descriptive Analysis
(ii) Inferential Analysis,

Following are the details;

Descriptive Analysis contains;

- Mathematical summary statistics (mean, standard deviation, proportion, association measurement, etc.)
- Graphical representation (Bar-chart, Pie Chart, etc.)

Proper sampling weight by stages was taken into account while in the above analysis. Such analysis was appropriate in the characterization of the obtained information.

Inferential Analysis: Confidence intervals (95%, 90% etc.) for the crucial benefit variables were constructed to enable one to understand the expected range of needs in the population. Hypothesis testing regarding difference in means, variances, proportion, etc. were also done whenever necessary.

3.3.6 Tabulation Plan

Simple tables as well as multivariate tables were constructed including various indicators of the study. All members of the core research team were involved in data analysis and writing of the draft and final report. The analysis was preceded by coding and editing of data. The quantitative part of analysis was substantiated by information obtained through the qualitative research.

INTERACTION mobilized a high-quality experienced research team including a highly experienced and qualified/knowledgeable Team Leader, Researchers, Study Coordinator, Quality Control Officer (QCO), Field Supervisors, Field Enumerators, and other required project staff immediately after being signed the contract agreement with the required qualifications mentioned in the TOR for conducting the study smoothly and to complete all the tasks within the defined timeframe.

3.4 Study Implementation

3.4.1 Review of the Project Documents

The Research Team of INTERACTION conducted a thorough review of the secondary data, and available publications. Secondary information was collected from existing data sources through literature review. A rapid background document/literature review was conducted that presented an overall idea about the assignment.

3.4.2 Developed Inception Report including Data Collection Instruments

INTERACTION developed inception report and arranged a online meeting to review the inception report which included data collection instruments within 7 (seven) days of the contract agreement. The report included study design and data collection instruments. Data Collection instruments/approaches included:

- Structured and standardized questionnaires for quantitative interviews.
- Semi-structured open-ended questionnaire for qualitative in-depth investigation with teachers and concerned programme personnel.
- Other Qualitative and in-depth data collection instruments (guideline/check-list) through FGDs, Observations and Key Informant Interview (KII).
- Documents were reviewed through examining relevant information and interpreting the findings.

These were designed by experienced and expert professionals, and then they were reviewed during training by the investigators and each instrument was thoroughly pre-tested at a comparable area outside the proposed sample spots.

3.4.3 Workshops/Meeting

- **Workshop/Meeting during development of Inception Report**: INTERACTION arranged workshop/meeting with various experts and administrators of the concerned fields in consultation with the Director General of BANBEIS to finalize the data collection instruments and sampling framework. Considering the Covid19 situation the said workshop was organized online, as per need of the situation.

- **Sharing Inception Report**: INTERACTION shared the draft Inception Report with BANBEIS for their review and feedback. A meeting was organized to discuss the report in order to the generate inputs, feedback. Necessary adjustments were made in the report incorporating the feedback; then the final version of the Inception Report was submitted for the approval of BANBEIS.

3.4.4 Recruitment and Training/Orientation

Field Survey team (Field Coordinator, QCO, enumerators and supervisors) were recruited from the reserved/enlisted pool. However, the selection criteria of this team were (a) educational attainment, (b) previous experience in working in the similar studies with communication and data collection skills, (c) reliability of the candidate, (d) skills/capacity of communication with local dialects/language. Thorough in-house training/orientation for one day was arranged for all field staff. Standard method for such training/orientation was followed. Content of the training/orientation were:

- Objectives of the study assignment
- Understanding (participator discussions, questions and answers and sharing of ideas and views) and practice of data collection instruments with role play; special emphasis was given on qualitative investigations;

- Understanding of sampling and data collection methodologies: reading, recording and comprehending data collection instruments - questionnaires, guidelines on in-depth interviews and checklists; and
- Record keeping, data checking, editing, cleaning and entry into SPSS for analysis.

3.4.5 Ensuring Quality of Training

After imparting training to more than required number of survey personnel, INETACTION were taken a written and oral test to assess the competence and understanding of each trained survey personnel. Those who qualified with their level of understanding and aptitude for going for such a research survey finally included in the team. Thus, a clear screening of each trained person was made to make sure that competent persons were included in the team. Moreover, a waiting list of trainees was kept for to use them as per requirement involved.

3.4.6 Pre-testing of Questionnaire and Checklists

The research team conducted the pre-testing of the questionnaire and the checklists. Pilot tests were carried out in non-sample schools to evaluate not only the questionnaire and checklist items, but also the quality of the interviews, the rate of and reasons for refusals, the length of the interview (including call-backs) and the overall appropriateness of the study method.

3.4.7 Field Operation and Data Collection

INTERACTION undertook all required field operation and relevant field data collection. Based on the sample size distribution the field survey/data collection activities were carried out by research team consisting of required number of Quality Control Officers (QCO), supervisors, and enumerators. Following a comprehensive plan, the enumerators completed the field works using pre-designed checklists and questionnaires.

3.4.8 Monitoring and Supervision of Field Work

The Team Leader and Research Team Members were in constant touch with the QCO, Field Supervisors and Enumerators so that they could obtain clarifications and instructions on the concepts, definitions and difficulties encountered in carrying out the field work under the actual field work operational conditions. Each Field Team were provided with one field supervisor, who carried one mobile phone for constant and regular contact with INTERACTION office to report on day to day basis on the progress of data collection. The Field Supervisor in each team was responsible for ensuring supervision and management of each team at the field level by assigning and taking stock of team's day's work by individual interviewers; arranging accommodation, coordinating with local prominent and maintaining regular liaison with INTERNACTION office at Dhaka. The Field Supervisors in addition to their functions of supervision and field management also ensured quality control checks through random interviews.

3.4.9 Field Editing

Filled-in questionnaires also were checked by the interviewers and field supervisors after completion of the interviews and before submission.

3.4.10 Quality Control

Following Lot Quality Assurance System (LQAS) a sample size of 3-5% was selected randomly for rechecking using a short questionnaire developed particularly for the purpose. Quality Control interviews were compared with the original interviews and any inconsistency was resolved accordingly. The quality control interviews were conducted by Quality Control Officers.

Data Quality Control Mechanism: Data quality control was ensured at three distinct stages:

- **During Preparatory stage**: Design of the study which includes development of study methods, selection of samples; data collection instruments (through pre-testing) re-translation; selection and training of study human power and finalization of study data collection plan.

- **During Data Collection stage:** Data collection stage, which entailed rigorous supervision and quality control interventions to ensure quality data, which means relevant and comprehensive data without incompleteness in data collection. INTERACTION ensured supervision of the data collection at various phase: team level supervisory provision for continuous guidance and checking of errors of selection the respondents, errors of conducting interviews, errors in recording responses, periodic professional supervision by specialist and experts at field level. INTERACTION team conducted short training of midlevel investigators' capacity building on data collection, and above all it ensured provisions for independent Quality Control Checks of at least 5% samples on random basis for Lot Quality Assurance (LQA). Moreover, for the present Study, INTERACTION ensured accuracy test of at least 5% of collected data immediately next day or day after with the respondents on the field by the key experts of the study.

- **During Data Consolidation and Analysis:** Data Consolidation, data editing and data entry were the next most important interventions to ensure quality of the study. INTERACTION deployed trained and experienced coders and data entry operators (for ensuring double entry of data for checking and rechecking). Data analysis was carried out keeping in view the ToR of the study. Comparing findings internally (reliability/consistencies) and also validity checkup with findings of the contemporary comparable studies were done. And in all those processes, frequent reviews of data and findings were carried out by the expert team.

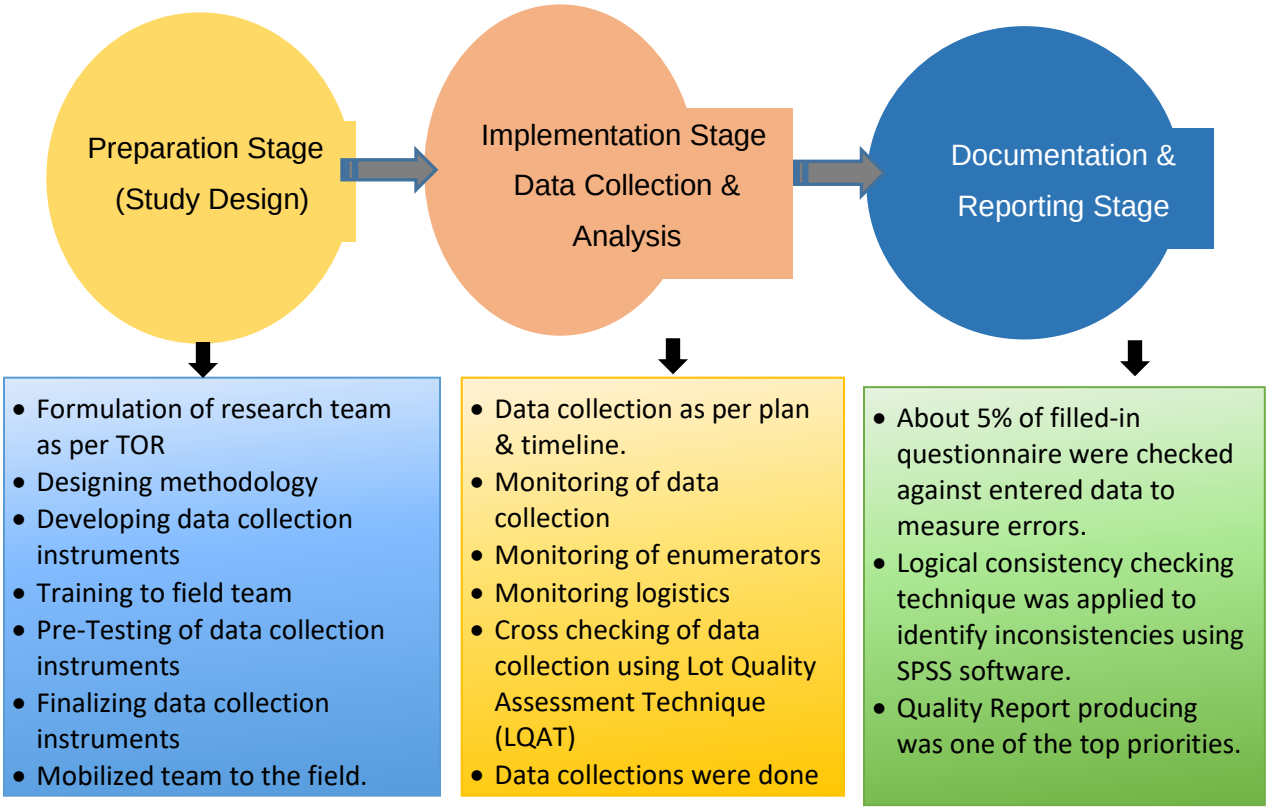


Figure 6: Data quality control mechanism

3.5 Data Consolidation and Analysis

Each filled-in questionnaire was thoroughly scrutinized, edited and checked before the schedule is coded for computer entry. Data consistency checks were run through generating frequency distribution using SPSS. Data processing work was done through registration of all the completed schedules and thereafter editing, coding, cross checking, data entry and matching of data also performed. A statistician looked after the data processing activities under the guidance of the Team Leader.

After such rigorous process of data consolidation data analysis was undertaken using statistical tools using SPSS software. Both for bi-variate and multi-variate analysis reflecting efficiencies and effectiveness were appropriately done.

3.6 Detailed Activities of the Study by Phases

Detailed activities of the study were ensured through the following phases:

- **Phase I: Preparatory Phase (1 week):** After the assignment was awarded the preparatory works were initiated which included documents review, design and finalization of data collection instruments, submission of Inception Report,

recruitment and training of human resources, pre-testing of data collection tools, obtaining request letter from BABEIS and finalizing the advance data collection plan.

- **Phase II: Data Collection Phase (10 days):** This included data collection at the field level, supervision, quality control, screening and editing of collected data at field, and conducting FGDs and KIIs.

- **Phase III: Data Consolidation and Analysis Phase (1 week)**: This phase included central registration and editing, coding, computer entry, cleaning of data and data analysis with frequency tables, administering statistical tests.

- **Phase IV: Report writing and Workshop (1 week):** This phase included preparing and submitting draft report, draft final report, arranging workshop on the draft final report, and final report writing incorporating comments/feedbacks of the workshop; printing and submitting the Final Report.

Table-7 : Detailed Work Plan with Time Duration

Main Activities	Total 5 Weeks					Remarks
	1	2	3	4	5	
Phase I: Preparatory Phase (Week 01)						
1. Mobilization of Research Team						
2. Review of secondary documents and other related documents; conduct field exercise (interviews, data collection)						All through the assignment
3. Kick off Meeting with BANBEIS						
4. Develop data collection instruments; questionnaires, guidelines and checklists						
5. Prepare Inception Report, which included detailed work plan, methodology, and sample size and data collection instruments						
6. Finalize data collection tools incorporating comments from workshops, and submit to BANBEIS						
7. Recruitment of support staff						
8. Develop training schedule and submit to BANBEIS						
9. Impart training to support/field staff for data collection						
10. Pre-testing data collection tools						
11. Submit Final data collection instruments incorporating feedback for Approval						
12. Obtain request letter from BANBEIS						
13. Develop data collection plan (field plan) and submit to BANBEIS						

Main Activities	Total 5 Weeks					Remarks
	1	2	3	4	5	
Phase II: Data Collection Phase (10 days from week 2)						
14. Conduct in-depth interviews with primary respondents (youths including technical/vocational training graduates)						
15. Conduct in-depth interviews with parents, and teachers of technical/vocational institutes						
16. FGDs with youths, technical/vocational training graduates, parents and teachers						
17. Field visits by seniors team members for supervision and quality checks						
18. Supervision and Quality Checks						
19. Field level editing of questionnaires						
Phase III: Data Consolidation and Analysis Phase (week 3 to week 4)						
20. Registration and editing						
21. Translation and shifting of qualitative data						
22. Data entry to computer						
23. Data cleaning and consistencies checks						
24. Design and construction of frequencies table						
25. Data Interpretation/Analysis						
Phase IV: Report and Dissemination (Week 5)						
26. Develop and submit draft final report including findings and data analysis						
27. Arrange workshop on the study findings						
28. Finalize and submit the Final report incorporating comments/suggestions from the workshop.						

Table 8: Sample Summary

Sl. No.	Description	Sample
1	TVET Youth-Questionnaire Survey	235
2	Non-TVET Youth-Questionnaire Survey	140
3	Persons/ Youths With Disability (PWDs) Survey	10
4	Faculty/Teachers Level Questionnaire Survey	60
5	Focus Group Discussions	10
6	Key Informant Interviews	40

Table 9: District and Upazila-wise Data Collection List

District	Upazila	TVET Youth-Questionnaire Survey	Non-TVET-Questionnaire Survey	Person (Youths) with Disability (PWDs)	Faculty / Teachers Level Questionnaire Survey	Focus Group Discussions (FGDs)	Key Informant Interviews (KIIs)
B' Baria	Nasirnagar	20	20	0	6	1	4
Kishorganj	Mithamoin	10	10	0	3	1	2
Sylhet	Sylhet Sadar	50	40	3	20	1	13
	Zokiganj	15	15	3		1	
Hobiganj	Baniachong	20	20	3	9	1	6
	Azmiriganj	10	10	3		1	
Maulvi Bazar	Raznagar	25	20	2	16	1	10
	M'Bazar Sadar	25	20	2		1	
Sunamganj	Sullah	10	10	2	6	1	5
	Derai	15	15	2		1	
Total		**200**	**180**	**20**	**60**	**10**	**40**
		400			**60**	**10**	**40**

3.7 Challenges and Limitations of the Study

The study was conducted through completing all stages successfully however the study team faced but overcome some of the challenges to reach final stage of the study. Followings were the key challenges and limitations:

The Covid-19 context: The field work was conducted during the Lockdown period when mobilization of field team was a great challenge considering the government-imposed restriction on the physical movement across the country. Keeping in mind such a situation the field team (enumerators) were given a thorough orientation on the study topic, work plan and methodology, and data collection instrument in Dhaka. All the study team members including

enumerators were aware of the Covid-19 context and government-imposed regulations. The health guidelines were followed like maintaining social distance, wearing musk, using sanitizers, etc.; and avoiding physical interaction like shaking hands, using one's pen, board, seat by others, etc. Considering the protection of the enumerators and respondents, enumerators were provided with adequate number of face musk, sanitizer, etc. In addition to that, one separate session was conducted with field enumerators on the techniques to maintain social distancing and other protective measures while conducting interview with the respondents and staying at field.

However, considering the challenges to reach the respondents during such an unusual and difficult time, only well-experienced enumerators were recruited so that they could apply their innovative skills to complete their assigned tasks at the field. All this consideration required more time, resources and efforts from the study team to complete the study successfully.

The closure of the educational institutes: The closure of the educational institutes including TVET institutes during Covid-19 created another major challenge to face for the study. The field team faced the following specific reality while stepping up to the field:

- majority of the respondents were scattered as they were stayed at their villages instead of urban locality or in their institutes;
- some respondents got involved in activities other than their study and were unable to spare time for the interview;
- few of the respondents even migrated from their home to other towns for the purpose of looking for paid work to support their family during the hard time.

In such a context, the enumerators had to travel long way to reach the respondents. In some cases, one enumerator could conduct only one face-to-face interview in a day, which required additional time and budget for completing the field work.

Chapter 4: Results/Findings and Analysis

4.1 Introduction

In order to materialize the objectives of the study, the study covered respondents from multiple socio-demographic backgrounds. Respondents' categories included running/ongoing TVET trainees, TVET graduates, non-TVET students, Instructors/Faculty members, representatives of institutes (administrative), and TVET experts covering both male and female gender identities from different age groups.

4.2 Socio-demographic information about the respondents

4.2.1 Sex and age of the respondents:

Although it aimed to maintain gender balance among the respondents, it was difficult to reach the expected number of female participants due to some unavoidable reasons, e.g., restriction for movement during covid-19 situation, and the lower rate of female participants in the TVET courses. In some cases, targeted female respondents were reluctant to physically meet the enumerator due to Covid-19 and closure of their TVET institute, although they were given options to choose their own and comfortable places. As a consequence, the participation of male respondents in the study was higher. To present the data more specifically, the percentage of male and female respondents were respectively 63.2 and 36.8 among the students/trainees, where among the faculties/instructors the gap between male (94.3%) and female (5.7%) was higher than that of the student category.

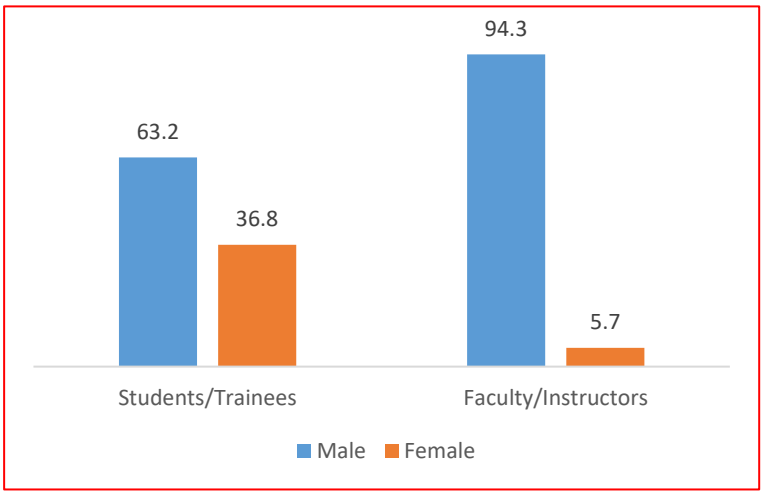


Figure 7: Sex of the respondents (%)

Furthermore, while looking at the age-groups of the respondents (trainees/students), particularly to understand their interest in TVET for the career development and employment, it was found that their average age was 20 years, where their minimum age was 13 and the maximum was 37 years.

4.2.2 Occupational background:

Occupation of both students/trainees and faculty level respondents were recorded to explore the socio-economic background more contextually. Among the trainees, the majority of them were

students who were still studying in different TVET and non-TVET institutes. The other occupational groups included Housewife, Businessman, Farmer/peasant, Veterinarian, Mobile servicing operator, Job-holder, Farm owner (khamari), Garment worker, Driver, and Unemployed.

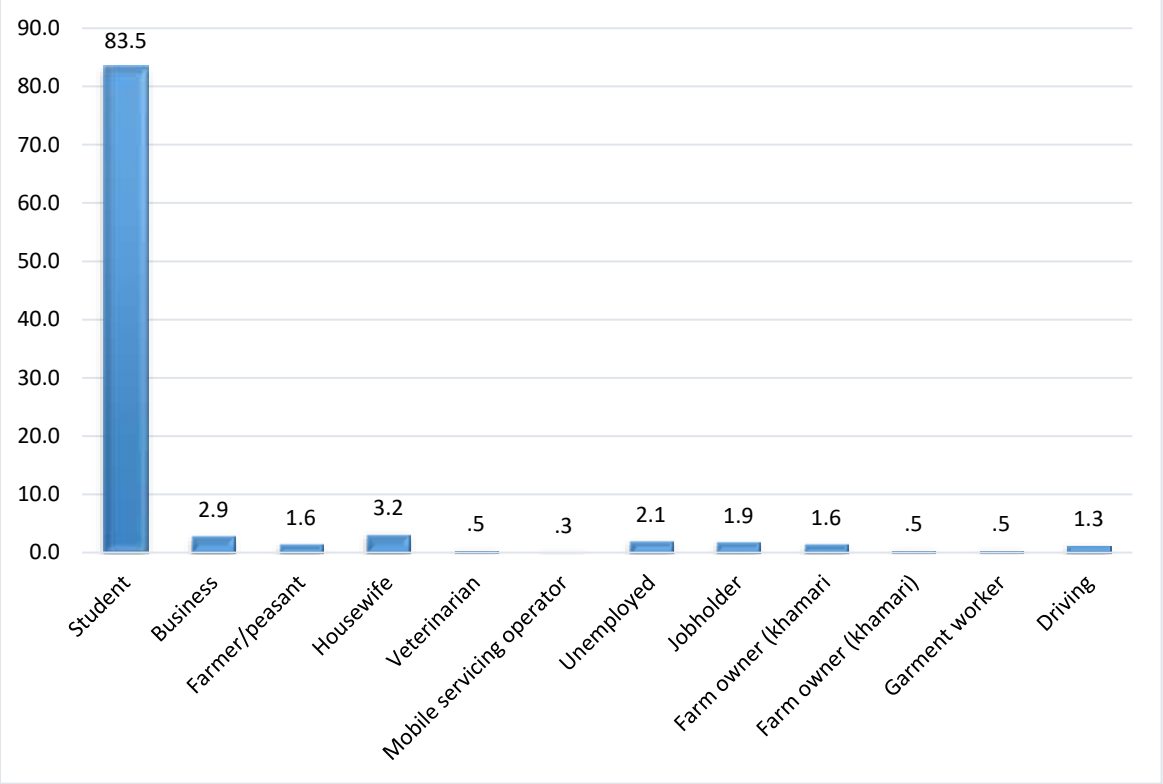


Figure 8a: *Occupation of the respondents (%)*

Among the other respondents from faculty group, on the other hand, majority of the respondents were Junior Instructors (47.2%) and mid and senior instructors (22.3%)

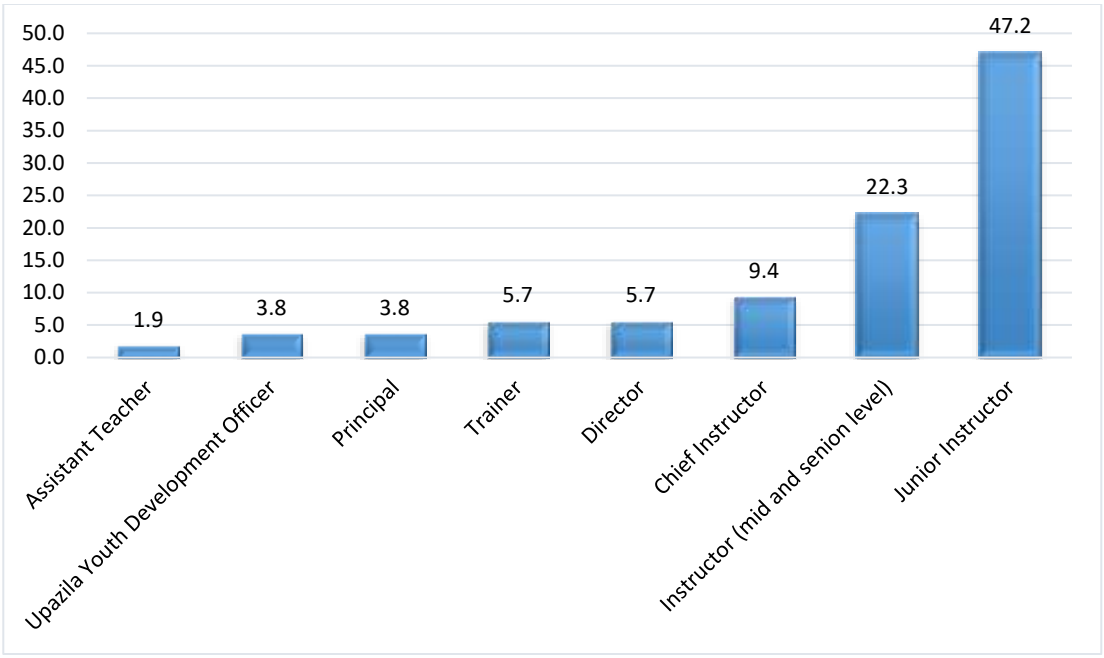


Figure 8b: Occupation of the respondents (%)

4.3.Tyes of TVET Institution Covered

4.3.1 Status/Profile of TVET service providers surveyed, and their services

During the survey, in 6 selected districts, a total of 23 Institutes/TVET service providing organizations were surveyed which are listed in Table 8.

Table 8: District and management-wise names of Institutes/Organizations

District	Management	Name of Institute
Maulvi Bazar	Government	Moulovibazar Polytechnic Institute
		Department of Youth Development
		Moulovibazar Technical School & College
		Moulovibazar Technical Training Center
		Technical Training Center for Orphan & Disable Girl's
		Moulovibazar Technical School & College
	Private	Rangdhanur Satrong
Sylhet	Government	Sylhet Technical School & College
		Sylhet Polytechnic Institute

District	Management	Name of Institute
B' Baria	Government	Brahmanbaria Polytechnic Institute
Kishorganj	Government	Kishoreganj Polytechnic Institute
Habiganj	Government	Habiganj Polytechnic Institute
		Habiganj Technical School & College
	Private	NS Computer Training Center
		Sufia Motin Technical school& college
		Bangla Telecom
		Srabonti Electronics
Sunamganj	Government	Sunamganj Technical School & College
	Private	Bihaa Computer Training Institute

Figure 9: District-wise percentage of Government and privately managed TVET/Skills Training Service providers surveyed

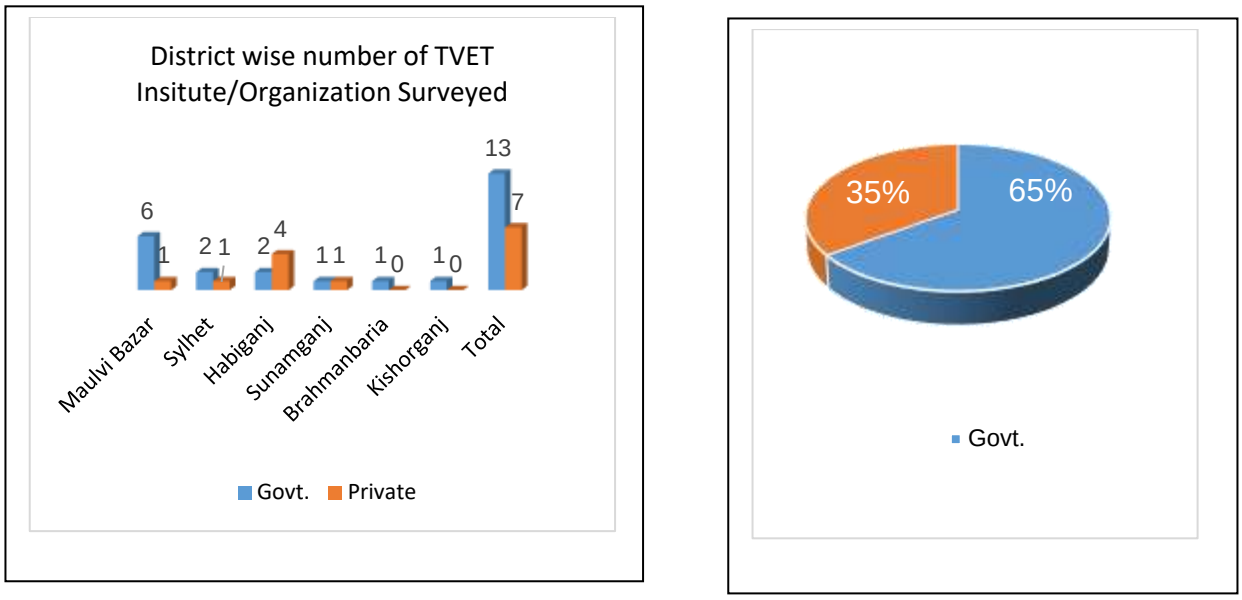


Figure 9: District-wise percentage of Government and privately managed TVET/Skills Training Service

Out of the total 20 TVET/Skills Training Providing organizations/institutes 13 Institutes are run by Bangladesh Government and 7 institutes are run by private initiatives, i.e., 65% were government institutes and 35% were private institutes those surveyed. It is to be noted that there were some skills/IGA training service providers, e.g., Department of Women Affairs, and Social Welfare Department were also under the survey in the said 6 selected districts.

Table 9 depicted the Upazila-wise TVET/Skills Training Service Providers surveyed

District	Upazila	No of Institutes	Type	
			Government	Private
Maulvi Bazar	Raznagar	1	0	1
	M'Bazar Sadar	5	1	0
Sylhet	Sylhet Sadar	2	2	0
	Zokiganj	1	1	0
Habiganj	Baniachong	2	0	2
	Habiganj Sadar	2	2	2
	Azmiriganj	0		
Sunamganj	Sunamganj Sadar	4	2	2
	Derai	1	0	1

District	Upazila	No of Institutes	Type	
			Government	Private
	Sulla	0	0	0
Brahmanbaria	Nasirnagar	1	1	0
Kishorganj	Mithamoin	1	1	0

Table 9: Upazila-wise distribution of TVET/Skills Training Service Providers

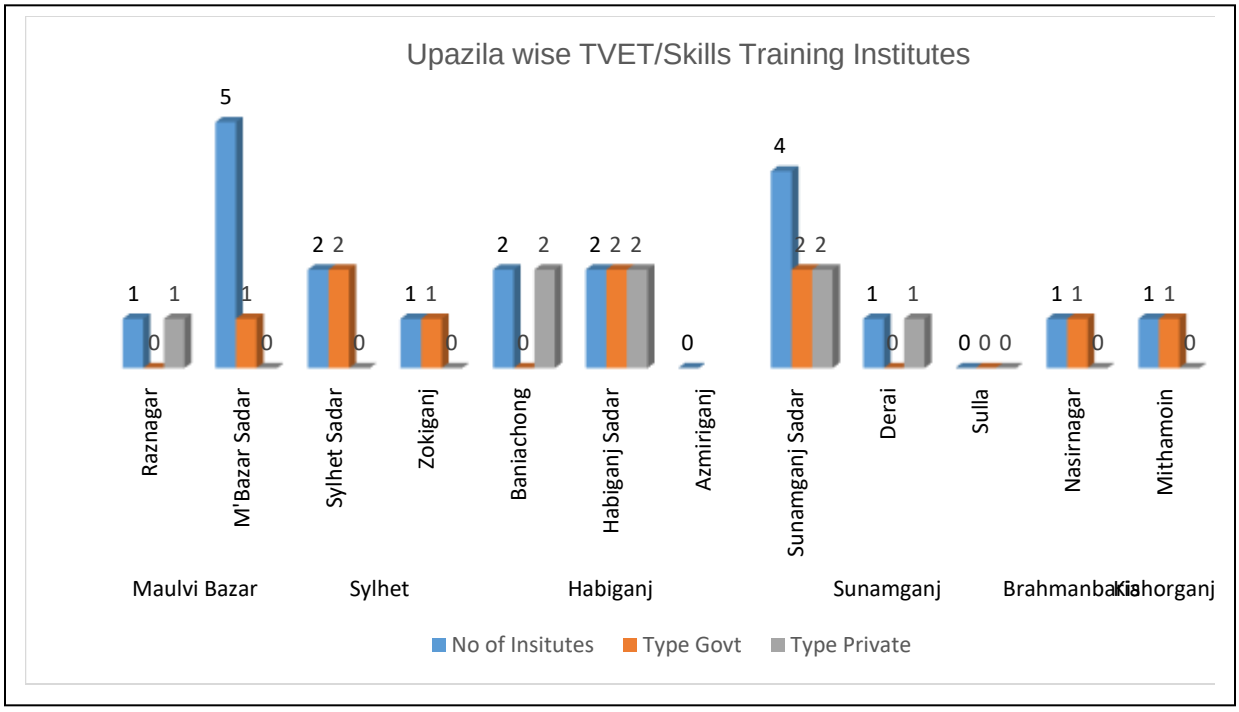


Figure 10: Upazila-wise distribution of TVET/Skills Training institutes

Table-1.2. Geographical Locations of the Training Institutes

Table 10: Geographical locations of the training institutes (Numbers)

District	Location		
	Plain Land	Hill Area	Haor Area
Maulvi Bazar	4	2	1
Sylhet	3	0	0
Habiganj	6	0	0
Sunamganj	2	0	0
Brahmanbaria	1	0	0
Kishoreganj	1	0	0

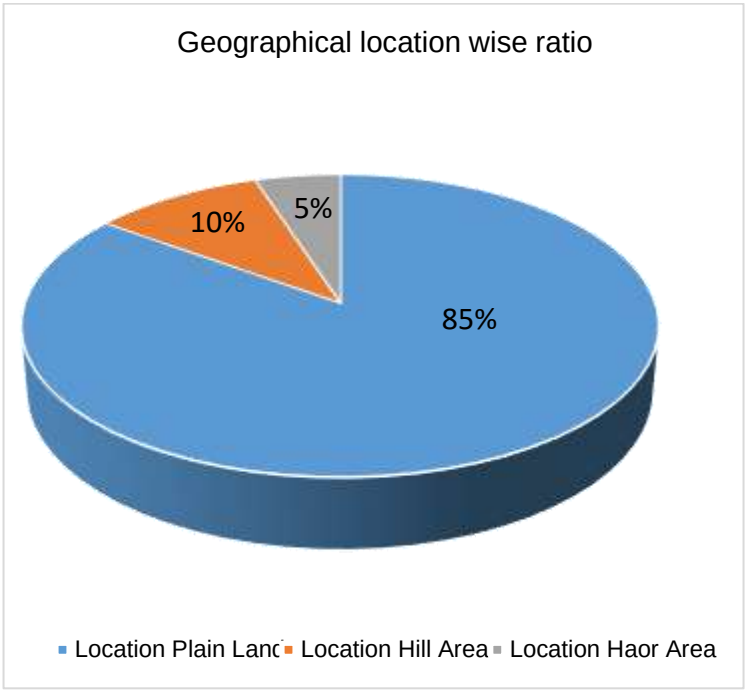


Figure 11 Geographical location wise ratio

From the findings, it is observed that most (85%) of the Institutes were located either at district level and/or on plain land, 10% of the total were located in/near hilly areas, and only 5% training institutes were located in *Haor* areas.

4.3.2 Most popular training trade

The survey revealed that the Computer and Networking is the most popular training trade. Respondents from different areas were asked about the type of trades they received training on. They have mentioned different trades which included Computer and networking; Cattle rearing/Farming (cow, goat, etc.); Welding machinery work (workshop); Electrical; Tailoring/Sewing; etc. Among all the categories the 32% of the total respondents reported to receive their training on Computer and Networking indicated as the most popular training trade among the respondents.

4.3.3 Different trades the respondents received training on

The Figure 12 reflected the percentage of different trades the respondents received training on:

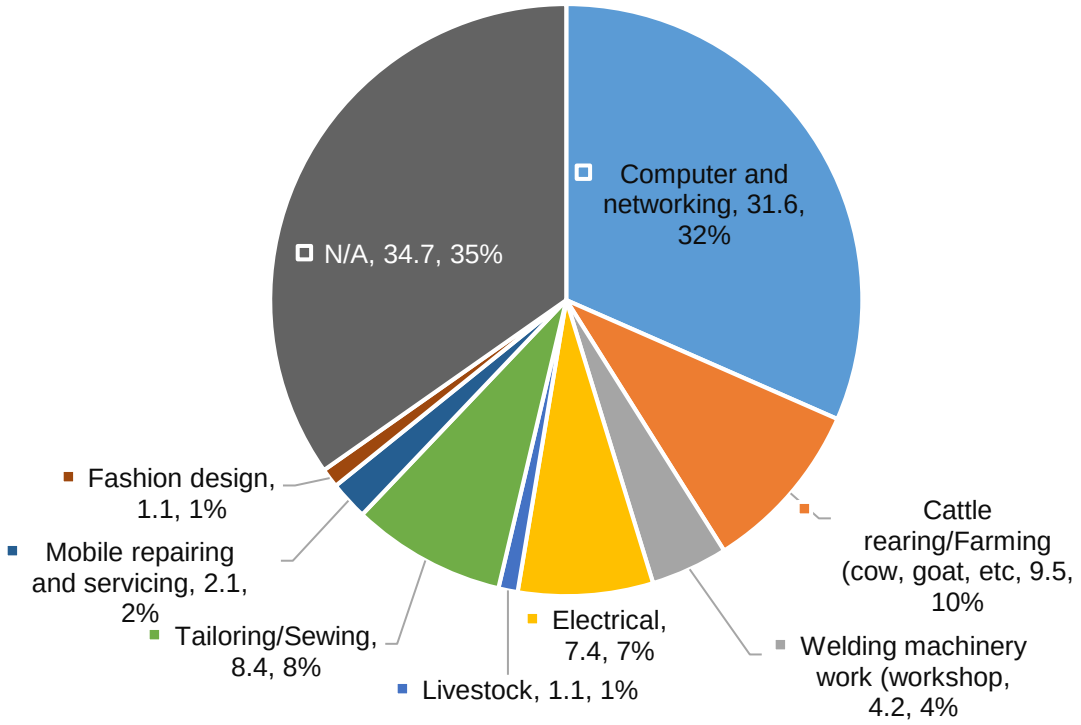


Figure 12: Type of trades on which the respondents received their training (%)

The gender segregated data provided a feature about the current trend and demand of different training trades received by male and female respondents. The **Figure 13** showed that the training on Tailoring/Sewing was taken only by female participants (100%), while the training on Fashion Design, Mobile Servicing, and Livestock were received only by male participants (100%). In other trades the percentage of recipients varied between male and female respondents.

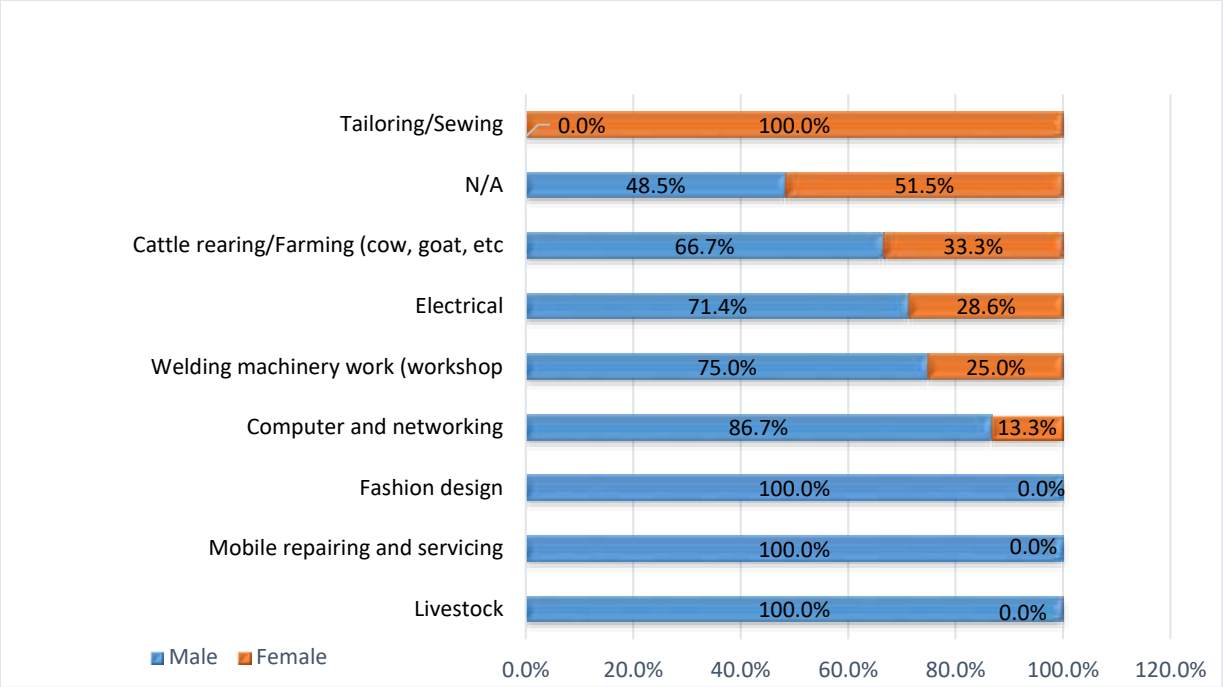


Figure 13: Percentage of type of training trades by gender

4.3.4 Information about shift of class, campus, branch

This study was also explored some other issues like the number of shifts the institutes conducted classes to understand the scope of the training courses more clearly. As data revealed, all studied institutes (94%) except 2 (6%) conducted classes in double shifts for some specific courses. Table 10 illustrated the name of the institutes those offered classes in double shift,

Table 10: Institutes offered shifts

District	Management	Name of the Institute	Shift (S)
Moulvibazar	Government	Moulvibazar Polytechnic Institute	Double shift
		Moulvibazar Technical School & College	
		Moulvibazar Technical School & College	
		Department of Youth Development	
		Moulvibazar Technical Training Center	
		Technical Training Center for Orphan & Disable Girl's	
	Non-government	Rongdhonur Satrong	
	Co-ed. combined	Moulvibazar Technical School & College	
Sylhet	Government	Sylhet Technical School & College	
		Sylhet Polytechnic Institute	
Brahmanbaria	Government	Brahmanbaria Polytechnic Institute	
Kishoreganj	Government	Kishoreganj Polytechnic Institute	
Habiganj	Government	Habiganj Polytechnic Institute	
		Habiganj Technical School & College	
	Non-government	Bangla Telecom	

		Srabonti Electronics	
		Ns Computer Training Center	
Sunamganj	Government	Sunamganj Technical School & College	
	Non-Government	Bihaa Computer Training Institute	
Moulvibazar	Government	Department of Youth Development	**Single shift**
Habiganj	Non-Government	Sufia Motin Technical School & College	

Respondents from all training institutes or service providing organizations surveyed/studied reported that they did not have any other branches. In addition to that, they also reported about their campuses, which revealed that 78% of the surveyed institutes operated at their own campuses where the other 22% in rented campuses.

Table 11: Name of institutes by type of campus

SL. No	Name of the institute	Type of campus
1	Sylhet Technical School & College	Own Campus (78%)
2	Sylhet Polytechnic Institute	
3	Moulvibazar Polytechnic Institute	
4	Department Of Youth Development	
5	Moulvibazar Technical School & College	
6	Moulvibazar Technical Training Center	
7	Habiganj Polytechnic Institute	
8	Technical Training Center For Orphan & Disable Girl's	
9	Habiganj Technical School & College	
10	Sufia Motin Technical School & College	
11	Rongdhonur Satrong	
12	Brahmanbaria Polytechnic Institute	
13	Kishoreganj Polytechnic Institute	
14	Sunamganj Technical School & College	
1	Bihaa Computer Training Institute	Rented Campus (22%)
2	Ns Computer Training Center	
3	Bangla Telecom	
4	Srabonti Electronics	

4.3.5 Services and activities during Covid-19

The educational institutes including training institutes have been remaining closed in Bangladesh since March 2020. After the identification of the first case of covid-19 in March 8, 2020, all educational institutes including training institutes were close on March 17, 2020. Despite the government decisions, some institutes provided their services using some other options like online classes, consultation, etc. The present study also tried to address which activities including classes, practical exercises and test that the studied institutes provided during the period. The Figure 14 showed that in most of the cases, the surveyed institutes conducted online classes where "consultation with the students about their study" was mentioned in 62% of the cases. In 9.4% of the cases, they could not take any initiatives during lockdown. Qualitative data also revealed that many of the students did not have access to the internet due to their geographical location and economic condition; therefore, they did not have access to the online classes. Some of them practices their lessons at home on their own and consulted with their instructors over the phone if required.

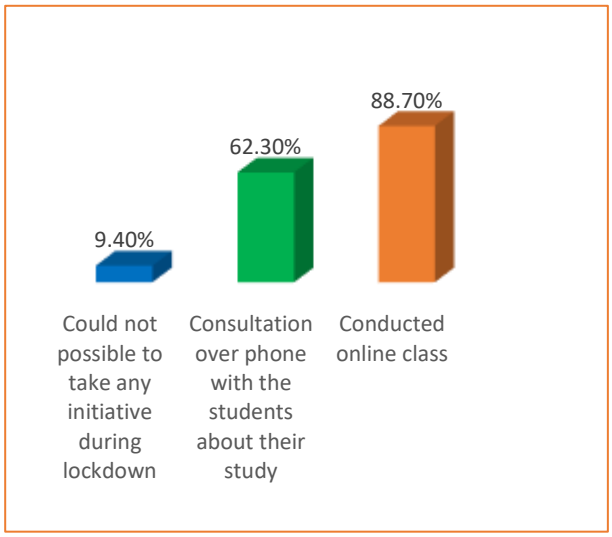


Figure 14: Services and academic activities during covid-19 lockdown (% of cases)

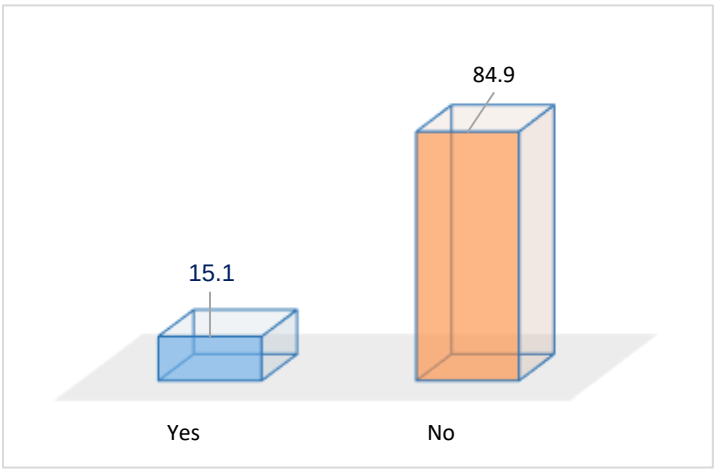


Figure 15: Percentage of institutes took online test

Moreover, while exploring whether the institutes took their tests online or not, majority of the institutes were found not to have taken any tests (84.9%) but they have conducted online classes and, in some cases, provided online/over-phone guidance and consultation to their trainees. Some instructors argued that online test is not applicable for all the students as they all did not have similar access to the internet.

One respondent (instructor from Sunamganj) mentioned:

"Look, the scenario of the Sunamganj town and of a remote village of the district cannot be compared in any means. As you may know, these areas are one of the poverty-affected regions of the country. In some certain period of the year, they do not even enjoy the access to their basic rights. It is not possible for them to attend classes either physically or online."

One of the respondents (instructor from Sunamganj)

4.4. Objective 2: Reflect on the school, to work transition readiness of existing courses

4.4.1 Employment after completion of training:

To explore the effectiveness of the TVET in terms of creating opportunities for getting job in the existing labor market of Bangladesh, the study attempted to assess the trend of employment after completion of TVET from different government and non-government institutions. Following figure illustrates that around one-third (32.7%) of the TVET Graduate found job, while the respondents who completed SSC/HSC, nobody of them reported to receive a job.

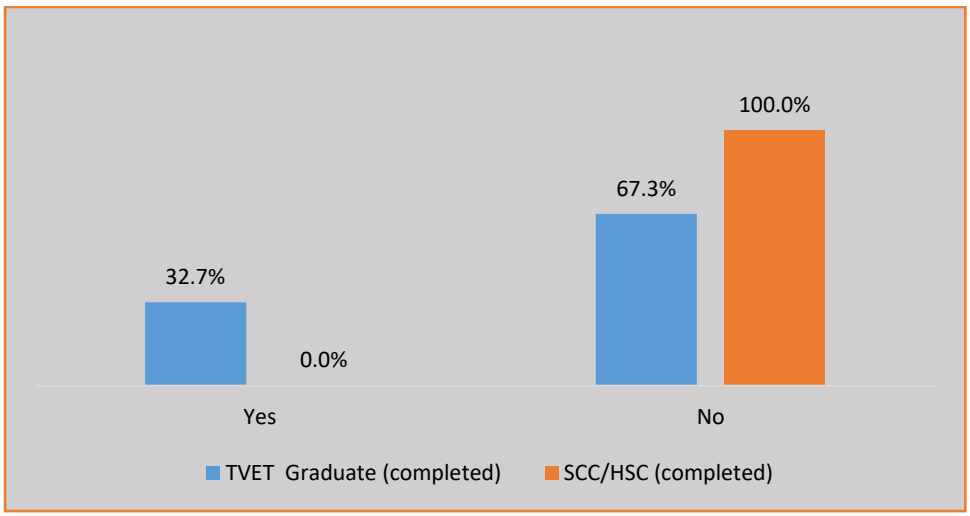


Figure 16: Percentage of respondents who found job after training (*% within the type of respondents)*

4.4.2 Trend of getting employment after completion of training (by gender):

The gender segregated data on the trend of employment after TVET courses provided a general picture of how TVET contributing to women's employment besides that of their male counterpart. Figure 7 shows that the employment after the TVET was slightly higher among the male participants than the female participants.

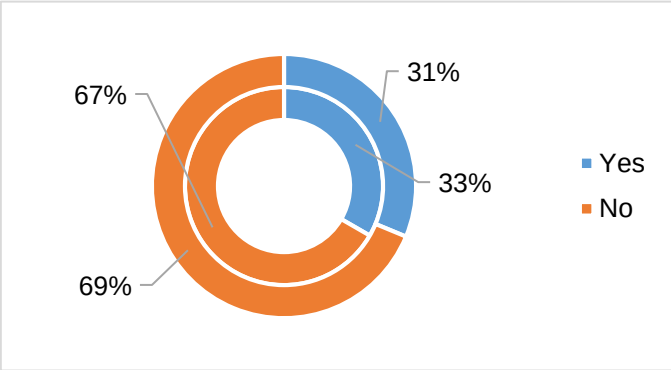


Figure17: Trend of employment after training (by gender)

4.2.3 Percentage of employment by type of trades

To understand the scenario more specifically, the rate of employment has been studied by type of trades. Table 12 showed that Computer and Networking provided the highest employment (0%) among all type of trades; cattle rearing is next to it (8%).

Table 12: Percentage of employment by trades

Type of Trades	Yes	No	Total
Computer and Networking	10.0%	32.0%	42.0%
Cattle Rearing/Farming (Cow, Goat, etc.	8.0%	8.0%	16.0%
Tailoring/Sewing	6.0%	10.0%	16.0%
Electrical	0	10.0%	10.0%
Welding Machinery Work (Workshop	4.0%	4.0%	8.0%
Mobile Repairing and Servicing	0	4.0%	4.0%
Livestock	2.0%	0	2.0%
N/A	0	2.0%	2.0%
Total			**100.00%**

4.4.4 Steps taken by graduates for employment after training

To explore the scopes of employment after the TVET in a broader sense, respondents were asked about the steps they took to create their employment after completion of their training. Surprisingly more than half of the respondents replied that they took no steps after their training. On the other hand, those who attempted to create employment, the highest percentage started "Training Related Business" (31%). Some also did other type of Jobs (6%) and Businesses

(6%) which were not related to their training. Those who could not utilize their knowledge and skill gained through the training or those who started type of business and jobs other than the trades they received training on, 85% (not mentioned in figure) of them claimed that they did not find such demand of those trades in the existing market.

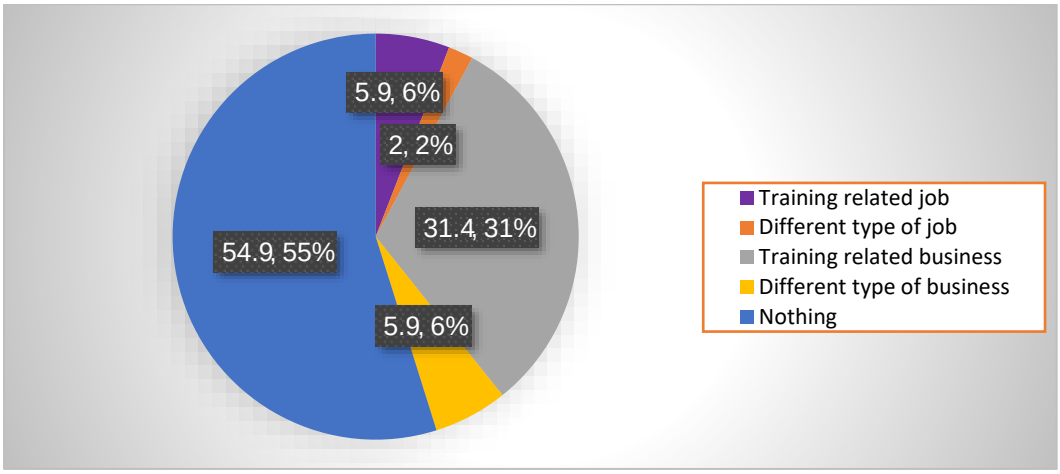


Figure 18: Steps taken by graduates for employment after training

4.4.5 Time span required the by graduates to get employment after receiving the training

In order to examine the impact of the training and the time gap from the completion of training to entrance into the job was considered important in this study. It was also indicated the readiness of the courses through placing in job or developing entrepreneurship for creating employment and income generation. Among the graduates who found employment (both job and self-employment), more than half of the respondents reported that they required only one month (56%) to be employed after completion of the training. On the other hand, some 12% required long time (above 6 months) for the same.

While discussing this issue more in detail in FGD and KII, it was reported that the course and the level of skill played significant role in creating employment. For example, if the graduates could receive their training on a certain course that had market

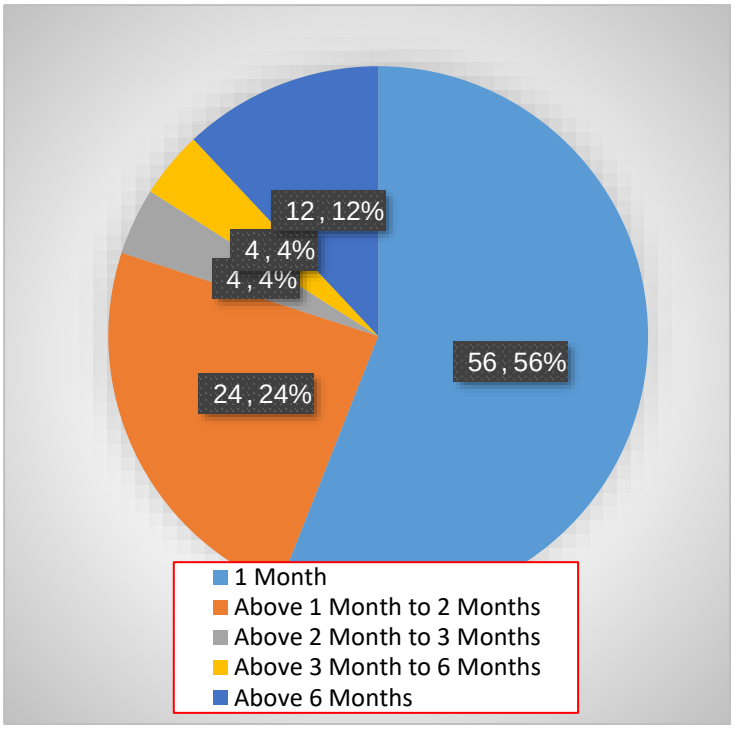


Figure 19: How much time the graduates required to get employed

demand, and simultaneously, the trainees could prove their skills, they could get employment within very short time like 1 to 2 months.

4.4.6 Gap between perception, expectation and reality (employment and market demand):

This study identified the relation between the perception and expectation of the trainees and their post-training realities particularly in the aspect of their employment and scope of utilization of their acquired skills. When the TVET graduates were asked to answer their opinion about the job demand for the courses in which they participated, around two-third of them opined that they were "sure" that their respective courses had a certain demand in the market. On the

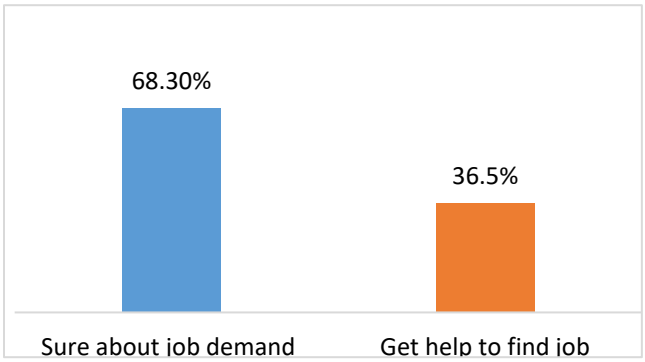


Figure 20: Gap between perception, expectation and reality

contrary, when they were further asked whether their courses helped them to find job after completion of their training, around one-third of them replied positively. Data, however, reveals that most of the graduates did not find employment as per their perception and expectation in reality.

However, this issue was further analyzed comparing the opinion between the instructors and the trainees. Like the graduate respondents, instructors also opined that the courses were relevant with the current labor market.

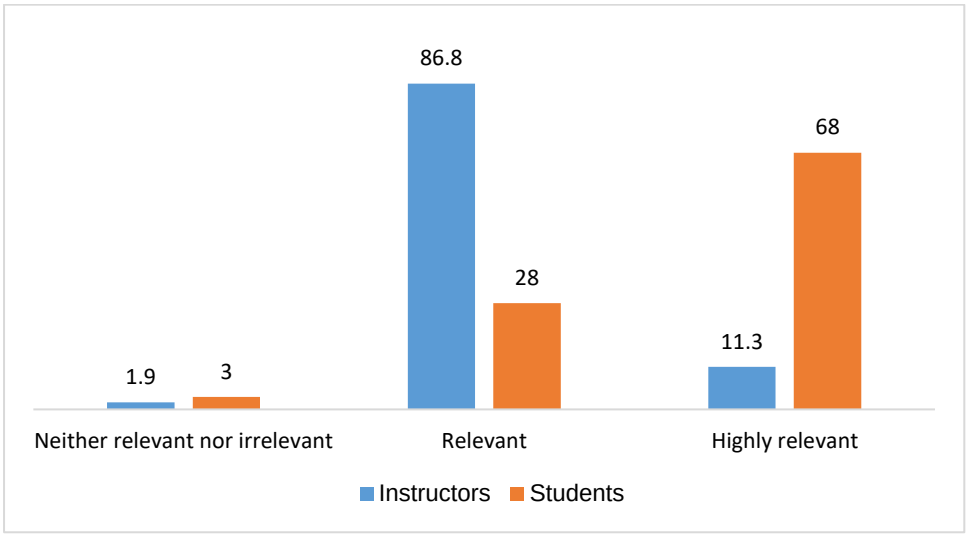


Figure21: Opinion about the relevance of the course with the labor market

In mentioning the reasons of such gap between pre-perception and employment, and gap in application and scope of utilization of the knowledge and skills that the graduates acquired from the training, instructors focused on the following reasons:

- They thought that all the students could not learn in the same way. There were always some “slow learners” and some “fast learners” but there were no additional options or enough extra classes for the slow learners in most of the training courses. Therefore, some students could not develop the skills adequately.
- Students lack in adequate information about the market and scope of applications of their courses trained.
- Some selected their courses following their friends or familiar persons. Therefore, they usually lost their interest at some point of their courses.

Furthermore, such gap between the expectation of trainees and reality was not observed only in the cases of finding employment, but also in the cases of having scopes of receiving training as per expectation and preference. For example, **Table 13** showed that nearly two-third of the respondents reported that they could not receive their training by their choice. While asking about the causes, majority of them mentioned “Lack of relevant training center and facilities” in their nearby areas.

Table 13: **Respondents could not receive training by choice and its reasons**

Responses	Percentage
Yes	35.9
No	64.1
Total	100
Poor Economic Condition	48.0
Lack of Training Center and Facilities	52.0
Lack of Facilities	23.5
Total	100.0

One young female FGD participants stated:

> ”It is very difficult even for a male trainee to attend the class at a district level institute. Can you imagine how difficult is this for a female trainee? In many of our *Haor* areas, situation of movement gets worse during July to October. In many places, we have only boat as a means of transportation which is slower and time-consuming transportation comparing to the other normal vehicles. Therefore, we could not choose our expected courses which ran during this period.”
>
> *One of the female FGD participants (24)*

In addition to that some other youth FGD participants mentioned that they could not select the courses on their own choice due to their long duration. They claimed, in some cases, they looked for short-term courses but did not find it as per their need.

4.4.7 Instructors/faculty members’ opinion on suitable courses for future market demand

With the pace of development in Bangladesh the demand of skilled labor is increasing day by day. Considering this national importance this study tried to explore the courses which would be useful to meet the future demand. Here the opinions of the instructors or faculty members who were involved in TVET courses in the surveyed institutes/service providing organizations are reflected. They have answered in multiple responses. **Table 14** presented the top ten answers which depicted that each of the Electrical and Civil courses ranked as first choice as demand-

driven courses, 34%, followed by Basic Computer (30%), Mechanical (28%) and Refrigerator and Air Conditioning (25%).

Table 14: Instructors/faculty members' opinions on suitable courses for future market demand (multiple responses)

Courses	N	Percent of Cases
Electrical	18	34.0%
Civil	18	34.0%
Computer Basic Learning	16	30.2%
Mechanical	15	28.3%
Refrigeration& Air Conditioning	13	24.5%
Food Processing	12	22.6%
Automobile	10	18.9%
Diver Cum Auto-Mechanics	10	18.9%
Electrical House Wiring	9	17.0%
Welding Machine	8	15.1%

Table 15: Instructors/faculty members' opinions on suitable courses for future market demand (in single response)

Courses	Percentage
Electrical	8.50%
Civil	8.50%
Computer Basic Learning	7.60%
Mechanical	7.10%
Refrigeration & Air Conditioning	6.20%
Food Processing	5.70%
Automobile	4.70%
Diver cum Auto-mechanics	4.70%
Electrical House Wiring	4.30%
Welding Machine	3.80%
Graphics Design	3.30%
Hotel Management	3.30%
Tailoring	2.80%
Power Plant	2.40%
Freelancing & Outsourcing	2.40%
Mobile Phone Servicing	1.90%
Electronics	1.90%
Plumbing & Pipe Fittings	1.90%
Garments Design & Pattern Making	1.90%

Courses	Percentage
Fish Culture, Breeding & Fish Processing	1.90%
Tiles & Marble Fitting	1.40%
Tourism & Hospitality Management	1.40%
Training on CNC Led & CNC Milling Machine	0.90%
Bakery & Cooking	0.90%
Environmental Studies	0.90%
Ship building & Maintenance	0.90%
Aeronautical Engineering	0.90%
Web Design/ Web Development	0.90%
Poultry Rearing	0.90%
Game Animation	0.90%
Patient Care	0.50%
Wood Polishing	0.50%
Electro Bio-medical	0.50%
Digital Marketing	0.50%
TV & Radio Repairing	0.50%
Ceramics	0.50%
IT Sector	0.50%
House Keeping & Laundry	0.50%
Beautification & hair Cutting	0.50%
Android App design	0.50%
Total	**100.00%**

Considering the geographical variation in the studied area, it was an important question that the scope of particular courses be varied among the areas. Table 15 shown the area-segregated data which reflected that Tourism and Hospitality, Hotel Management and Computer Basic were the most demand-driven courses in at least 4 (out of 6) studied districts. These courses were anticipated to have future demand in the studied areas. Since these districts are most well-known tourist areas in the country the tourism related courses were considered as the best potentials.

Table 15: More useful new courses in the area (top 5 multiple answers)

	MOULVIBAZAR	SYLHET	B' BARIA	HABIGANJ	SUNAMGANJ	KISHOREGANJ
Tourism & Hospitality	7.70%	20.00 %	60.00%	18.20%	25.00%	
Food Processing	23.10%	40.00 %	-	-	50.00%	-
Electrical Maintenance	15.40%	-	-	-	-	-
Driver Cum Auto-Mechanics	15.40%	-	-	45.50%	-	-
Hotel Management	23.10%	26.70	40.00%	-	25.00%	-

	MOULVIBAZAR	SYLHET	B' BARIA	HABIGANJ	SUNAMGANJ	KISHOREGANJ
		%				
Tea Technology	-	13.30 %	-	-	-	-
Software Development	-	26.70 %	-	-	-	-
Computer Basic	-	-	40.00%	27.30%	25.00%	100.00%
Refrigeration & Air Conditioning	-	-	40.00%	-	-	-
Electro Bio-Medical	-	-	20.00%	-	-	-
Automobile	-	-	-	36.40%	-	-
PLC	-	-	-	36.40%	-	-
Fish Processing	-	-	-		25.00%	-

4.4.8 Current limitations of the training institutes

This study tried to identify the challenges or limitations faced by the training institutes or the service providing organizations. In this regard, respondents from both instructors/faculty members and students/trainees' groups were asked if they observed any challenge or limitation in the TVET training courses. The responses were varied among the type of respondents. Figure 21 showed that the TVET graduates, nearly 20% observed limitations, while none of the running students observed the same. Moreover, while the highest portion of TVET graduates (60%) were found not to observe any limitation, almost all the respondents among the running students were not sure(98%) whether they faced any.

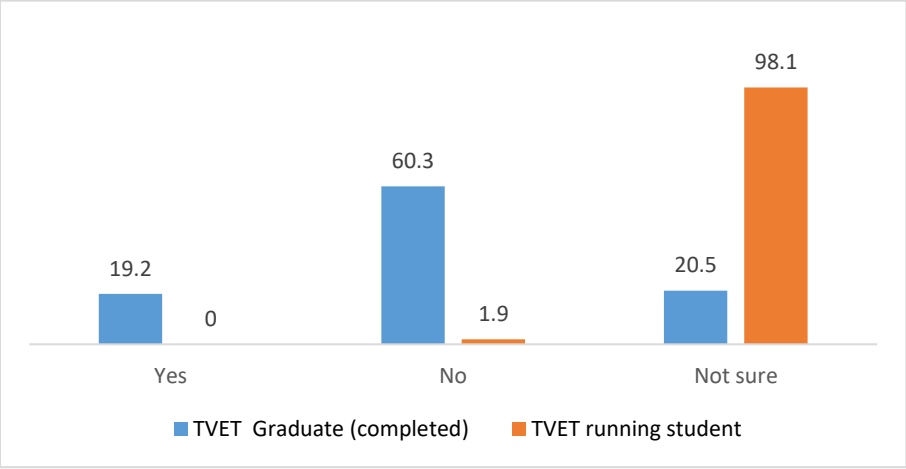


Figure21: Limitations of the TVET courses (%)

The findings also reveal some specific limitations. Particularly the respondents who were instructors mentioned that they observed the challenges and limitations pointed some issues. For example, in the highest percent of cases, “lack of residential facilities” (67%) and “Not having courses as per the market-demand” (57%) were mentioned as current limitations.

Table 16: Type of limitations mentioned faculty/instructors

Limitations	Percentage(%)
Lack of residential facilities	**36.30**
Not having courses as per the market deman	**30.80**
Employment/job placement	**18.70**
Lack of attachment facilities	**14.30**
Total	**100.00**

Some other types of limitations were recorded in from the students/graduates group opinion. Among the students who mentioned that they observed limitations, nearly half of them identified “Lack of modern training method and technology” (46.7%) followed by “insufficient infrastructures” (33.3%).

Table 17: Limitation mentioned by students

Type of limitations	Percentage (%)
Insufficient manpower	6.7
Insufficient infrastructure	33.3
Absence of contemporary courses	6.7
Lack of modern training method and technology	46.7
Shortage of offered courses related to the labor market	6.7
Total	**100.0**

While discussing about these limitations during the FGDs, participants opined that some courses, e.g., programming, computer and networking, software development, web development, etc. need more modern equipments and methods like visual and multimedia-based classes, visual contents, etc. for both in and out of class practices.

“I am pursuing a training on Computer and Networking but due to the Covid-19, it left us out of class for months. Many of my batchmate forgot what they learnt. However, I am one of few students who are accessing to some online classes on my topic but I could not understand all the lessons because the contents are made by foreigners for their students. If we can have such resources in Bangla, we can keep learning despite the outbreak”.

Miraz Munshi (28 years old FGD Participant)

Furthermore, qualitative findings from both institutes and students revealed that the limitation like “insufficient infrastructure” was mostly mentioned by the respondents from non-government institutes. For example, such institutes mostly ran in rented buildings where class rooms, labs, materials, etc. were often short considering the number of students.

4.5 Objective 3: Identify potential short courses to promote school to work transition (both job market and entrepreneurship development)

4.5.1 Trend of receiving certificate courses

To identify the potential courses (Certificate Courses, HSC/Diploma, SSC) to promote school to work transition, the trend of receiving short-term courses was assessed among the respondents who already received the training.

Among the graduates and the current trainees under this study, three-fourth of the respondents mentioned “Certificate Course” as the course of their choice, while the small percentage of respondents mentioned “HSC/Diploma” (15%) as their choice, followed by “SSC” (9%). It indicated that among the trainees, the demand of Certificate Courses is higher than that of the other courses. The study found the reasons behind choosing and receiving certificate courses (by a wide range of respondents) were: short duration of the courses, flexibility in terms of conditions, e.g., educational background, multiple courses in a year, etc.

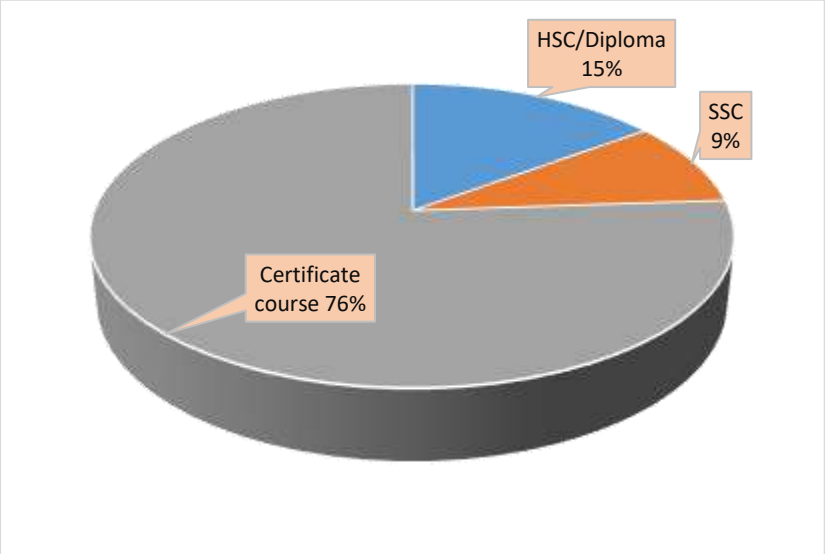


Figure 22: Level of Courses

4.5.2 Trend of receiving short-term courses

To identify the potential short courses to promote school to work transition, the trend of receiving short-term courses was assessed among the respondents who already received the training.

Respondents who already received training and currently receiving training on different trades were asked about the preferred duration of their courses to assess which duration of the courses were mostly demanded by recipient in the studied areas. Data reveals that the highest portion of respondents chose and received the 3-month long courses (27%), although the 1-week and 6-month long courses were received by almost the same portion of respondents (23%). In other words, 50%, the highest percentage of the trainees chose and received training on short duration courses, which indicated that the short courses were mostly popular among the trainees.

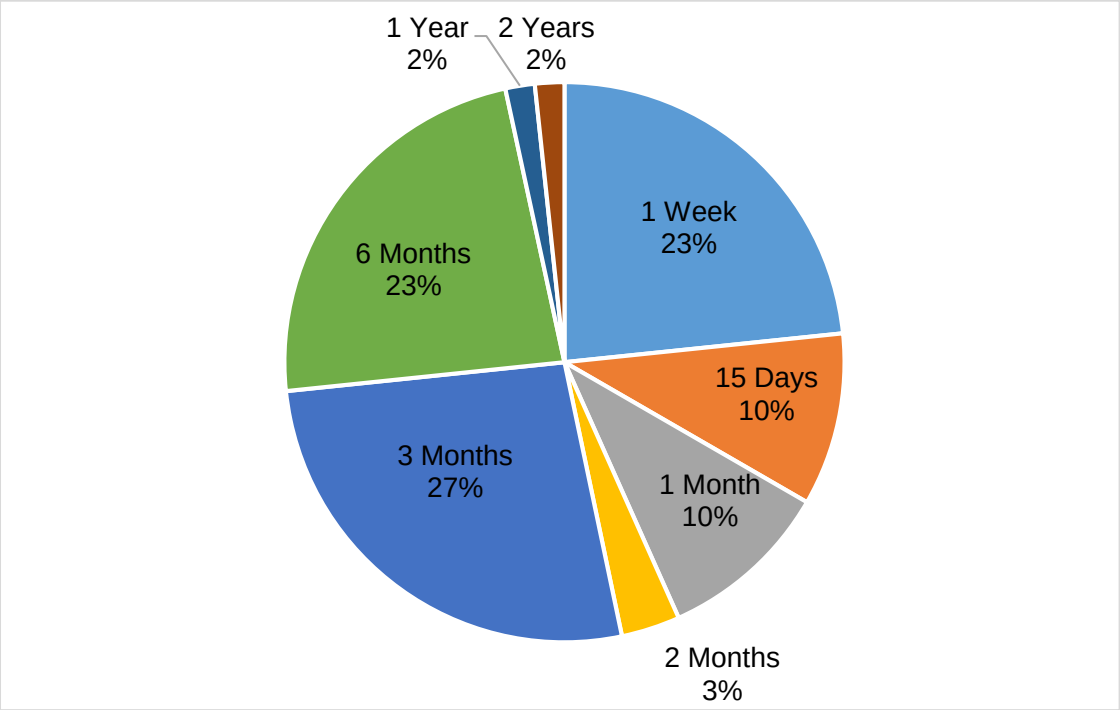


Figure 23: Duration of the received training (%)

4.5.3 Opinions about the short-term courses: helpfulness and limitations

Respondents shared their opinions about the short-term courses of their areas. Each respondent expressed several responses, and, therefore data in the **Table 8** have been presented as multiple responses (percent of cases). It revealed that nearly two-third (62%) of the trainee-level respondents opined that "*Short Courses*" were helpful to gain the skill in a short time. Although, respondents in majority of the cases opined in favor of short-term courses, a mentionable percentage of respondents (42.10%) indicated limitations of the short-term courses. To mention it more specifically, 26.2% of respondents opined that "Not possible to gain complete experience about the course/work" and 15.9% expressed that "Not possible to become a skilled worker" in short courses.

Table 2: Opinions about short-term courses

Type of opinions about short-term courses	Percent of cases
Not possible to gain a complete experience about the course/wo	26.20%
Not possible to become a skilled worke	15.90%
Not possible to become independent/self-dependent	7.90%
Helpful for skill development in short time	61.60%
Duration of the training course should be extende	9.80%
Helpful to get a job	24.70%
Harmful for health	1.80%
Not standard	4.00%
Helpful to gain primary knowledge	16.80%
Could participate along with regular study	7.90%

While obtaining the opinions of the respondents on short-term courses in general, both positive and negative outcomes of the short-term courses have been made by the respondents. Considering this, respondents were further asked about the benefits and challenges of short-term courses to had their opinions.

4.5.4 Benefits of short courses:

Considering the high demand for short-term courses among the studied young people, they were further asked to describe/identify the benefits of short-term courses, as they perceived. Most of them replied with multiple options, which are reflected in **Table 9.** Most of the respondents, 48%, 44%, 38% identified benefits as “Skill development”, “Helpful for becoming a self-dependent person” and “Helpful for getting a job in short time” respectively at their highest level.

Table 3: Benefits of the short-term courses

Benefitsof short-term courses	Percent of cases
Low cost	8.00%
Helpful for getting a job in short time	38.00%
Helpful for becoming a self-dependent person	43.90%
Skill development	48.10%
Short periodic course	22.30%
Acquiring knowledge on labor marke	11.60%
Confidencedevelopment	10.40%
Helpful to gain a primary knowledge	15.10%
Reduce poverty/unemployment	7.70%

Benefitsof short-term courses	Percent of cases
Helpful to be an entrepreneur	4.70%
Didn't waste time	5.30%
Helpful to gain an enough knowledge in short time	6.50%
Get economic support of family	2.70%
Easy to get certificate of the training	0.90%

4.5.5 Challenges of the short-term courses:

Besides the benefits, they were also inspired to share their experiences and opinions about the limitations and challenges of the short-term courses in their areas. As the following table shows, 68% of the respondents mentioned limitations as "Not possible to gain an enough knowledge" and" Not possible to become a skilled worker"; 26% commented that "Not possible to maintain quality with low cost". Some other respondents expressed the limitations as "Lack of transportation facilities" (18.60%),"Lack of learning standard" (10.80%), "Low demand at labor market" (6.6%), "Mental pressure" (7.5%), and so on.

Table 4: Type of challenges of short-term courses

Type of challenges of short-term courses	Percent of cases
Not possible to maintain quality with low cost	26.00%
Not possible to gain an enough knowledg	45.20%
Not possible to become a skilled worke	22.80%
Lack of interest of the students	9.90%
Lack of transportation facilities	18.60%
Costly	22.80%
Too short duration	14.70%
Insecurity issues	6.60%
Lack oflearning standard	10.80%
Lack of usage new technolog	4.80%
Not helpful to be an entrepreneur	4.20%
Low demand at labor market	6.60%
Mental pressure	7.50%
Didn't know the problem	3.00%
Didn't get the support of family	1.80%
There is no govt.Training center	0.90%
Low salary	4.20%
Didn't get an expected job	7.20%

4.6, Findings on/against Objective-4: Identify potential actions to be taken under the GO-NGO Collaboration

The data and information addressing or to assess the findings on the objective-4 of the assignment were mainly collected from the FGDs and Key Informants' Interview (KII).

4.6.1 Key Findings of FGD

Focus Group Discussions (FGD) were conducted in all studied districts. Mainly community people including stakeholders from different socio-cultural background including farmers, teachers, students, TVET graduates participated in the FGDs, and shared their knowledge and opinions regarding employment opportunities of young people, skills, and labour market demand, scope of skill developments, etc.

Most of the participants from all areas generally expressed their observation that local and broader labour market mostly requires skilled labor, where people with traditional occupations or lacking modern-day skills and knowledge are likely to experience reduced scope, unemployment, low-wages, heavy work, work in unhealthy environment, etc.

Based on the experience, FGD participants mentioned the following topics to get more emphasis while providing TVET training:

- Agriculture: Participants argued that most of the TVET courses were focusing on the technology-based training like computer, engineering etc., but as the surveyed areas as well as the whole country is still agriculture-based, focus should also to be made on the agricultural issues. They have suggested to introducing or making available some courses on operating advanced Agri-machinery, Environment-friendly crops varieties, High yielding crops of vegetables. They also suggested to subsidizing the local farmers in dire necessities.

  Participants also opined that, until the young people are interested in agriculture, our national development would not reach sustainability because agriculture is the backbone of the nation's economy and employment. They concluded that only the introduction of modern technology, attractive crop value, creating easy access to the markets, inclusion of agricultural issues to a larger extent in education course-curriculum, and national level awareness raising along with providing subsidiary, and rewards, etc. can attract young generation involved in the agriculture. One teacher mentioned:

  > *"In our education curriculum, we studied agriculture as an optional subject. Could you just imagine that how much the subject was ignored, which is providing us food and money to live and survive? It's time to pay back its value and honor."*

- **Handicraft**: Some participants thought that handicraft could be another important topic to be included in the courses, considering the international demand of such products. If

the art of producing handicrafts can be learnt in more advanced and professional ways, it would generate opportunities to attract national market as well as world market. Some NGOs are working on it but they alone cannot cover all communities involved with them. As a result, a large number of people are losing their hereditary occupation as they are lacking advanced technologies, market linkage and guidance.

- **Fishery resources:** Participants from *Haor* areas like Sunamganj and Mithamoin emphasized on some subjects associated with fishery resources. They mentioned, they need training not only on fish cultivation but also on fish processing, exporting, marketing, etc. They also expressed their demand of creating market linkage, negotiation skill development, etc.

4.6.1.2 Participant ÑV recommendation s for a sustainable TVET program me:

- TVET program should specifically focus both on market demand and supply sides. Before introducing any TVET program in any certain Upazila or District, it needs to conduct a *Training Need Assessment (TNA*) and market mapping.
- Instead of introducing common trades in all areas, the potentials and area-context-specific needs to be assessed as first priority.
- The post-training supports including both technical and advisory supports need to be accessible by the trainees to make their journey smoother and more effective.

4.6.2 Key Findings of KII

4.6.2.1 Opinion about the existing/available TVET services:

Across the spectrum, the respondents have reported that technical and vocational education and training is very important in achieving the Vision 2021 and Vision 2041 specifically in increasing foreign remittances.

A huge portion of locales in Sylhet in particular are interested in going abroad. This makes it more important for them to have technical skills training. There are a number of training institutes and offices in Sylhet district: a Regional Directorate's office under the Directorate of Technical Education, two separate technical training centers for men and women, Sylhet Technical School and College for vocational courses, Sylhet Poly-technical Institute for diploma courses, and TTC for three (3) months to six (6) months courses. Apart from that there are four other non-government Polytechnic institutes as well. In addition to these 79 (seventy-nine) non-government institutes/organizations are running vocational, business management and other short courses like driving and computer skills. Encouraged by the support of the government and its commitment these institutes are trying hard to develop expected level of skills through training to the trainees. Trainees are having their income through generating initiatives after having training from government institutions and private workshops.

Unfortunately, all these institutions are mainly based at district headquarters and in Sadar Upzilla headquarters. However, this is not the case for all districts and all Upazillas. For instance, Mithamoin has only one small computer training center while Rajanagar, Dirai and Shalla Upazila still lack in adequate number of institutes and courses. They need customized skills training which match their lifestyles and can improve their livelihood skills. Baniachang Upazila has two technical and vocational training centers. Moulavibazar has TTC, Polytechnic Institute, and one training center for Women and PWDs. Habiganj district also inadequate in number, and is four-times hard-pressed every year while admitting students; they need more, and suggested for training center in each Union. They need more trade based trainings as well. As most people are not interested in higher level education, they need systematic technical training support. But unfortunately, many are not interested in getting training from the technical institutes. And so, the authority has been trying their best to motivate them to attend the courses.

It is worth mentioning that although there are a number of institutes in Sylhet however they are lack in market-driven courses. To meet the demands placed on Europe-going employment seekers there should be institutes with modern equipments. It is also necessary to have tailor-made courses for them such as nursing courses, chef courses, hotel management courses etc.

One respondent, an electrical engineer and Instructor (EIM) SEIP-BACI, Ministry of Finance, assessed that there are lack of skilled trainers as well. So, infrastructural development, advanced trainers' training, modern equipments, and new technological courses needed to be introduced. Cash support can be provided to the trainees after successful completion of the courses. One opined that in some cases, long courses are less-effective as trainees forget many aspects of learning and skills set as well.

In Brahmanbaria, the situation is not as good as Sylhet though a considerable number of abroad-going people are there as well. They lack in adequate number of technical institutes especially with latest technologies. Upazilas under these districts mostly lack in technical institutes. Just Sultanpur has only one training center for youths.

4.6.2.2 Opinion about the Future Demand of Trades/Course ~~considering future demand:~~

Some respondents (about 15%) expressed their hope for courses on textile engineering, marine engineering, food engineering, IT engineering, computer software and hardware development, computer office management (short course), Apps development, graphic designing, environmental research. Some presented the idea of trainings on hotel & tourism, cooking on continental and international dishes, tea processing, tea preservation, housekeeping, welding, garments making, motor driving with basic maintenance, electrical housewarming, automobile servicing, advance agricultural training, Nokshikantha, food preservation, goat rearing, fisheries, drilling and mining courses are to be incorporated to meet the current advance needs of the relevant districts, the whole country and global market. Training on modern technologies such as civil, electrical, mechanical, power technology and HVAC (Heating, ventilation, and air

conditioning for heating and cooling residential and commercial buildings) are also to be introduced as per needs.

Some (about 10%) advised that web designing, web development should be introduced; particularly for Sylhet district to meet the needs of its high-tech park. Language course (English, Spanish, and Arabic), care giving occupational course, nursing and Chef Course also to be introduced which will be very crucial in foreign countries. Some suggested for courses on mobile phone servicing, freelancing outsourcing, online marketing, handcrafting, dressmaking, boutiques, and weaving courses; some suggested for courses on carpentry, AC-freeze repairing, electric and electronic courses, mechanical courses, computer repairing and maintenance, livestock, dairy farm, poultry farming, bee fattening, horticulture, farm management course, boat making etc. Business management courses which includes quality production, staff management and marketing will also be very needful for the entrepreneurs after receiving the trainings.

Some respondents (about 10%) suggested adding courses on lift maintenance, sewing and embroidery, jute-made produces, tourist guide, cane and bamboo-made produces, etc. Strikingly one respondent suggested for 6months/3years Diploma course on ICT, 6months and 3year long diploma course on mechanical training particularly in Habiganj upazila. For Rajanagar upazila, one suggested that shipyards industry-related course, food processing course, Parjatan and animal husbandry courses may be introduced.

Most respondents (about 65%) opined, if training are arranged in line with the needs of economic zones, it will help expedite the employment generations as well. Above all, some assessed that, without establishing the infrastructural development, it is difficult to introduce modern-day-demanded courses mentioned above. Some opted for awareness raising program on the benefit of all those courses; providing adequate credit after successfully completing training courses, and if possible cooperating the trainees in getting employment by linking with the employment providers.

4.6.2.3 Opinion on how the mentioned trades/courses can benefit the youths of Haor Areas:

Almost all respondents expressed that trainees will be highly benefited if they are adequately supported with concessional course fees or free, and for some very destitute ones residential arrangement at the Upazila level. So far their knowledge go, they learned that government has the systematic plan for establishing well-equipped training institute upto Upazila level. If it is implemented, youths will be equipped with demand-based skillsets needed for their livelihoods and smooth advancement in their lives.

In the *Haor* areas, youths can be brought under training through introducing some well selected customized training in the schools and colleges at Upazila level. The courses relevant for the people of *Haor* needsto be identified and introduced. Until and unless the training institutes are

being established and made functional at Upazila level, district level institutions can set quotas for Upazila level participants to participate in each courses. Food and accommodation should be made free or partial subsidy should be given by the institutes. Government grants may accelerate this process as well.

It is hoped that after successful completion of training, they will be able to start their own entrepreneurial ventures and get employment as well. Thus, they will be able to take care of their families well. A couple of respondents opted for establishing training center at Union levels. GO-NGO-Private collaboration might be an effective system to turn this initiatives successful. A comprehensive awareness raising campaigns are to be initiated so that youths even at Union level can be made enthusiastic to avail their needful training. In Habiganj, there are nongovernmental SSC Vocational training centers at each Upazila. The task will be easy and effective if machines and raw materials are provided to them. Different courses of 360 hours is also to be introduced in these centers. Hall rooms of the Union councils could be utilized for implementing those training courses.

4.6.2.4 Opinion on how the NGOs/Private organizations contributed or collaborated with Government Services:

Almost all respondents emphasized the scope of utilizing the capacity, coverage and competency of non-government TEVET centers as the government agencies do not have adequate human resources to meet the needs of a huge number of youths to explore their potentials and to capitalize the expected dividend from them.

Respondents have assessed that non-governmental TVET centers have contributed a lot so far, so if they are supported with governments financial and technical-know-how, they will be able to flourish further and will create a great impact on this large audience, and enhance employment generation for the youths as well. Non-governmental TVET centers are to be encompassed under the National Training and Vocational Qualifications Framework (NTVQF) in order to enhance their capacity to reach the level they need to meet the emerging market demand. The labor market also needs to be assessed. In addition, different trade courses are to be introduced and implemented enhanced by modern equipment and technologies as mentioned before. These courses should follow both national and international curriculums.

The trainers need to be of high quality. It is to be taken into consideration that, amongst the trained youths there will be ones who have successfully completed the course from TVET but not have the money required for their entrepreneurial venture. There has to be a system to provide these trainees with individual credit. NGOs like ASHA, Brac and other local NGOs can provide low interest-rate loan in this regard. The training providing by TVET centers need to connect these trained youths to relevant industries with support from government organizations.

One respondent suggested that non-governmental organizations and private sectors should be included in conducting research to identify the real gaps and needs in this sector. A state-led

strategic document is also to be developed in collaboration with non-governmental and private organizations. Those organizations may be utilized to reach to the grassroots level, at least up to Union levels, and for this they are to be financially, technically supported by the government with political commitment.

4.6.2.5 Opinion on how can the NGOs contributed to meet the future market demand of TVET services in terms of developing Entrepreneurs and Employability:

According to almost all the respondents, non-governmental and private organizations can play a vital and massive role in meeting the need of TVET training, businesses and entrepreneurships initiatives, and can foster employment generations. As mentioned by the respondents, the NGOs have already been contributing in developing micro and small entrepreneurs, and creating self-employment generations throughout the surveyed areas, and throughout the country as well. As a result, unemployment is getting reduced slowly and steadily.

It is a matter of fact that, government alone cannot meet the required needs of every nook and corners of the country. It's really difficult. So NGOs can provide need-based short-term trade courses training to meet the need and fill in the gaps. They also can motivate youths to avail the relevant need-based training for them in order to ensure and enhance their family livelihoods. They can provide low-interest-rate loan to them as well to help them establish youths' business, based on their acquired skills. That will also help meet the Vision 2041.

Apart from this, job fairs need to be jointly arranged by the TVET centers and government institutes. This will be accompanied by awareness raising seminar so that trainee youths can learn search and about the job opportunity and create spaces for them. All these initiative can be cooperated and coordinated by experienced NGOs. Unfortunately, Rajanagar in particular, has no such NGO which can contribute in this regard. But it could have been a good option for that Upazila, if it would have them.

Many NGOs are contributing in TVET training and business interventions in various Upazilas. Youths that have been trained up in TVET can borrow loan at low-rate-interest from NGOs, Upazila Youth development office, BRDB, Fisheries office, Livestock office, and so on to establish their own entrepreneurships; this in turn will expedite employment generation towards their self-reliance. NGOs can build up linkages with different potential employers, and then take the responsibility of follow-up and monitoring the business trend of the loaners and entrepreneurs. Proficient NGOs can also help in providing skilled trainers to the existing GO-NGO-Private initiatives in this TVET training. To mention, one respondent complained about some NGOs that they exploit the credit receivers and put heavy pressure for loan repayment which sometimes make them helpless and bankrupt.

4.6.2.6 Opinion on possible/potential partnership or collaboration between NGOs and Government Sectors:

According to the surveyed KII respondents, in order to avail the employment opportunities inside Bangladesh and abroad, establishing collaborations among government agencies, non-governmental and private organizations will play a vital role in accelerating the quantity and quality of the TVET training for the youths. This will also inspire and to attract foreign investment for constructing and establishing infrastructure for industrial and technological purposes. Arrangement should be ensured by the relevant government authority, so that, side by side, jointly and along-with governmental agencies, NGOs can smoothly play their expected substantial role in this regard. It has been mentioned in the earlier sections that it is really difficult for the government to singlehandedly handle the vast demand and create opportunities for the youths in availing training on TVET throughout the country. So it should consider the collaboration with private organizations and NGO in order to capitalizing their support to meet the emerging needs. So the coordination, collaboration and friendly cooperative intervention among government agencies and NGOs-private sectors is a must. Otherwise complexities may occurred in the whole process of intervention.

But, in this regard, close cooperative supervision from government agencies should be enhanced to reach the expected target, and to ensure transparency and accountability; and to get rid of irregularities & misappropriations. To ensure this collaborative approach, government local agencies should play the prime and proactive advanced roles. Contractual agreement (MOU) is necessary to make the roles of both parties clearer, facilitate information exchange, and to make it executable, viable, accountable and transparent. A joint follow-up and monitoring cell may also be established to ensure the expected achievement and other relevant issues. One respondent suggested a regional collaborative monitoring and follow-up team comprising of benevolent citizens from economists, lawyers, teachers, technical trainers, in order to make it more accommodative and comprehensive. Information sharing and updating the progress of training and employment generations can be enriched through holding regular (monthly or bimonthly, quarterly) coordination and accountability meeting, and having substantial and productive discussion. This will also reduce the rate and trend of duplication or overlapping of getting same or different training by the same persons.

One respondent chose one stop service to achieve the target as expected; another one suggested establishing and running TVET training centers jointly. NGOs and Private organizations can also capitalize the skills of the TVET trainers of governmental agencies like Jubo Unnoyon, social service and women affairs office situated at local levels to upgrade their capacity, and to ensure the quality of training as well.

4.6.2.7 Opinion on feasible/potential short courses to meet the future market demand:

In order to capitalize the huge dividends of a large portion of youth sectors, and to meet the emerging needs of the local, national and international needs, following trade courses may be

introduced, and the courses should be imparted by well-equipped trained trainers and instructors. The training institutes should also to be equipped with modern technologies and equipment. These are also mentioned in some of the previous sections.

The suggested long list of courses, some of them are not practical in the eye and the assessment of the consultants, are:

Category A: ICT: Computer hardware technology, graphics designing, freelancing ICT, android apps developing, computer basic course, web-net developing, web designing, short courses on Auto CAD-D, 3D, computer office management, HAVC.
Category B: Mechanical works and repairing: Motorcycle repairing and maintenance, automobile mechanics, automation, plumbing and pipe feting, tiles fixing, painting, electrical, mechanical and electronic works, mobile servicing, merchandizing, driving, welding, sewing machine repairing, machine tools operating, motor vehicle assembling, mobile parts producing and assembling, TV-frees repairing and assembling, electrical housewarming, welding, machine tools practice farm machinery, etc.
Category C: Tailoring: Tailoring/dress making, block boutiques, handcrafting, textiles and fabrics
Category D: Nursing, care giving, paramedical courses
Category E: Hotel management (front desks and other supports), tourist guiding, foreign languages courses, chef.
Category F: Bamboo and cane produces, boat making,
Category G: Agro processing, fruits and vegetable gardening,
Category H: Entrepreneurships management, which includes production, marketing, staff management cost-benefit analysis etc.

Some emphasized that cooking courses for six-months/three-months should be continuously available to meet the need of growing food and restaurant market, and to create easy employment for local youths. Many other courses should also to be offered for short time, for example: automobile, out sourcing, sewing, block boutiques, building designing, and beatification courses for *Haor* areas particularly,

Another respondent suggested that instead of introducing fresh new courses concerned authorities and TVET centers should emphasize on investing on recruiting well-trained trainers and instructors, and properly imparting of those skills-based courses. Adequate infrastructures, deploying quality trainers, and availability and regular attendance of well-motivated potentials trainees should also be ensured. Guardians should also be accommodated in ensuring all these processes.

4.6.2.8 Opinion on possibilities to introduce more inclusive short courses:

Creating affirmative space for women is often necessary to ensure equal and equitable treatment for both men and women. They should be given the scope to choose according to what's comfortable for them. The same policy should be adopted for the Adivashi (ethnic

minority people) and for the Persons with disabilities (PWDs) as well. PWDs can be preferred for computer and ICT, freelancing, graphic designing, handcrafting etc., and ethnic minority youths should be provided with customized training, friendly for them. In the era of globalization and emerging inventions of 4IR, anyone can take the opportunity of exploring and developing their latent inner potential.

For PWDs and ethnic minority people, as they are more vulnerable and disadvantaged, the well thought quota is to be defined and offered for them in order to achieve the desired goal by them; this is applicable in the case for women as well. They should be motivated with additional financial packages in order to boost up and attract them in these trainings. Besides, scope of connecting with employment providers shall also be adding extra incentive for them to join these courses. Some suggested to open extra courses on trades in the existing schools for ethnic students. By providing proper residential arrangements, special transports, and financial support, they can be attracted better. Special campaign programs also are to be launched for them to raise their awareness regarding the importance of TVET training.

Short course with financial credits at low rate-interest from NGOs may accelerate the numbers of trainees. One respondent suggested opening centers at grassroots level that is downward to villages. Suggestions also are there for introducing special centers in tea garden areas with specialized need-based course. Separate training center may be considered for above-mentioned PWDs and ethnic minority youths. Above all, trainers, efficient in local language of ethnic minority are to be deployed, and special infrastructures should be considered as per needs. And sign language is to be introduced for hearing impaired people. Some suggested home visits to motivate special groups. Government substantial initiatives will be very crucial in this regard.

4.6.2.9 Other comments or opinions

The respondents expressed their experienced observations that countries that have had introduced vocational, technical and technological training, so far, have developed adequately, and are now in solid financial condition enabling their citizens to enjoy a prosperous livelihood. Their production levels are also at peak. So it is highly important to have technical, vocational and technological education and training nationwide, need not to mention, in all the surveyed areas as well, especially considering the vision 2021 and vision 2041. This is especially important in order to increase the foreign remittances and uplift the country's standard up to the mark in international standard. So, it is necessary to take into consideration, the highest priority in advancement of TVET, ICT and aspects of 4IR in order to compete with other competitive countries for generating employment in the country and abroad. All these are crucial to capitalize adequate foreign remittances as well.

All Upazilas should have at least one TVET and ICT and technological institute to meet the emerging need of the national and global market. And this will mainly help the youths to achieve healthy livelihood and be self-reliant. To mention, there are variations in needs and nature of the job market in different places. For example, in particular, as many people in the Sylhet region are immigrating abroad in search of employment after gaining technical skills from the institutes, some special courses should be prepared in that line for them. Moulavibazar should be specially taken care of as it is very backward in comparison to other districts. Keeping in mind, the above-mentioned preamble, and the less interested and less enthusiastic youths, a massive campaign

for people's awareness raising about the importance of all these training to be systematically ensured.

Respondents emphasized that government and NGOs should assess the global market and demand of human resources that they want to acquire from the countries like ours. So based on those needs and aligning the capacities of different districts and Upazilas, it is needed to plan and arrange and provide training in that line. Industries are to be linked up with the training institutes so that they can suggest for relevant trade courses to employ the skilled youths necessary for their quality productions. Needs of the country and global market, and the lab workshop equipment- these three should be tied together in common thread to achieve the goal of 2021 vision. Agro marketing center needs to be established at each Upazila.

One respondent suggested not to make the courses full free; rather to take a little amount of fees from those who can afford. This will increase the importance of training to them. As mentioned in previous sections, the training institutes should be upgraded with modern equipments and technologies. Education ministry, Ministry for Industries, education and industry department needs joint venture in this regard. Competency-based training should be provided both to the trainers and trainees.

One expressed his satisfaction that he could have been successful after completing the TEVET training with his enthusiastic intervention and entrepreneurship. So, if it is possible to implement and maintain properly the ideas reflected from the sections one to nine it can be easily facilitate and expedite the youth's skills development. TVET and other advanced technological training can foster the country to be built up as The Shonar Bangla, the dream of Bangabandhu.

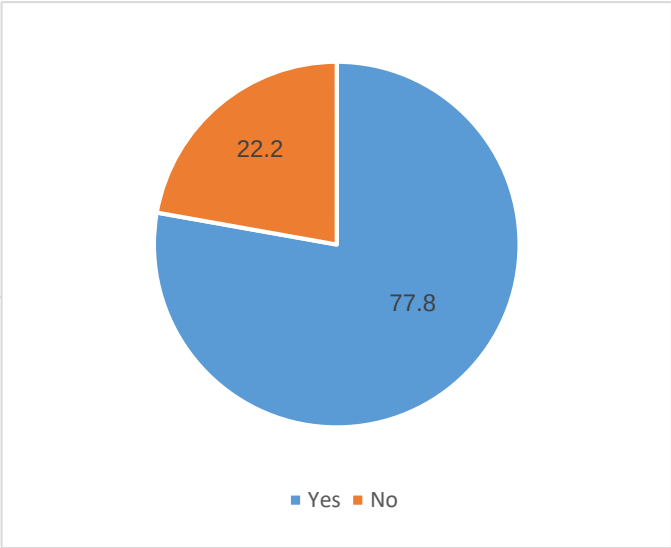
The major challenge in this sector is the implementation and hands on practice of all these training, and its follow-up. So, concentration should be on energy and investment in these aspects. Regular and cooperative follow-ups are to be ensured both by the Government agencies and NGOs along with the private sectors and representatives of different civil society organizations.

One Diploma Engineer expressed his experience that he has been running his own business since 2014. In 2021 he has started SP Engineering where the customers are happy however, to continue his reputation he need to have adequate support, at least 10 Lac Taka, from government to continuing his business.

One respondent expressed an insightful, thought provoking and stimulating remark that, ethical and value-based awareness raising campaign among the youths must be ensured. Without this, a nation cannot progress as much as they need to.

4.7 Scope of TVET for PWD in the studied areas

Bangladesh was one of the first countries to ratify the UN Convention on the Rights of Persons with Disabilities (PWD). It makes Bangladesh committed to realize and ensure PWD's basic rights including their rights to decent employment. Since then, with the support of different



international communities and organizations e.g., International Labor Organization (ILO), European Union, etc., Bangladesh Government and workers and employers' organizations are working for disability inclusion in education and in employment sector.

Realizing this context, however, the current study also attempted to assess the scope of TVET for PWDs in the studied institutes. Representatives from different departments and TVET institutes were asked whether their department/institutes offer any training for PWD while 77.8% of them answered positively. **Table 11** also presented the name of TVET institutes/departments considering the availability of scope of TVET for PWD.

Figure 24: Representatives of TVET institutes reported they offered courses for PWD (%)

Table 5: Names of the TVET institutes that offered courses for PWD

SL.No	Name of Institute/Organizations	Availability of courses for PWD
1.	Chhatak technical school and college (additionally visited)	Offer courses for PWD
2.	Department of Social Welfare	
3.	Department of Youth Development	
4.	Habiganj Polytechnic Institute	
5.	Habiganj technical school and college	
6.	Moulvibazar polytechnic school and college	
7.	Moulvibazar Technical School and college	
8.	Sylhet Engineering College	
9.	Sylhet Polytechnic Institute	
10.	Sylhet Technical School and college	
11.	Women Affairs	
1.	Department of Social Welfare	Do not offer courses for PWD
2.	Department of Youth Development	
3.	Sunamganj Technical School & College	

4.7.2 Types of disabilities covered:

Representatives from different institutes/departments/organizations reported that they have provided TVET services to persons with disabilities but the arrangements were limited to some certain type of disabilities namely vision impairment, physical disability, and autism.

4.7.3 Limitation of arrangement:

Although it is reported by the representatives of the institutes that they were offering courses for PWDs, none of the visited institutes were found to have adequate arrangement and facilities to provide TVET for PWD during the direct field visit and observation. Due to the pandemic situation, the study team limited its direct visit and field observation in the institutions (observation of facilities, classroom arrangement, teaching methods and medium). For example, if some institutes had the facility of ramps, they did not have lift capacity. In addition to that most of the visited institutes were observed not to have specialized class rooms, trained instructors/manpower and other resources. This was confirmed by the senior team members of the study team while visited (as part of data quality assurance) Habiganj Technical School and College, Sylhet Technical School and College and Sylhet Polytechnic School.

4.7.4 Opinion about the scope and opportunities for PWD:

Respondents reported that PWDs are one of the most vulnerable groups who commonly faces stigma and stereotypical attitudes from others. In case of education, they are likely to be treated based on their disability no on their ability. For example, persons with mobility disability are often suggested to get training on computer because they can sit. Their intellectual capacities are also denied. However, all the respondents opined that the scope and opportunities in the training program for the PWD students should keep in priority.

While asking about the potential courses that can be offered from the respective institutes, respondent faculty category mentioned multiples responses where computer training was mentioned in highest percent of cases (66.7%). Among other courses, tailoring (33.3%), foreign language (33.3%), etc.

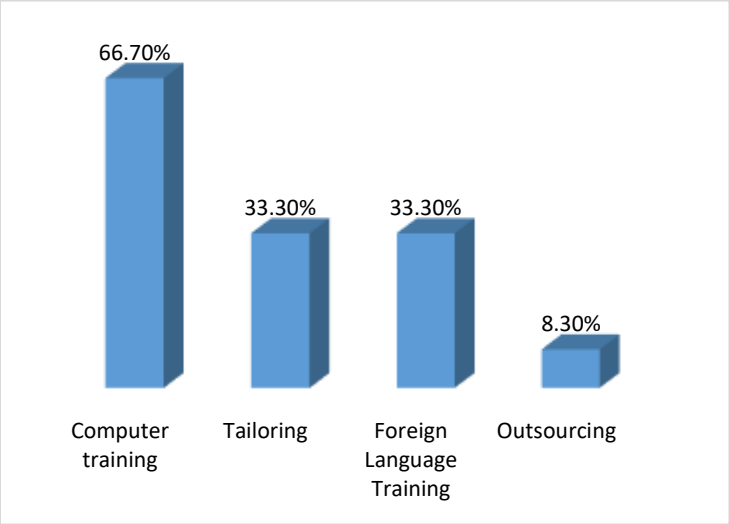


Figure 25: Scope and opportunities for PWD

However, respondents also opined that the traditional and general teaching method would not work for person with disabilities because they are in special need. Therefore, they provided some specific suggestion to be followed TVET providing institutes or organizations, e.g.,

i) Effective methods of training should be followed (considering disability);
ii) Digitalize the classroom;
iii) Separate and comfortable washroom;
iv) Special stipend for PWD students;
v) Develop the communication system for PWD students; vi) Braille method, etc.

Chapter 5: Conclusions and Recommendations

5.1 Summary of Findings and Discussion

This study was conducted in order to explore the current status and scope of technical and vocational education and training in selected *Haor* areas of Bangladesh namely Sunamganj, Sylhet, Habiganj, Mauluvibazar, Netrokona, Kishorganj, and Brahmanbaria. The specific objectives of this study were to assess i) the key TVET services available in the selected districts of Bangladesh; ii) the schools to work transition readiness of existing courses; iii) the courses to promote schools to work transition in both job market and entrepreneurship development; and iv) the identification of potential actions to be taken under the GO-NGO Collaboration.

Based on the objectives of the study, 20 institutes/TVET service providing organizations were surveyed as presented in Figure 1. Out of the total 20 TVET/Skills Training providing organizations/institutes 13 (65%) Institutes were run by the Bangladesh Government and 7 (35%) were run by the private initiatives in the 6 studied districts. While exploring the most popular and common training trades among the running trainees and already graduated respondents from these institutes the survey found that the Computer and Networking is the most popular training trade. About one-third (32%) of the total respondents received training under this trade. Among the other courses, Cattle rearing/Farming (cow, goat, etc.); Welding machinery work (workshop); Electrical; Tailoring/Sewing; etc. were reported by the respondents.

Furthermore, the study attempted to assess the trend of employment after completion of TVET from different government and non-government institutions. Data showed that about one-third (32.7%) of the TVET Graduates found job while others were still waiting to have the employment. Those who were graduated under Computer and Networking composed the highest percentage to have employment after completion of their courses. However, data showed that a mentionable gap is still exists between TVET courses and employment.

Considering such gap, the study attempted to explore which courses have the potential in the labor market. Findings of the study suggested that two aspects were found to be important in the data of respondents: short duration and availability of contemporary courses with market demand. For instance, near about two-third (62%) of the trainee-level respondents opined that “Short Courses” were helpful for them in order to gain/improve skill in a short time.

This study is small but is an important step for the development of *haor* areas. Skill development education is a prioritized area for the development of youth in Bangladesh. Several international and national agenda and policies are emphasized on this, e.g., SDGs,

Currently, 65% people belong to the working age population of Bangladesh (BBS 2017). Scholars and development experts considered it as potential force for economic development of the country. When there are such a large percentage of young people belong to any nation they are expected to contribute in the country's economy. This phenomenon is known as the "demographic dividend". While the opportunities and the demand of skilled labors are increasing in Bangladesh the number of skilled labors trained unmet the demand. Around 2 million youth enter Bangladesh’s labor forces every year (Mustahsin-Ul-Aziz 2019;a2i n.d.). On the other

hand, people with tertiary education are facing unemployment at a rate of 11.6% which is much higher than the national figure 4.2% (BBS 2018).

Despite having such an unemployment rate among highly educated young population, the country remits vast amounts of money outside in the form of foreign workers (Mustahsin-Ul-Aziz 2019). Evidently, unemployment caused more by lack of skills than the scarcity of jobs in different sectors (Mustahsin-Ul-Aziz 2019; Zahid 2017). As evident in ILO's document, developing the skill of young people is a big challenge for Bangladesh like some other countries across the globe. A better skilled workforce could lead Bangladesh to take advantage of new economic development by boosting the employment options for the country's growing workforce (ILO n.d).

Realizing the context and the future challenges, Bangladesh Government is implementing different policies and plan like the National Skills Development Policy adopted in 2011. In addition to this, Bangladesh government is also implementing the Master Plan for *haor* areas targeting the specific *haor* context. This Master Plan (2012-2032) is a framework plan for developing the *Haor* areas through optimal utilization of natural and human resources for the next 20 years (up to FY 2031-32). It will be implemented on the short-, medium- and long-term basis with the provision of updating and incorporating rationale changes in demand. The evidence-based information about status and trend of human resources development particularly by increasing access to TVET can make the implementation of the above-discussed plans and polices easier by analyzing the context. However, the findings of the study can contribute to this implementation as it is representing the demand and supply context including features like status, challenges and scope of TVET program in the *Haor* districts.

5.2 Conclusion

This study explored the status of technical and vocational education and training program of both government and private initiatives-run institutes in the 6 (six) districts of *haor* areas in Bangladesh. To assess the readiness of the existing program to meet the contemporary labor market demand, the study specifically focused on the effectiveness of courses, rate of employment after completion of training, identification of the most-popular courses among receivers, challenges and limitations to provide TVET, and the potential action to be considered for the further development. As evidenced in the findings, TVET created employment for 32.7% of the studied TVET Graduates. Those who did not find employment, 85% of them claimed that they faced lack of demand of their respective courses.

Among the respondents, the demand of short courses was significantly mentioned. They opined that short courses were more accessible for the young people of *haor* areas because it required less time and financial costs. Moreover, it also helped them to attend more than one course if someone wanted to develop skill in multiple sectors.

However, the findings of the study suggest that there is a scope of need assessment and market demand assessment in the *Haor* areas to ensure more effectiveness of the TVET program. These assessments would also help to reduce the gap between demand and supply sides and create more employment after the training.

5.3 Recommendations

From the study findings from all sections of respondents (Semi-Structured Interview, FGD and KII) following are the key recommendations.

(i) Review and Update the Courses keeping in mind the future market demand increasing locally, nationally and internationally.
(ii) Assess the future skill demand for the rapidly increasing industrialization and expansion of Export Promotion Zones (EPZ), Special Economic Zones etc..
(iii) Include and emphasize the future selection of courses keeping in mind the future market demand focusing on the fourth industrial revolution (4IR) both home and abroad.
(iv) Expand the Training Facilities to more remote areas like at least to the Upazilas of *Haor* Districts where such services are almost absent and the interested youths cannot avail or afford the existing city-based facilities due to long distances, lack of accommodation facilities as well as declining demands of the conventional trades/courses which have limited market demands locally and outside the region.
(v) Short as well as long courses in collaboration with NGOs and Private Sector organizations can be expanded up to Upazilla level which is also mentioned in the 8th 5 Year Plan of Bangladesh.
(vi) Financial incentives for industries, stipends for students, and recognition of TVET institutions to place their students in industries to restoring the reputation of TVET.
(vii) In addition to modernize and update the education curriculum of TVET appropriate importance would be given to up skilling and re-skilling workers and creating inclusive digital infrastructure as planned in the 8th Five Year Plan of Bangladesh.
(viii) The youths of Bangladesh are far from ready to utilize the opportunities offered by the 21st century and their potential remains vastly unrealized. This is especially true for female youth and youth from poor socio-economic background. So, opportunities can be created for them.
(ix) Continuous training of the trainers will help to develop a dynamic TVET system. Update the training courses to training the trainers to be organized.
(x) The course design and selection of Person with Disability (**PDW**) should be considered "**Not** on their Disability" rather on their "**Ability**" to learn.
(xi) As evidenced in the study, the major portion of employment (80%) among the TVET graduates was being created within 3 month TVET institute needs to conduct an assessment after/within this period to figure out the market demand and effectiveness of certain courses. Analyzing the data of several years, they can prepare the list of most demanded and successful trades according to the market scopes.
(xii) TVET providing institutes requires need assessment considering the geographical area, cultural and market context to identify the application of particular training trades. Considering the area, the centers/institutes may offer periodic or mobile/temporary TVET courses on the potential topic at the rural level or UP/UZ level.
(xiii) The existing training institutes should make the training facilities and courses more inclusive, especially for the persons with disabilities, like ensure easy accessibility to attend the classes/sessions, make the services more accessible by decentralizing the services, develop courses suitable for the persons with disabilities, etc.

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List of Annexes

Annex 1: Survey Questionnaire

Annex 2: FGD Guideline

Annex 3: KII Checklist

Annex 4: List of FGD Participants

Annex 5: Maps of Study Areas

বাংলাদেশ শিক্ষাতথ্য ও পরিসংখ্যান ব্যুরো (ব্যানবেইস)
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