



# Potentials and Challenges of Technical and Vocational Education and Training to Reap Demographic Dividend in Bangladesh



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University of Dhaka

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# **Potentials and Challenges of Technical and Vocational Education and Training to Reap the Demographic Dividend in Bangladesh**

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## Acronyms

BTEB	Bangladesh Technical Education Board
DTE	Directorate of Technical Education
DD	Demographic Dividend
GDP	Gross Domestic Product
SDG	Sustainable Development Goals
IDI	Indepth Interview
KII	Key Informative Interview
UNESCO	United Nations Educational, Scientific and Cultural Organization

## EXECUTIVE SUMMARY

### Background

Technical and vocational education and training (TVET) refers to the organized educational programs, and activities which aim to prepare the individuals for a career that require technical competencies or a secondary, higher secondary or tertiary level degree. The purpose of TVET is to overcome the existing skill gap in job market facilitating continuous career development, and exposure to an expanded range of job opportunities.

Bangladesh Technical Education Board (BTEB) is responsible for monitoring and developing TVET in the secondary level of education throughout the Country. The board formulates academic curriculum, prepares and provides learning materials, approves affiliation to TVET institutions, regulates admission procedures, conducts examinations, awards certificates, monitors the overall education and work progresses of respective field, etc. According to the Bangladesh Bureau of Educational Information and Statistics (BANBEIS), around 757 thousand students are enrolled into TVET institutions in Bangladesh of which 27.6 percent is female.

The specific objective of this study was to find the potentials and challenges in vocational and skill development training currently operated by TVET. This study also intended to comprehend how TVET can positively impact the journey of Bangladesh towards achieving demographic dividend.

### Link between TVET and demographic dividend in global and Bangladesh perspectives:

- Bangladesh is on its way to achieve demographic dividend with 48 percent working age people. To accomplish the window of opportunities that demographic dividend will offer, the nation should increase the amount of money it invests in socio-economic development, increase the proportion of GDP that is accounted for by manufacturing while decreasing the proportion that is accounted for by agriculture, expand and diversify its exports, and send more and more skilled workers to other countries. These require concerted efforts to produce an increasing number of skilled workers, to expand access to TVET, and to design and develop an inclusive skills system that provides opportunities for those who are excluded from the formal education system.

### Contributions of TVET graduates in achieving the demographic dividend in Bangladesh:

- TVET graduates are participating in income-generating activities more competently than the graduates of general education as they are skilled in technical field. They have vast opportunities in skill-based job market, entrepreneurships, creation of employment for others through which they are contributing in income generation in Bangladesh.
- Apart from entering into the skill demanding labor market, establishing own start-up and providing employment to others, many of the TVET graduates move to the countries of

Middle East, South-East Asia or Europe where demand for skilled labor is quite high. These expatriates are accumulating larger amount of remittances in our economic sector.

- Despite possessing technical skills, the TVET graduates are being neglected by the employers or recruiters only because they are assumed less competent, unmeritorious than the graduates of general education.

#### **Influence of the existing policies and programs related to TVET the achievement of demographic dividend in Bangladesh:**

- Sustainable Development Goals (SDGs), Perspective Plan and 7th and 8th Five Year Plans, The National Skills Development Policy 2011, National Strategy for Accelerated Poverty Reduction II (NSAPR II), National Education Policy 2010, Population Policy 2012, National Youth Policy 2017, Bangladesh National Adolescent Strategy, etc. are the major policies of Bangladesh those have emphasized on the issues related to TVET, some of them have specific targets focusing on vocational education.
- The policymakers, teachers and people who are working at the managerial level also highlighted about several government projects and programmes regarding the promotion, implementation and monetization of this field.

#### **Perceptions and attitudes about TVET among potential TVET students (grades 8 and 10):**

- Though majority of the potential TVET students of class eight and ten perceive that TVET will expand job opportunities for them preparing them as skilled human resource, only 1.1 percent of the respondents are willing to get enrolled in TVET institutions.
- Most of the students of class eight are determined to be in science at the next phase of their education and the students of class ten did not desire to go for TVET during their junior secondary education level. According to them general education is more suitable than TVET in accomplishing their career goals and also their parents' desires are similar to them.

#### **Perceptions and attitudes about TVET among community people (parents and community leaders):**

- Though majority of the parents and community leaders are positive towards TVET and are aware that TVET can ensure massive range of job openings for the graduates, many of them perceive that TVET students are not as meritorious as the non-TVET students.

#### **Attitudes and perceptions, and expectations about TVET among employers:**

- Employers who recruited TVET graduates in their workplaces are quite satisfied with the performances of their staff.
- Though few of them prefer non-TVET graduates over TVET graduates because of the broader exposure of the students of general education to different extra-curricular and co-curricular activities, they also claimed that nowadays demand for TVET graduates are increasing in the job market with the rapid growth of industries.

### **Experiences of current TVET students (challenges of skill development/skill enhancement):**

- Almost 40 percent of the current TVET students got to know about TVET from internet and rest get to know about it from their teachers, parents and neighbors.
- While talking about job placements, around 50 percent of the students said that their institutions support them in this issue.
- Approximately, one-third of them are dissatisfied of the accommodation facilities, scholarships and quality of practical classes.

### **Conclusion and Recommendations:**

- The findings of this study clearly show that TVET has both opportunities and challenges on the way of achieving demographic dividend in Bangladesh's context.
- But it is influenced by a multiplicity of causes for which a multi-dimensional approach is needed to implement the initiatives of the government to promote, improve and monitor the scenario of TVET and to minimize the challenges.
- Emphasis should be given on reformation of education related (more specifically TVET related) policies including apprenticeship law, inclusive governance and monitoring system, modification and regeneration of the academic curriculum according to the market needs, integration with industries, creation of a convenient platform for employment opportunities and promotion to increase social acceptance.
- Concerted efforts are needed from all levels-individual, community, institutional, state and policy-to harness demographic dividend utilizing the potentials of TVET.

## CHAPTER ONE: INTRODUCTION

### 1.1 Background

Bangladesh is crossing the first demographic dividend phase. It is urgently needed to generate employment opportunities for the youth and working-age population to benefit from this demographic dividend. Bangladesh's labor market analysis is crucial because it primarily involves the informal labor market. According to estimates provided by the Government of Bangladesh, approximately 2 to 2.5 million young people, the vast majority of whom are unskilled, enter the labor market every year (Bangladesh Bureau of Statistics (BBS), 2018). The Labor Force Survey (LFS) 2016-2017 of the Bangladesh Bureau of Statistics (BBS) refers to millions of working-age people who are still out of the labor force, unemployed, and in the informal sector. Compared to this, the number of people looking for work is far more than the number of available positions. The vast majority of working age people, including a disproportionate number of women and members of disadvantaged groups, are either self-employed or find work in the informal economy in positions requiring little expertise and providing little output, or they are self-employed. Here the relatively young age structure of the population suggests that the country will have a growing workforce in the future; nevertheless, most of the population is still unskilled. Here 65.51 percent of the entire population falls into the age bracket of 15 to 64 years old, while 28.09 percent of the labor force comprises people aged 15 to 29 years old (Bangladesh Population and Housing Census, 2022). The relatively young age distribution of the country's population and realizing the economic potential of this age group through investments in economy, governance, health and education is frequently referred to as the nation's "demographic dividend" (Roy & Kayesh, 2016). However, the most significant obstacle is to train this large pool of young workers in skills that are in demand by employers and to improve the kinds of support services available to them so that they can make a smoother transition from school to the workforce ("Youth in Bangladesh: Demographic Dividend or Demographic Disaster," 2019).

Moreover, there has been a significant shift from traditional agriculture to export-oriented manufacturing industries and service sectors (Labor force survey, 2016-17). Therefore, Bangladesh needs to capitalize on the youth force by increasing their skills to get full benefit of this demographic dividend opportunity. The Government of Bangladesh has taken several initiatives to generate a skilled workforce for employment at home and abroad through effective vocational and skill development training- mainly *Technical and Vocational Education and Training (TVET)*. However, although access to education has grown substantially, the vast majority of the working-age population lacks quality education or occupational training skill, standardized curriculum, certification as per global standards. Moreover, the general perceptions of TVET students and their parents on such jobs are not evident yet (BRAC, 2019). The proper realization of the potential of TVET among youth and their parents is necessary to construct a positive attitude towards this specific stream of education. That can create a pathway towards better enrollment and thus create a skilled

human resource which will be beneficial for grabbing demographic dividend in Bangladesh. However, the country is committed to achieving the Sustainable Development Goals (SDGs)- 8 to promote a "decent skilled workforce" and national development agenda. Labor market-oriented training would convert these people into human capital and meet the demand for local and international industries.

The Government of Bangladesh has set a lofty goal of achieving middle-income status by 2022 and a developed country by 2041 (Taha & K, 2020). To accomplish the goal, the country need to increase the amount of money it invests in socio-economic development, increase the proportion of GDP that is accounted for by manufacturing while decreasing the proportion that is accounted for by agriculture, expand and diversify its exports, and send a larger number of skilled workers to other countries (Yousuf et al., 2019). These require concerted efforts to produce an increasing number of skilled workers, to expand access to technical and vocational education and training (TVET), and to design and develop an inclusive skills system that provides opportunities for those who are excluded from the formal education system (Sadekin et al., 2021).

In reality, the efforts from the government have been reflected through significant policy focus on technical and vocational education in different government policy documents. The current policy documents like the Perspective Plan of Bangladesh (2021-2041) and the 7<sup>th</sup> and 8<sup>th</sup> Five-Year Plan (FYP) of Bangladesh emphasize the importance of modernizing and expanding the TVET system for building a skilled workforce, through which reaping the benefits of the demographic dividend would be very much easier and smoother for Bangladesh (General Economic Division, 2015, 2020a, 2020b). In January 2020, a 20.525 billion project was approved by the Executive Committee of the National Economic Council (ECNEC) to establish 329 technical schools and colleges at Upazila level in the country to create employment opportunities and skilled human resources (Bangladesh Sangbad Sangstha, 2020). The 8th FYP sets a target to ensure 156 students per institution, a 1:12 teacher and student ratio, and 13 teachers per institution with a framework of public-private-NGO partnership and Sector Wide Approach (SWAp) (General Economic Division, 2020a). The Perspective Plan of Bangladesh (2021-2041) seeks to ensure 41 percent of TVET enrollment by 2041 to accelerate human development (General Economic Division, 2020b). Besides, The National Skill Development Policy 2011 also provided the National Skills Qualification Framework (NSQF) to overcome challenges associated with the proper supply of technical and vocational education in Bangladesh (Ministry of Education, 2011). National Education Policy 2010 also came up with 25 strategies for TVET, including pre-vocational education to introduce school-level students to TVET, allocation of a specific budget for this sector, the introduction of the apprenticeship program, sufficient and quality books and practical equipment, strengthening public-private partnership, academic curriculum based on the market demand, etc. (Ministry of Education, 2010).

However, despite the presence of different policy-level initiatives in Bangladesh, due to several factors, including access (dropouts, poverty, availability of institutes), equity (girls, disadvantaged), teachers' ability—particularly pedagogical and practical knowledge, poorly equipped workshops, limited teaching and training materials, and classrooms—both the development of the sector and the quality of the TVET have historically suffered (Khan et al., 2017). The overall formal TVET system (other than non-formal short courses of less than 360 hours) demands completion of class VIII in secondary education at the admission level, excluding school dropouts and impoverished rural youth, a substantial population of potential target beneficiaries (ADB, 2015). The rural population had fewer opportunities to study TVET due to the urban concentration of training institutions. Most trades were dominated by men and lacked any provisions for the participation of disabled people. Female enrolment has been low in the recent years (The World Bank, 2017).

It was anticipated that the TVET system would play a significant part in both the expansion of the economy and the improvement of social conditions. This would be accomplished by producing human capital for the labor market and developing employable skills among the early-school dropout, unemployed, and underemployed populations. This was not even close to being possible due to the fact that the formal TVET system however was not successful to exhibit strong linkages with the industry and was unable to respond to the demands of the labor market.

Besides, greater synergy between the policy documents and market reality is yet to be ensured in the current context, where the lack of effective coordination between supply and demand is prominently visible. The existing TVET institutions, in terms of number and quality, are not sufficiently fulfilling the demand. The situation is worsened by the significant lacking of proper academic and market research, which could offer the way forwards to TVET institutes by showing different strategies to face the challenges mentioned above. Understanding the context through exploring attitudes, perceptions, expectations, and market demand from various concerned stakeholders ranging from students, parents, employers, teachers, and policy planners can facilitate bringing the synergy among supply and demand sides and policy planners in the given academic and labor market reality in the context of Bangladesh.

Different studies were conducted to know the issues associated with the effectiveness/development of technical and vocational education and training in Bangladesh. Those included the role of TVET in the **development of the country** (Alam, 2008; Raihan & Han, 2011; Ullah & Parveen, 2018) **curriculum structure** (Haolader & Paul, 2013; Haolader et al., 2017; Maurer, 2012; Md. Mahmudur Rahman et al., 2012; M. A. Raihan & Han, 2013; Rauf, 2018), **teaching method** (Haolader, 2015; Shamim & Raihan, 2016), **employment issues associated with TVET** (Haolader, 2015; Rahman et al., 2021), **empowerment potential** (Haque, 2000) **desired coordination issues** (Naziz, 2019) **policy issues** (Siddiky & Uh, 2020), and **prime challenges to ensure the enrollment and success of TVET program** (Aziz, 2016; Comyn, 2013; Hoque, 2019; Kono et al., 2017; Rahman et al., 2018; Rahman & Md., 2013).

However, despite a fair amount of studies conducted earlier on the issues related to technical and vocational education and training in Bangladesh with separate and narrower focuses (containing a smaller geographic coverage, applying single research strategy, involving smaller number of target population), a comprehensive effort to bring attitude, perception, and practice regarding TVET in a single study where realities from both demand and supply side are brought, is hardly present in the context of Bangladesh. On top of that, connecting demographic dividend as a pertinent issue of the country with the prospects and challenges of TVET in the contemporary setting was also absent in the above-mentioned studies. These single-focused studies, however, captured the snapshots of different pertinent issues. Still, they did not aim to bring the overall picture of the TVET sector in the context of Bangladesh, where various stakeholders were approached with a comprehensive research strategy to explore the situation of TVET and explain the pathway of its connection with demographic dividend and related economic opportunities in Bangladesh.

In this context, the current study aimed to explore the potentials and challenges of technical and vocational education and training to reap the demographic dividend in Bangladesh, where primary and secondary data were collected to conduct an extensive investigation of different demand and supply side issues associated with the TVET and explore the pathway through which TVET can facilitate reaping the demographic dividend in a proper and timely manner.

## **1.2 Research Questions**

The broad research question of this study was to find the challenges and potentials in vocational and skill development training currently operated by Technical and Vocational Education and Training (TVET). In addition, this study aimed to understand how TVET can positively impact the objectives of demographic dividend in Bangladesh. The specific research questions of this study were as follows:

1. What is the link between TVET and demographic dividend in global and Bangladesh perspectives?
2. What are the contributions of TVET graduates in achieving the demographic dividend in Bangladesh?
  - 2.1 What are the involvements of TVET graduates in income-generating activities in Bangladesh?
  - 2.2 How are the TVET graduates contributing to the national economy?
  - 2.3 What challenges and opportunities do TVET-completed students face while getting the job?
3. How are the existing policies and programs related to TVET influencing the achievement of demographic dividend in Bangladesh?
4. What are the perceptions and attitudes about TVET among potential TVET students (grades 8 and 10)?
5. What are the perceptions and attitudes about TVET among community people (parents and community leaders)?
6. What are the attitudes and perceptions, and expectations about TVET among employers?
7. What are the experiences of current TVET students (challenges of skill development/skill enhancement)?

## CHAPTER TWO: METHODOLOGY

### 2.1 Introduction

This chapter describes the multiple sources of data used in this research. Both quantitative and qualitative (primary) data were collected and used in addition to reviewing the existing relevant literature and policy documents for addressing the identified research questions. Data collection and analysis techniques along with the study population are also elaborated on in this chapter.

### 2.2 Research Approach

This study used mixed methods and sequential approaches to collect secondary and primary data. First, the existing relevant policies and strategies were reviewed to know the linkages between TVET and demographic dividends from national and global perspectives. Secondly, two survey data collection tools (Annex-A and Annex-B) were developed to collect quantitative data from potential and current TVET students. Finally, five sets of qualitative data collection tools (Annex-3 to 8) were designed to collect qualitative data from the parents, community people, employers, former TVET students, and the TVET program promoting and implementing agencies in Bangladesh. Table 2.1 presents the research question-wise study participants, data source, and data collection methods.

**Table 2.1: Matrix for research question-wise study participants, data source, and data collection methods**

Research Questions	Study participants	Data source	Data collection methods	Tool's name
1. What is the link between TVET and demographic dividend in global and Bangladesh perspectives?		Secondary	Literature review	
2. What are the contributions of TVET graduates in achieving the demographic dividend in Bangladesh?				
2.1 How are the TVET graduates contributing to the national economy?	Former TVET Students	Primary	Qualitative	IDI (Former TVET)
	Employers	Primary	Qualitative	KII (Employers)
2.2 What are the challenges and opportunities TVET completed students are facing while getting the job?	Former TVET Students	Primary	Qualitative	IDI (Former TVET)
	Policymakers & Teachers	Primary	Qualitative	KII (Policymakers)
				KII (Teachers)
Employers	Primary	Qualitative	KII (Employers)	
3. How are the existing policies and programs related to TVET influencing the achievement of the demographic dividend in Bangladesh?				
Policies and programs related to TVET influencing the achievement of the demographic dividend in Bangladesh		Secondary	Literature review	
Challenges of promotion phase	Policymakers & Teachers	Primary	Qualitative	KII (Policy makers)
				KII (Teachers)
Challenges of Implementation phase	Policymakers & Teachers	Primary	Qualitative	KII (Policy makers)
				KII (Teachers)
Challenges of monitoring phase	Policymakers & Teachers	Primary	Qualitative	KII (Teachers)

4. What are the perceptions and attitudes about TVET among potential TVET students (grade 8 and 10)?	Students of classes 8 & 10	Primary	Quantitative	Survey (8,10)
5. What are the perceptions and attitudes about TVET among community people (parents and community leaders)?	Parents and Community Leaders	Primary	Qualitative	IDI (Parents)
				IDI (Community Leaders)
6. What are the perceptions and attitudes about TVET among employers?	Employers	Primary	Qualitative	IDI (Employers)
7. What are the experiences of current TVET students (challenges of skill development/skill enhancement)?	Current TVET Students	Primary	Quantitative	Survey (Current TVET)

## 2.3 Data Collection Tools Development

### 2.3.1 Quantitative Data

In terms of enrolling in TVET, there are three levels of enrollment. The first level is by enrolling in class six/seven for JSC (Vocational) examination. However, according to BTEB annual report-2021 the number of students who were registered at JSC (Vocational) level was 63. This number is very negligible compared to the huge number of students in classes six and seven. So, this study excluded classes six and seven from potential TVET students' criteria. The first type of potential TVET students are those in class eight (08) who can attend a two-year SSC (Vocational) course. The second type of potential TVET students are those in class ten (10) who can get admission in a two-year HSC (Vocational) course or a four-year diploma course after completing SSC.

As specified in the research question matrix, this study aimed to focus on three specific areas which required quantitative study. These were (a) perceptions and attitudes of potential TVET students (Class 8 and 10), (b) experience of the current TVET students and (c) attitudes about TVET among tertiary level students (university). Data from potential TVET students and current TVET students were collected through quantitative surveys from selected study areas whereas an online survey was conducted for collecting data from tertiary-level students.

Two structured questionnaires were used for collecting quantitative data. One was for the potential TVET students (Class 8 and 10). This was used predominantly to find the attitudes and perceptions of the potential students. The questionnaire was divided into three sections; family background, educational background, knowledge, attitudes, and perceptions of them toward the TVET program and TVET graduates. The second one was for the current TVET students and was divided into six sections; family background, educational background, enrollment decisions, opinion about own institution, perceptions, and opinions towards TVET and general education.

### 2.3.2 Qualitative Data

Four topic guides were developed to collect qualitative data; one Key Informant Interview (KII) guidelines for service providers, two In-depth Interview (IDI) guidelines for parents/community leaders and employers, and one IDI for the case study of the former TVET

graduates. The KII guidelines for the service providers (Teachers, Policy Makers, and TVET program executing agencies) covered different aspects of promoting and implementing the TVET program such as inclusion, access and enrollment process of TVET students, challenges of curriculum, challenges of infrastructure, classroom performance, training of teachers, bridging the labor market, connecting to demographic dividend, collaboration/coordination, and different crosscutting issues. The IDI guidelines for parents/community leaders covered the family-level decision-making process to get enrollment into the TVET program, their attitudes, and perceptions towards the TVET program and TVET graduates, and the promotion of the TVET program. The guidelines for the case studies for TVET graduates also covered the reasons for enrollment into the TVET program, their experiences of graduating from TVET, TVET and job opportunities, TVET and economic development, perceptions towards TVET, challenges of existing TVET program, and way forward for promoting TVET program in Bangladesh.

The data collection tools were developed in three phases. First, the core research team drafted the English version of the questionnaire based on the review of existing literature related to research questions. Secondly, members of the technical committee validated the English version of the questionnaire. The English questionnaire was translated then into Bengali. Thirdly, the Bengali questionnaire was finalized by incorporating inputs received from the enumerators during their training for data collection and after conducting the pre-test.

## 2.4 Study Area, Sample Size, and Sampling

### 2.4.1 Study Area and Study Population

This study generated primary data, both quantitative and qualitative, from two high (Rajshahi 19.56% and Dhaka 19.28%) and two low (Sylhet 3.56% and Barishal 7.78%) performing divisions, selected purposively considering the proportion of current TVET students (see Table 2.2 for details about the distribution of current TVET students). Then two districts were selected based on the highest and lowest number of TVET trades (see Table 2.4).

**Table 2.2: Distribution of current TVET students, both private and public formal institutions, by division**

Division	Type of the institution		Total	Percentage
	Public	Private		
Rajshahi	43569	172786	216355	19.56
Dhaka	73361	139831	213192	19.28
Khulna	35150	125501	160651	14.53
Rangpur	44942	109423	154365	13.96
Chattogram	56544	78816	135360	12.24
Mymensingh	31977	68710	100687	9.104
Barishal	28497	57512	86009	7.777
Sylhet	14514	24825	39339	3.557
Total number of students			1105958	100

Source: Bangladesh Education Statistics 2021

Quantitative data were collected from the potential TVET students of grades 8 and 10 of both private and public schools and the current TVET students of both public and private formal institutions only. Qualitative data were collected from former TVET students, parents, community leaders, employers, and the persons involved with the TVET implementation program (teachers and policymakers).

#### 2.4.2 Sample Size and Sampling for Quantitative Data

The primary objective of the quantitative survey was to know the attitudes and perceptions of potential TVET students (Class 8 and 10) as well as the experience of the current TVET students. The total sample size for the quantitative survey of this study was 2608 of which 1,872 were from potential TVET students (46.2% from grade 8, 38.4% from grade 10, 15.4% from madrasa), and the rest 736 were from current TVET students (70.8% from private and 29.2% from public TVET institutions). Using the highest prevalence rates (see Table 2.3 for details about the distribution of potential and current TVET students by institutions) and formula for random sampling,  $[n=(Z^2P(1-P)/e^2 \times rr) \times \text{estimates}]$ , where  $n$ = sample size,  $Z= 1.96$  (95% CI),  $p= 0.45$  (prevalence of potential TVET students) and  $p=0.11$  (prevalence of current TVET students),  $deff=1.5$ ;  $e= 0.05$ , response rate=0.95 and three number of estimates, the calculated sample size was 1,794 and 730 for each group. However, it reached 1,808 and 736 for potential TVET students and current TVET students respectively due to the equal distribution of the sample and rounding effects by districts. Moreover, around 16% of the potential students (grade 8 & 10) are of madrasa. When we considered taking madrasa students the sample size increased to 1872 for potential TVET students. The specific number for the sample is given (see Table 2.4 for details about the distribution of survey sample by districts and divisions).

**Table 2.3: Distribution of potential and current TVET students by institutional types**

Type of student	Type of institution		Total	Proportion
	Public	Private		
Students in Secondary level (6-10)	543,603	838,6642	8,930,245	
Potential TVET students (8 and 10)	244,633	3,720,855	3,965,488	0.44
Students in Secondary & Higher Secondary (6-12)	3,000,486	10,233,024	13,233,510	
Current TVET students	340,020	824,860	1,164,880	0.11

Source: Bangladesh Education Statistics 2021

**Table 2.4: Distribution of survey sample by division and district**

Division and District	Rajshahi		Dhaka		Barishal		Sylhet		Total
	Rajshahi	Joypurhat	Dhaka	Munshiganj	Patuakhali	Jhalokathi	Sylhet	Sunamganj	
Class 8 student	108	108	108	108	108	108	108	108	864
Class 10 student	90	90	90	90	90	90	90	90	720
Madrasa	36	36	36	36	36	36	36	36	288
TVET student	92	92	92	92	92	92	92	92	736
Total	326	326	326	326	326	326	326	326	2608

### 2.4.3 Sample Size and Sampling for Qualitative Data

Saturation level was considered as the benchmark in this study to continue the collection of qualitative data. Thus, the collection of qualitative data by adding new respondents for each of the categories was carried out until reaching the saturation level. Table 2.5 presents the distribution of respondents for qualitative data by data collection methods and districts.

**Table 2. 5: Distribution of qualitative sample by methods and districts**

Type of respondents	Methods of Collection	Unit	Total
Former TVET Students	Case study	4 for each district	8×4=32
Parents/Guardians of Non-TVET Students	In-depth interviews (IDIs)	2 for each district	8×2=16
Parents/Guardians of TVET Students	In-depth interviews (IDIs)	2 for each district	8×2=16
Community leaders (Religious leader/Chairman/Member)	In-depth interviews (IDIs)	1 for each district	8×1=08
Teachers of TVET institutes	Key informant interviews (KIIs)	2 for each district	8×2=16
Teachers of Non-TVET institutes	Key informant interviews (KIIs)	2 for each district	8×2=16
Polymakers (BTEB and DTE, UCEP)	Key informant interviews (KIIs)		06
Employers	In-depth interviews (IDIs)	2 for each district	8×2=16
<b>Total sample for qualitative data</b>			<b>126</b>

### 2.5 Recruitment and Training of the Enumerators

Twenty-four (24) enumerators, twelve (12) supervisors [eight (08) for quantitative and four (04) for qualitative data] and two (02) research assistants with a combination of male and female were recruited for fieldwork. Graduate-level education and prior experience in fieldwork in social science research were the recruitment criteria for the enumerators, supervisors, and research assistants. Among the recruited staff, the research assistants worked full-time both at Dhaka and in the field. After completion of the recruitment, the members of the core research team conducted five days (05) of training for all the recruited staff and involved them in the pre-testing of the data collection tools on another day. Training sessions for fieldworkers were conducted by the research team members to inform the study objectives, sample selection, data collection, quality ensure process, and mock interview sessions.

### 2.6 Quality Control of Quantitative Data Collection

Three-stage quality control mechanisms were in place to ensure the quality of the collected data. In the first stage, supervisors, research assistants, and core research team members spot-checked the completed questionnaire in the field and, if necessary, asked the enumerators to re-interview the respondents. Secondly, all completed questionnaires were cross-checked by other enumerators. Twenty percent of the cross-checked questionnaires were then verified by the supervisors. The supervisors then sent the questionnaires to the research assistants. In the third stage, research assistants verified at least five percent of the questionnaires that had been verified by the supervisors. The core research team members also randomly verified the collected questionnaires at this stage.

## **2.7 Data Entry and Processing Plan**

The filled-in questionnaires were periodically returned to the computer lab at the Department of Population Sciences, University of Dhaka, for data processing while fieldwork was ongoing. Simultaneous processing allowed researchers to receive feedback on the quality of the collection of data at the field level and to make adjustments if required, while still in the field. Data processing consisted of office editing, coding for open-ended questions, data entry, and editing of inconsistencies that were found by the computer program. The data were processed by four data entry operators and three data entry supervisors. Data processing was carried out using the SPSS, Microsoft Excel software. Qualitative data collected through in-depth interviews were recorded by using a digital audio recorder and transcribed. The transcripts were then word-processed for analysis by using the qualitative data analysis software Nvivo (version 10) and a thematic analysis was performed.

## **2.8 Data Analysis**

Descriptive and inferential statistical techniques, both bivariate and multivariate, using SPSS-23 were performed to analyze quantitative data. For qualitative data, transcriptions from the recording and handwritten notes were prepared for Cases Study, In-Depth Interviews (IDIs), and Key Informant Interviews (KIIs) to generate codes. Qualitative data then were analyzed thematically based on the themes and reported in parallel in the results sections of quantitative findings, where appropriate.

## **2.9 Ethical Issues: Privacy and Confidentiality**

The study ensured the ethical issues involved, including the risk and benefits of the respondents. Before conducting data collection, each respondent was informed about the purpose, type of information coverage, confidentiality, interview time, etc. Also, they had the right to refuse in giving the interview. It is important to explain to respondents that their participation in the study is voluntary, and their names or any identifying details will be kept strictly confidential. The study asked for their verbal consent, both from students and the head of the institutes, to take part in the study. The research protocol had been reviewed by the Academic Committee of the Department of Population Sciences, University of Dhaka, as well as the Technical Review Committee formed for this research.

## CHAPTER THREE: LINK BETWEEN TVET AND DEMOGRAPHIC DIVIDEND IN GLOBAL AND BANGLADESH PERSPECTIVES

### 3.1 Realizing Demographic Dividend

The demographic dividend is considered an outcome of a secular decline in fertility and consequent changes in the age structure of a country, commonly a developing country with an existing high rate of fertility. As a result of the shift in the fertility and age structure and through proper investments in education, health system, and economic policies, the overall youth dependency declines, and the share of working age population increases, which ultimately creates the pathway for the increase of per capita income and smooth income growth.

### 3.2 Linking Demographic Dividend & Education

The linkages between the decline of fertility, changes in the age structure, and the level of educational attainment are very close. Different studies focusing on isolating the single dominant factors of demographic dividend found that human capital has a clear dominance in influencing demographic dividend over age structure, and thus the role of education is very crucial in this regard. (Crespo et al., 2014; Lutz et al, 2019). Education, being a key driver of economic growth (Lutz et al., 2008) widens up the scope of reaping the benefits of demographic dividend in a country.

The channels through which improved education can affect economic growth are multi-dimensional. Education can increase the level of skills of the working-age population and thus the overall labor force, which ultimately results in better productivity of the workers in a given time (Crespo et al., 2014). The higher share of a working-age population is not enough, rather it can be detrimental if the education level of such a portion remains lower. The absence of a proper institutional setting and a systematic educational structure can give rise to unrest among the youth population in a situation where they are not provided with productive employment opportunities (Cincotta, 2011).

The existing literature has focused differently on the determinants of economic growth and the demographic dividend in recent years. The sole focus on demographic changes such as fertility decline and changes in the population age structures as drivers behind demographic dividend has been found among different academic literature. (Lee & Mason. 2010; Mason et al., 2016). On the other hand, a single focus on educational attainment as a predictor of demographic dividend disregarding the roles of changing fertility patterns and shifts in the age structures is also provided in other academic literature (Johnes & Johnes. 2004). The work of Lutz, Crespo-Cuaresma, and Sanderson (2008) and Crespo-Cuaresma, Lutz, and Sanderson (2014) played a role in connecting two different ways of thinking and concluded that when

correcting for educational expansion, the effect of population age structure on GDP per capita is reduced significantly—that is, the demographic dividend is mainly an education effect.

### **3.3 Recognizing Technical and Vocational Education and Training (TVET)**

According to the definition provided by UNESCO and International Labor Organization (ILO), Technical and Vocational Education and Training (TVET) refers to “aspects of the educational process involving, in addition to general education, the study of technologies and related sciences, and the acquisition of practical skills, attitudes, understanding, and knowledge relating to occupants in various sectors of economic and social life” (UNESCO & ILO, 2011). To ensure the progress and modernization of societies, the role of technical and vocational education and training is prominently addressed all over the world. It has been recognized as the “engine of economic development and international competitiveness” (Azzoni & Arbizu, 2013). Besides, TVET is considered to be playing role in other processes such as ensuring proper social inclusion, ensuring long-term economic prosperity, and reduction of inequalities in society (Wheelahan & Moodie, 2016; UNESCO, 2015). Besides the mainstream education of a country, TVET continues to hold its sheer importance because of different challenging issues of general education and a significant amount of dropout cases from mainstream academic activities (Adams, 2007).

In the labor markets, both in developed and developing regions, unemployment poses a great challenge as it is triggered by the lack of appropriate skills of the general working-age population who are struggling to grab different earning opportunities. The potential workers present in the workforce struggle to find the proper employment opportunities because of the gap in sufficient skills (UNESCO-UNEVOC, 2013). Deficiency of different cognitive, non-cognitive, and technical skills often becomes the reason for rejection of the workforce even with higher general education as the growing industries demand such sets of skills for entry-level posts. This necessitates the process of recognition and implementation of TVET programs for both developed and developing country contexts.

Though TVET has its prominent potential of being a great support towards the overall progress of a country, the practical application of this tool is not much satisfactory in the cases of both developing and developed countries all around the world. The paradox between this potential and actual performance of TVET all over the world is reflected by the larger share of the unskilled population in poor and developing countries and lacking in the ability of richer countries to meet the demands of the rapidly changing work environments in terms of human capital issues (Campbell, 2015. UNESCO TVET Strategy 2016–2021). The failure has been observed both in the perception and attention process towards technical and vocational education and training.

### **3.4 TVET and Economic Development**

TVET facilitates economic acceleration by opening the pathway towards employment and empowerment opportunities of the skilled human resource of a country. The way TVET influences economic sustainability and economic growth certainly vary from country to country. The scopes of newer employment generation evolve with the simultaneous development in the skills of the workforce which ultimately results in the overall workforce development of the countries. TVET can facilitate skill generation, and skill development, opening the opportunities for broader job markets for the working-age population, and also can enable individuals for creating the scopes for self-employment.

#### **3.4.1 Role of TVET in Facilitating the Skill Generation**

Human capital is inarguably the most crucial deciding factor behind the economic progress of a country (Shreeve et al., 2013). Different country examples showed how the realization of TVET and its importance in better productivity is reflected even in their academic curriculum. The Australian government has established a link between post-secondary education and labor productivity, with special emphasis on making the most use of developed talents in the labor market (Pavlova & Maclean, 2013). To handle the high technology and capital-intensive industries in the 1990s and the service sectors in the 2000s, Singapore's TVET system was reformed, and a skilled labor workforce was generated as a result. Singapore's establishment of the ITE (Institute of Technical Education) and an industry-driven TVET system have made it possible for it to generate a technical workforce of the highest caliber (Seng, 2011).

Hanushek and Wößmann (2008) investigated the role that vocational education plays in the development of job-related skills for particular occupations. Romanian graduates of vocational education and training have a lot of job opportunities in fields related to handicrafts, according to Malamud and Pop-Eleches (2010). In a similar vein, Pongo et al., 2014 found the benefits of skill development achieved through the Integrated Community Centre for Employable Skills (ICCES) TVET in Ghana.

In 23 developing nations, including Afghanistan, Bhutan, and Bangladesh from Southeast Asia, the Netherlands Initiative for Capacity Development in Higher Education (2010) is implementing a strategy to build TVET capacity. This confirms that TVET can foster the innovative capacity of such nations if provided with career counseling and soft skills like creative skills that can be used locally to find new technological solutions or be exported to developed nations (Netherlands Initiative for Capacity development in Higher Education. (2010). NICHE strategy on Technical and Vocational Education and Training (TVET). The Netherlands: Netherlands organization for international cooperation). Despite having abundant natural resources, emerging or underdeveloped nations struggle to entice multinational corporations through foreign direct investments, which forces foreign investors to relocate because of a lack of relevant labor market skills and knowledge (Farstad, 2009). Due to the lack of trained labor, development partner and donor organizations have

developed TVET and skill development programs in knowledge-intensive economies including India, China, and South Africa (European Commission, 2012).

### **3.4.2 Role of TVET in Skill Development**

While emerging nations with smaller economies and undeveloped countries require skill development to enter new rising industries, developing nations with larger economies need it to maintain their growth strategy (Martinez-Fernandez & Choi, 2012).

Training programs in Nepal are provided to help young people strengthen their talents. The National Planning Commission Nepal 2010 has outlined its goals to advance and broaden employable skills (Gajurel, 2011).

### **3.4.3 Role of TVET in Employment Generation and Job Market**

The main goal of TVET is to provide courses that include the necessary skills to function in the labor market. The graduates' skill set makes them employable in the industries and marketable to employers. According to Karki (2011), the development of both hard and soft skills has a considerably beneficial relationship with employment. King and Palmer (2008) stated that the growth of skills and a productive workforce have a beneficial link.

## **3.5 Technical and Vocational Education: The Picture of South Asia**

Recognition, application, and development of TVET hold multidimensional characteristics when we consider South Asian countries. Different prospects and challenges are visible in these countries regarding these processes. These realities in different country contexts necessitate a wider and stronger focus from the policy perspectives as well as from demand and supply side dimensions.

### **3.5.1 Access to TVET in South Asia**

Because South Asia (except for Sri Lanka) did not ensure the universalization of education up to at least the eighth grade at an early stage in its growth, it has failed its children. As a consequence of this, there are already 238 million people in the labor market who are either illiterate or have primary or education levels lower than primary. This accounts for 49 percent of the labor force (Mehrotra, 2014). South Asian countries have historically been faced with a paradoxical situation: the majority of the children who have access to formal TVET are young males who have the financial means to continue their education for a longer period and complete at least class 8 (as this is the minimum qualification required to enter formal TVET), but they have high aspirations of working in white-collar jobs. Consequently, many who do enroll in a formal TVET program have little to no interest in obtaining a vocational skill because their goal is to obtain a position in the public sector or in the private sector that requires a white-collar occupation. In the meantime, young people who have not completed eight years of schooling are automatically disqualified from entering TVET because completing eight

years of study is often required to enroll in TVET. The low rate of enrollment is, therefore, triggered by this paradox to a great extent (Mehrotra, 2017).

### **3.5.2 Challenges in Ensuring Quality Education**

Challenges regarding quality education issues are widespread across South Asian nations, and it has two underlying causes: the first is a lack of capacity to educate instructors, and the second is bureaucratic red tape that makes it difficult to fill vacant roles. Both of these factors contribute to the problem. In most cases, there is neither a clear policy nor a set of guidelines to follow in order to further one's career as a TVET instructor. In most cases, they do not receive much pedagogical training at all, let alone training that focuses on competencies. They also lack the necessary practical abilities, and having prior work experience in their field is not always a must for becoming a teacher (World Bank 2008; ILO 2003).

### **3.5.3 Budgetary Challenges Regarding TVET from the Policy Perspectives**

The budgetary challenges are one of the crucial issues which demand to be addressed while considering the development of TVET in South Asian countries. For example, the amount that the government of Bangladesh contributes to vocational education does not surpass one and a half to two and a half percent or two and a third percent of total education spending. About 1.2 percent of Nepal's education budget went toward technical and vocational education and training, while just 0.2 percent of the country's overall budget did (UNESCO). Although the percentage is unknown for India, it is highly unlikely to be significantly higher than in other South Asian countries.

### **3.5.4 Challenges Regarding Demand-Based Timely Modification of TVET Curriculum**

There is a restriction placed on the responsiveness of TVET when its systems are government-run and supply-driven, especially in the South Asian region. As a consequence of this circumstance, the process of developing new curricula, introducing new courses, and terminating courses that are no longer relevant has become complicated and time-consuming. In addition, as a result of administrative laws that centralize the employment process, it can be challenging to hire new personnel on a contractual basis to meet the demand for additional classes that comes from the market. This is also common in the South Asian developing country context.

## **3.6 Technical and Vocational Education in Bangladesh**

According to estimates provided by the Government of Bangladesh, approximately 2 to 2.5 million young people, the vast majority of whom are unskilled, enter the labor market every year (BBS, 2017). When compared to this, the number of people looking for work is far more than the number of really available positions. The vast majority of young people, including a disproportionate number of women and members of disadvantaged groups, are either self-employed or find work in the informal economy in positions that require little expertise and provide little output, or they are self-employed.

The relatively young population of Bangladesh suggests that the country will have a growing workforce in the future; nevertheless, the majority of the population is still unskilled. There is around 63 percent of the entire population that falls into the age bracket of 15 to 49 years old, while 37 percent of the labor force is comprised of people in the age bracket of 15 to 29 years old. The relatively young age distribution of the country's population is frequently referred to as the nation's "demographic dividend." However, the most significant obstacle is training this large pool of young workers in skills that are in demand by employers and improving the kinds of support services available to them so that they can make a smoother transition from school to the workforce.

The Government of Bangladesh has set a lofty goal of achieving middle-income status by the year 2022. To accomplish this goal, the nation should increase the amount of money it invests in socio-economic development, increase the proportion of GDP that is accounted for by manufacturing while decreasing the proportion that is accounted for by agriculture, expand and diversify its exports, and send more and more skilled workers to other countries. These require concerted efforts to produce an increasing number of skilled workers, to expand access to technical and vocational education and training (TVET), and to design and develop an inclusive skills system that provides opportunities for those who are excluded from the formal education system.

### **3.6.1 TVET in Bangladesh: Past and Present**

In Bangladesh, due to some factors, including access (dropouts, poverty, availability of institutes), equity (girls, disadvantaged), teachers' ability—particularly pedagogical and practical knowledge, poorly equipped workshops, limited teaching and training materials, and classrooms—both the development of the sector and the quality of the TVET have historically suffered.

The prevalent formal TVET system (other than non-formal short courses of less than 360 hours) demands completion of class VIII in secondary education at the admission level, hence excluding school dropouts and rural impoverished youth, a substantial population of potential target beneficiaries. The rural populace had fewer opportunities to study TVET due to the urban concentration of training institutions. The majority of trades were dominated by men and lacked any provisions for the participation of disabled people. Female enrolment has been quite low.

Despite this, it was anticipated that the TVET system would play a significant part in both the expansion of the economy and the improvement of social conditions. This would be accomplished through the production of human capital for the labor market as well as the development of employable skills among the early-school dropout, unemployed, and underemployed populations. This was not even close to being possible because the formal

TVET system did not have any linkages with the industry and was unable to respond to the demands of the labor market.

### **3.6.2 Current Scenario of TVET in Bangladesh:**

#### **❖ TVET Structure in Bangladesh:**

The changing nature of the world of work, particularly due to globalization and technological changes, has significant implications for the quality of social, economic, and environmental conditions. Technical and vocational education and training (TVET) can indeed play an essential role in developing a new generation of individuals who are equipped to face the challenges of achieving sustainable socio-economic development.

TVET is education and training which provides knowledge and skills for employment. TVET uses formal, non-formal and informal learning (Iqbal, 2022). TVET is recognized to be a crucial vehicle for social equity, inclusion and sustainable development (Iqbal, 2022).

Though TVET has various purposes, its core purpose is to prepare the youth for the skill-based job market providing the work-related skills, underlying knowledge and scientific principles (Iqbal, R. M., 2022). Skill based job refers to both formal employment and self-employment, but the curriculum of TVET includes entrepreneurship training to make the students capable of creating self-employment (Iqbal, R. M., 2022).

The wastage of unused seats due to the failure of students is a serious challenge for the TVET system (Aziz, S. A., 2016). This not only results in the loss of resources but also indicates the inability of the system to provide quality training and support to the students.

#### **❖ Weakness of TVET Structure in Bangladesh:**

Barriers to quality TVET in Bangladesh that include lack of practical skills and industrial experience of majority of the TVET teachers, ineffective delivery of the practical component of the curriculum; inadequate professional preparation of teachers in both subject matter and teaching methods, lack of academic supervision, inadequate attention to research, lack of teacher and institutional accountability, insufficient and unsuitable textbooks and lab equipment, lack of linkage with industries, lack of government initiative, lack of coordination among different levels of education (primary, secondary, tertiary) and also among institutions, lack of teacher-student communication, improper licensing, insufficient student competencies (key or basic competences) at entry-level, lack of self-learning facilities at training institutes (for example using information and communication technology (ICT), etc.

#### ❖ **Access to TVET:**

The TVET system needs to focus on ensuring that the students have access to relevant and in-demand skills, and that the training provided aligns with the needs of the labor market (Aziz, 2016). As a result not only the success rate of the TVET program will improve but also contribution to the economic development of the country will increase by addressing the skills gap in the workforce. (Aziz, 2016).

#### ❖ **Quality of the TVET Teachers:**

The success rate of TVET programs depends on the quality of the program and the competency of the trainers (Aziz, 2016). The quality of the TVET system is dependent on the human resources, where the teachers, play a significant role in determining the success or failure of the system. The shortage of skilled teachers and their inadequate training are some of the significant challenges that the TVET system in Bangladesh is facing (Aziz, 2016).

#### ❖ **Teacher's Qualification:**

It is essential to prioritize the development of qualified and trained teachers in the TVET system to ensure the quality of education and training. Teacher training programs, workshops, and seminars can be organized to enhance their skills and knowledge. The recruitment process should be transparent and based on merit to ensure that only qualified and competent teachers are hired. Furthermore, the government should provide adequate resources and facilities to TVET institutions to attract qualified teachers and facilitate effective teaching and learning. (Iqbal, 2022).

Relying heavily on temporary or project-based teachers can have a negative impact on the quality of education provided. These teachers may not have the same level of experience and expertise as full-time teachers, and may not be as invested in the long-term success of the institution. In addition, constantly hiring and training new teachers can be expensive and time-consuming. It is important for TVET institutions to prioritize long-term planning for human resource development and invest in attracting and retaining qualified and experienced teachers. This can include offering competitive salaries and benefits, providing ongoing professional development opportunities, and creating a supportive and collaborative work environment (Aziz, 2016).

Additionally, it is important to create a clear career path for TVET teachers, with opportunities for promotion and recognition of their contributions to the sector (Aziz, 2016). This can help to attract and retain high-quality teachers who are committed to improving the quality of TVET education. Finally, it is important to ensure that all TVET teachers are properly trained and qualified, with ongoing opportunities for professional development to keep up with changing technologies and industry needs (Aziz, 2016).

It is important to establish clear policies and guidelines for the recruitment and management of temporary and project-based teachers, and to invest in the development of a strong and sustainable teacher education system (Aziz, 2016). This can be achieved through initiatives such as improving the quality and relevance of teacher education programs, providing ongoing professional development and support for teachers, and creating opportunities for teacher collaboration and knowledge sharing (Aziz, 2016). By prioritizing the recruitment, training, and retention of qualified and motivated teachers, we can help to ensure that all students have access to a high-quality education that prepares them for success in the 21st century (Aziz, 2016).

Ensuring the sustainability of the TVET system and its ability to meet the evolving needs of the economy is very crucial. By prioritizing the recruitment, training, and retention of qualified TVET teachers, we can ensure that students receive the education and skills they need to succeed in the workforce. Additionally, by promoting the importance of TVET teachers, more talented and motivated individuals can be encouraged to pursue careers in this field, leading to a more robust and dynamic TVET system overall. (Aziz, 2016).

#### ❖ **Teachers' Type:**

Both technical and non-technical teachers play a crucial role in the success of TVET institutes. Technical teachers bring their extensive practical knowledge and skills to the classroom, which is essential for preparing students for their future careers. They must be able to integrate theoretical knowledge with practical skills to ensure that students have a well-rounded education.

On the other hand, non-technical teachers are responsible for teaching general subjects that are not directly related to a specific trade or skill. They must have a solid understanding of the subject matter they teach and the ability to communicate complex concepts in a way that is understandable to students (Aziz, 2016).

Having a balanced mix of technical and non-technical teachers is important for providing the best possible learning experience for students which ensures students receive a well-rounded education that prepares them for successful careers in their chosen fields. Therefore, it is essential for TVET institutes to recruit and retain both technical and non-technical teachers and provide them with the necessary support and training to ensure their continued professional development. (Aziz, 2016).

#### ❖ **Curriculum Relevance:**

TVET curriculum update is a challenge because we are living in the age of changing technology where machineries are being replaced by new innovations frequently. As a result, market demand also keeps changing. Mismatch between the TVET curriculum and the changing market requirements is another major challenge faced by the TVET sector (Iqbal, 2022). It is essential for TVET institutions to have a curriculum that is relevant to the current and future job market. This can be achieved through regular consultations with industry stakeholders and employers to identify the skills and knowledge that are needed in the workforce. TVET institutions can establish partnerships with companies and organizations to offer training programs that are tailored to meet the specific needs of the industry. Such collaborations can help to ensure that graduates of the TVET system are equipped with the skills and knowledge that are in demand in the job market. (Iqbal, 2022).

#### ❖ **The Strengths of the Curriculum:**

The content of the curriculum covers a wide range of areas including domain specific subjects, cross-occupational subjects (e.g. information technology, biomedical engineering, communication technology, engineering drafts), and related subjects (higher mathematics, natural science, social science, business studies, entrepreneurship, environmental engineering, etc.) (Iqbal, 2022). The curriculum is comprehensive and well documented. This needs to be updated to match the changing market requirements and to ensure that students acquire the necessary skills and competencies needed in the current job market. It is important for BTEB and the TVET institutions to regularly review and update the curriculum in collaboration with industry stakeholders to ensure that it remains relevant and up-to-date. This will enable TVET graduates to compete effectively in the job market and contribute to the economic development of the country (Iqbal, 2022). This may include enhancing the curriculum, providing adequate training to the trainers, and improving the learning environment (Aziz, 2016).

#### ❖ **Lack of practical relevance:**

The focus of the curriculum is not placed upon the practical requirements, but rather on theoretical matters (Haolader & Paul 2013). The focus should be on developing the skills and knowledge required for the actual workplace, rather than just theoretical concepts. This can be achieved through more practical training and use of real-life scenarios and projects in the curriculum. The curriculum should also be updated regularly to reflect the changing needs of the industry and the job market (Haolader & Paul, 2013).

❖ **Inefficient Enterprise attachment/training:**

In order to improve the efficiency and management of work placement, the government and TVET providers need to establish better partnerships with industries and ensure that companies are fully prepared to receive and train students (Haolader & Paul, 2013). Also, the duration of work placement should be increased and the gap between the end of the work placement and the start of the next semester should be minimized. It is also important to ensure that students are not required to pay fees for work placement as this can be a financial burden and hinder their ability to fully participate in the program (Haolader & Paul, 2013).

❖ **Apathy towards TVET:**

TVET is a valuable education and training option for students with a wide range of abilities and interests. It provides practical skills and knowledge that are in demand in various industries, and can lead to meaningful and rewarding careers (Iqbal, 2022). To address this lack of awareness, there needs to be a concerted effort to promote the benefits and opportunities of TVET. This can be done through various channels, including media campaigns, career fairs, and outreach programs to schools and communities. Additionally, it is important to change the perception that TVET is only for those who are not able to continue with general education. This can be achieved by highlighting successful TVET graduates and their achievements, and emphasizing the important role that TVET plays in driving economic growth and development (Iqbal, 2022). Overall, increasing awareness and understanding of the benefits and opportunities of TVET is crucial to addressing the skills gap and promoting sustainable economic growth in Bangladesh (Iqbal, 2022).

❖ **Coordination for Implementation:**

Lack of coordination and action plan for TVET implementation is a major hindrance to the development of skilled manpower in the country (Iqbal, 2022). It is essential that the government takes concrete steps towards materializing their stated vision for TVET. This can include the development of a comprehensive action plan with clear objectives and timelines, adequate resource allocation for TVET infrastructure and facilities, training and development of skilled trainers and instructors, and effective monitoring and evaluation mechanisms to ensure the quality and relevance of TVET programs (Iqbal, 2022). Without a coordinated and well-planned approach, the potential benefits of TVET for economic growth and social development may not be fully realized (Iqbal, 2022).

❖ **Gender Issues, Barriers and Gaps:**

There is a social stigma and lack of gender friendly environment in TVET institutions and workplace. People often view that; technical jobs and training programs are better suited for the men. Lack of social safety and security at the institution, lack of

female-friendly structures (separate accommodation, washrooms, etc.) and safe transportation are the barriers for the females to pursue TVET (Iqbal, 2022).

Campaign for female is an essential issue in order to accessing TVET. When they enter TVET institutions, the way they are received and accommodated also need to be promoted, so that both female students and their parents desire to choose TVET as the mode of education. Recruiting more female instructors and administrators into TVET will be a major challenge with the gradual increase of female enrollment.

### **3.7 Linkage between TVET and Demographic Dividend in Bangladesh:**

To facilitate linkages between education and skills training to ultimately make Bangladesh's youth more employable, this case study uses secondary and primary research to examine the extent to which education and training systems in the country prepare young people for the world of work. It provides an overview of the education and skills landscape in the country, highlighting gaps, to ultimately make some recommendations on how the government might improve these systems toward enhancing the employability of its young people (Dewan & Sarkar, 2017).

#### **3.7.1 How TVET Components are linked with Demographic Dividend in Bangladesh:**

##### **❖ Skilled Training:**

Skill training is perceived as a way of plugging this gap. The Bangladesh government has crafted a skills development system with a National Skill Development Policy and Framework (2011), Technical and Vocational Training (TVET) in schools, a National Technical and Vocational Qualification Framework, and centers for Recognition of Prior Learning (RPL) across the country (Dewan & Sarkar, 2017).

Yet despite the government's desire to skill its population to meet the demands of the market and fuel economic growth, the existing skills infrastructure in Bangladesh has some serious limitations. First, the resources allocated to TVET are sorely lacking. In the fiscal year 2007-08, only roughly three percent of the total budget for education was allocated to TVET. In the fiscal year 2009-10, even though the absolute budget for TVET increased by five percent, its share in the total education budget decreased. Of the total funding that skill development receives in Bangladesh, 45 percent comes from public sources and 55 percent is from private sources (Dewan & Sarkar, 2017).

##### **❖ Accelerating Economic Development:**

Among 38% students who are dropped out at secondary level, 86% students of general education background join job market with inadequate skill (BANBEIS, 2017). Though educational qualification is the fundamental requirement to get a job, a generalized education system that does not have much job orientation can only produce unemployed graduates (Iqbal, 2022). Our education system needs to be reformed

through skill development-oriented curriculum in all streams of education in order to prepare skilled young labor force (Iqbal, 2022).

In developing countries like Bangladesh, TVET can play two critical roles in national sustainable development. Firstly, by providing technical and vocational skills training, TVET can enable young people to acquire the skills and knowledge needed to secure decent employment and contribute to the economy. Secondly, TVET can provide skilled manpower that is needed at all levels of the economy which is important for the growth and development of various sectors, including agriculture, manufacturing, construction, and services. The skills developed through TVET should be able to lead to self-reliance in the absence of salaried employment and enhance the industrialization process. This, in turn, can promote economic growth and development, reduce poverty, and contribute to sustainable socio-economic development.

Moreover, TVET can also promote sustainable development by integrating social and environmental considerations into the training curriculum which can ensure that TVET graduates are equipped to contribute to sustainable development by applying skills and knowledge that are environmentally and socially responsible. By providing skills training and promoting self-reliance, TVET can contribute to economic growth and development while also promoting social and environmental sustainability.

#### ❖ **Employment Generation:**

The unemployment rate rises with the level of education due to the lack of technical skills. This keeps labor productivity low (Aziz, 2016). There is a need for job-oriented quality education, English (communication) skills, on-the-job training as well as better job formation. TVET can play a very effective role in reducing educated unemployment and make a significant improvement in labor productivity (Aziz, 2016).

Sustainability of TVET can be achieved by keeping pace with new technologies, promoting and increasing women participation in TVET, continuous updating of curriculum according to the demand of both local and global market, linkage among industries and institutions, increasing training facilities for teachers' and trainers, etc.

## CHAPTER FOUR: CONTRIBUTIONS OF TVET GRADUATES IN ACHIVING THE DEMOGRAPHIC DIVIDEND IN BANGLADESH

### 4.1 Contributions of TVET Graduates to the National Economy:

#### ***Skilled Labor Force/ Skilled Human Resource:***

The major purposes of TVET is to prepare the youth for the skill-based job market that requires technical knowledge. This special mode of education provides training to the students so that they can be well trained on their respective disciplines. Students are also preferring trades those are highly in demand among the employers.

According to one of the higher officials of the BTEB,

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*“Many of the students are pursuing diploma on computer, electrical or automobile engineering, some are interested in BMT, marine trade, health technology, fisheries, etc. But female students are likely to choose trades related to health technology, or short-term courses related to crafting or agriculture.”*

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#### ***Practical Knowledge:***

TVET curriculum is mainly focused on laboratory practices of course related to technical mechanisms. Attending practical classes is mandatory for every TVET student. And also, hands-on trainings are compulsory part of vocational curriculum. One of our respondents stated,

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*“We have to attend mandatory practical classes as our discipline is based on practical knowledge of technical stuff.”*

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#### ***Knowledge of Industrial Machineries:***

As TEVT aims at producing skilled workforce to fulfil market demand, acquiring knowledge of modern technical machineries is a crucial criteria for the students. Though most of the institutions do not have modern practical equipment, teachers provide trainings with whatever the institutions can offer.

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*“We cannot provide quality practical classes to our students because we do not have up-to-dated technologies as per the market need. Our college cannot afford heavy machines which are used in industries, and so students suffer after joining to their workplace.”*

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But the employers are also satisfied with the potentials of their TVET graduate employees. An employer said,

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*"My employees from TVET institutions are very much well-trained with technological niceties."*

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#### **Opportunities for Higher Studies:**

Students who has completed their diploma courses, can go for pursuing higher degrees in their respective fields. It has been mentioned by some of our respondents that a number of public and private universities provide tertiary degrees to the diploma graduates.

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*"Graduates are pursuing B.Sc. in engineering degree from renowned universities of our country after completing their diploma in any of the engineering trades."*

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Even foreign universities offer lavish scholarship opportunities to the TVET students as they prioritize for their practical skill.

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*"Many of my friends are going abroad for higher studies. They are being offered scholarship by their respective institutions."*

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#### **Skill based Employment:**

Nowadays, demand for skilled labor force is increasing rapidly with the expansion of industrialization. This study found that industries and other potential workplace of TVET graduates offer attractive facility for the skilled students.

#### **High Demand in Industries:**

According to the perceptions of the respondents, due to the fourth industrial revolution and newer technological innovations industries are growing rapidly which is creating massive employment opportunity for the skilled youths. TVET graduates are preferred in those newest industrial projects as they have hands-on knowledge of technical jobs better than the graduates of general education.

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*"Number of government-based IT firms, high-tech parks are increasing gradually. To run these projects, authorities are hiring skilled workforce prioritizing people like us who have TVET certificates."*

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#### **High Demand in Foreign Labor Market:**

Foreign labor market has huge demand for skilled Bangladeshi labors. The employers offer higher amount of wages to the expatriates who have a degree of TVET or have minimal practical knowledge of technical aspects than those of our country. Mainly the countries of Middle East, South-East Asia and Europe hire labors from Bangladesh.

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*"As the employers cannot offer sufficient salary or facilities, many of the skilled graduates are leaving country. Countries like Japan, South Korea, and Qatar are providing higher paid jobs to skilled labors."*

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### **Entrepreneurships/ Self-employment:**

#### ***Self-employment:***

TVET graduates can even be entrepreneurs if they want to, as their technical skills make them capable of running their own start-ups where they can also provide employments to others. As found from the interviews, TVET graduates who became entrepreneurs either could not get any decent jobs that could utilize their skills, or their assigned tasks, workplaces and coworkers were not compatible for them.

An entrepreneur stated while interview,

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*"I looked for jobs after passing my diploma certificate course. Buy could not found any placement that can justify my degree or capabilities. So, I decided to have my own business and became an entrepreneur."*

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#### ***Home Based Opportunities for Female:***

Female who have formal or non-formal training of any skill craft related trades, can also do retail handcraft business from their residences. A few of the respondents experienced that women prefer doing courses which require shorter course duration. Besides, while choosing trades they keep in mind which of those can help them doing or getting comfortable jobs.

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*"But female students are likely to choose trades related to health technology, or short-term courses related to crafting or agriculture."*

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According to another respondent,

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*"Women prefer short-term courses on clothing, handcrafts, etc. Many of them are now doing business from their home...tailoring, making crafts.....they are doing various income generating activities staying at home."*

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### **Increased Productivity:**

#### ***Practical/ Technical Knowledge:***

TVET graduates are likely to get engaged into income generating activities earlier. According to the respondents, an individual who is graduated from TVET has vast job opportunities in labor market because of their practical knowledge of technology. Also, he/she can be an entrepreneur.

A former TVET student said that, he got this preferred job because of his technical skills. In his word,

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*"As I have first-hand experience in working with machineries, I think that helped me to get my desired job."*

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**Competency:**

Our findings show that, in compared to graduates of general education, TVET graduates are more competent in job market as they possess practical skills of technological niceties. Despite possessing various professional skills, general education graduates are less prioritized in skill-based job sector because of not having technical trainings. And so, TVET graduates are highly demanded in industrial sector.

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*"Yes! Among all of my employees, the TVET graduate one is more competent than those who are from general education...it's because of their practical skills..."*

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**Creation of newer employment:**

***Through hiring staff for Business/ Entrepreneurship:***

A tracer study shows that, TVET graduates who run own businesses can create job openings for others. They appoint staff to accelerate their production or to assist themselves. According to the demand of the job position they recruit graduates of general education or TVET or any other hierarchy of educational qualification.

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*"Now I hire staff in my company according to my work demand... So, I think I am creating employment opportunities for others."*

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***Providing Training to Others:***

Often TVET graduates are seen providing training to others. A parent of a former TVET student mentioned that his child teaches technical works to others. He provides short-term trainings to those who cannot afford going to formal institutions.

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*"Even they can provide vocational trainings to other youths..."*

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Another respondent shared that he trains his newly recruited staff by himself before they start working at a proper industrial setting as they hardly have any practical knowledge of massive industrial machineries.

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*"I train my employees before recruiting them permanently so that they can do their job properly."*

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#### **Remittance:**

##### ***High Demand in Foreign Labor Market with Highly Paid Jobs:***

As foreign labor market has huge demand for skilled labors, our government is prioritizing in sending skilled workforce to foreign countries, especially in Middle East. According to a key-informant,

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*"Foreign labor market has huge demand for TVET graduates. Because they are good at skill-based tasks."*

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Skilled labors are offered high salary in international labor market. This skilled manpower contributes in our national economy as the pay huge amount of remittance every time they sent money to their families.

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*"I have seen kids of my neighborhood are going abroad after completing their studies from TVET institutions and getting highly paid jobs."*

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#### **Unemployment:**

##### ***Scarcity of Discipline Centered Jobs for the Graduates of General Education:***

Unemployment rate is quite high among the students of general education. Rather most of the jobs nowadays require employees those have at least minimal technical skills. As a result, the unemployment rate among the students of general education are increasing day by day as they hardly have any practical knowledge of technology. One of the respondents claim that,

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*"Nowadays, most of the jobs are skill based. As a result, students of general education cannot get into any suitable jobs for being amateur of technical tasks..."*

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##### ***Lack of Practical/ Technical Knowledge among the Graduates of General Education:***

As general education does not provide any practical or technical knowledge, students barely have any knowledge about TVET. According to the teachers of non-TVET institutions, their curriculum has few subjects those require practical knowledge on certain topics and students have to appear practical examinations as well. In many institutions' students do not need to attend practical classes or exams due to the scarcity of lab equipment.

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*“Our laboratories are so congested that we cannot accommodate all the students at a time. We do not even have all the equipment mentioned in the course books to provide them the exact training. So, we focus on enrich them with theoretical knowledge so that they do not lag behind in competitive exams.”*

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## **4.2 The Challenges and Opportunities TVET Graduates Face in Job Market:**

### **Underestimation of TVET:**

#### ***Social Unacceptance:***

The IDs of parents and community leaders’ portrait that, majority of people in our country think that TVET is for the people who are disadvantaged or living below poverty line. As majority of the TVET graduates who do not have any diploma degree works in different electronic or automobile service centers, become plumber, mechanic, etc., whom the society never show any dignity, people perceive it as an inferior form of education. And so, if someone get enrolled into TVET institution, his/ her society does not appreciate it in anyways. A parent told what he faced when his son started studying TVET,

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*“People in our neighborhood rebuke us for sending my child into TVET. They consider this to be for the underprivileged people of our society who are not financially well to do. His friends’ also tease him and make fun of him for this choice he made.”*

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#### ***Considering TVET Students/ Graduates as Unmeritorious:***

It is a common perception among the people of society that students who cannot do well at general education or dropout of general education choose TVET so that they can manage to get a certificate and get suitable jobs. One respondent said,

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*“I think students who fail in exams, cannot do well with their studies choose TVET so that they can get the degree as soon as possible and get into the labor force.”*

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Beside these, general education offers a vast opportunity to the students to participate in different extracurricular activities, competitions, fests, etc. which are hardly seen in any TVET institute. As a result, general education graduates imbibe more professional skills than TVET graduates which help them to flourish at their workplaces. According to an employer,

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*“Graduates of general education are more spontaneous and easy-going at workplace. Most of my staff having TVET certificate are lacking these qualities.”*

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### **Negligence of the Employers towards TVET Graduates:**

Though job openings those require skilled employees are available in job market, TEVT graduates often struggle to get suitable jobs. The reason behind this is employers' unwillingness and negligence in hiring TVET graduates. According to few employers, graduates of general education are quick learner, whereas the TVET graduates are not too fast at learning. Again, despite studying a first-hand knowledge-based curriculum, they hardly have sufficient technological skill due to poor laboratory set-up.

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*"TVET students are not too meritorious to learn things quickly. Also, due to poor lab facilities they lack for quality training for which they are lagging behind in the race of getting good jobs."*

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### **Quality of Curriculum:**

#### ***Updating Syllabus According to the Market Demand:***

As Technologies are upgrading day by day due to innovation of newer machines. Also, machineries are replaced by new innovations. To make the students capable of coping up with updating technology, syllabus should be updated after a certain time interval. And the quality of the curriculum should be maintained and monitored on regular basis.

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*"As industries are frequently replacing their machines with modern equipment, we need to be skilled at using those equipment as well. But our curriculum is not so frequently updated. As a result, we cannot acquire any knowledge regarding those machineries."*

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### **Lack of Well-trained Teachers:**

Most of the TVET institutions in Bangladesh are in lack of well-trained teachers who are good at the field of technology. According to the policymakers and teachers, lack of quality technical institutions, poor training facilities, unwillingness of eligible candidates to join TVET institutions, etc., are some of the underlying causes of insufficient number of teachers.

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*"Scarcity of expert teachers is one of the biggest challenges in this field."*

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The key informants of BTEB said that as the salary of the teachers are quite low in compared to other professions, for those they are eligible for, they prefer to choose any other white color jobs over being teachers of any TVET institutions.

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*"As we cannot offer high end salaries to the teachers that do justice to their degrees or level of expertise, teachers are less attracted towards this field."*

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### **Lack of/ Insufficient TVET Institutions in Downtown Localities:**

#### ***Poor Infrastructure:***

Findings of our interviews show that, government is establishing modern structured TVET institutions in sub district level. But lack of maintenance and monitoring are causing degradation to the quality of those establishments for which parents or guardians do not feel keen to enroll their children to those schools.

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*"Because of the absence of monitoring, and accountability, a huge number of TEVT institutions do not have quality infrastructure."*

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### **Poor Quality of Laboratory:**

#### ***Insufficient Laboratory Equipment:***

TVET students should have the practical knowledge of operating industrial machineries. But most of the institutions do not have sufficient laboratory equipment. As those tools are too expensive, it is difficult for both government and institutions to afford.

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*"Our laboratory did not have any well-maintained modern equipment. Even our institution did not have many of the equipment those are mandatory for our practical classes."*

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#### ***Unusable Equipment:***

Due to the lack of expert trainers, laboratory equipment remains unused.

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*"There were no well-trained teachers in our school who would know the exact usage of every equipment and teach use technological know-hows. So, with time being delicate machineries became unusable."*

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### **Absence of Quality Public Private Partnership:**

Government need to emphasize on strengthening public private partnership so that better training and job opportunities can be offered to the TEVT students. According to the key informants of this study, through the collaboration between public and private institutions and industries can improve the quality of education. Budgetary crisis, unaffordability of

practical tools, unavailability of expert trainers, and all these issues are triggered by the absence of public private partnership.

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*"If effective public private partnership would exist, TVET sector would not be in financial deficiency...also, training facilities would improve by organizing industrial visits..."*

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**Need Apprenticeship Law:**

Emphasize should be given on preparing and implementing apprenticeship law. Through apprenticeship law students can be able to get training from renowned industries which will enrich their practical knowledge.

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*"It is high time our government should emphasize on planning and implementing an apprenticeship law to support the students, so that they can have industrial experience..... This experience will help them to be familiar with the ambience and work processes of an industry."*

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**Lack of Knowledge Regarding TVET:**

In our society, people do not have clear knowledge about what TVET is, for whom is this education sector dedicated to, what are the benefits of studying TVET, and so on. TVET is assumed to be the choice of the financially insolvent people or students who are not so good at studies.

Parents of TVET students claim that, they got to know about it when their children took admission there or when any of their relatives or neighbors explained it to them. On the other hand, parents of non-TVET students are mostly ignorant of this sector.

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*"I did not have any idea about TEVT before my son get enrolled into it."*

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On the other hand, parents of non-TVET students are mostly ignorant of this sector.

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*"I have heard of it...but actually I do not know what my kid would learn if I admit her in a TVET institute."*

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## CHAPTER FIVE: POLICIES AND PROGRAMMES RELATED TO TVET TO ACHIEVE THE DEMOGRAPHIC DIVIDEND IN BANGLADESH

### 5.1 TVET in Sustainable Development Goals (SDGs), Perspective Plan and 7th and 8th Five Year Plans:

The third target under the **Sustainable Development Goals (SDGs)** 4 seeks to ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education. Lack of proper skill and competency is one of the many reasons causing youth unemployment and hindrance in accelerating this sub-goal of SDGs.

In order to achieve this target and develop the skill of the youths who are currently 41.63 million in number, effectiveness of TVET institutions to reach and offer quality education and training is necessary (BBS, 2017). And so, the Perspective Plan of Bangladesh (2021-2041) and the 7th and 8th Five Year Plan (7th FYP, 8th FYP) emphasizes the role of expansion and modernization of TVET for building a skilled workforce.

In **7th FYP** aimed to implement the vision and mission of National Skills Development Policy (NSDP 2011) and also to ensure the benchmark teacher students ratio of 1:12 with the allotted budget of 100 crore to fund pre-employment training, up-skill training for existing workers and training of women and disadvantaged people.

Though the teacher student's ratio could not be achieved during the period of 7th FYP, in January 2020, a 20,525.69-crore project was approved by the Executive Committee of the National Economic Council (ECNEC) to establish 329 technical schools and colleges at upazila level in the country with an aim to create employment opportunities and skilled human resources.

Now the **8th FYP** is targeting to ensure 156 students per institution, 1:12 teacher and students' ratio and 13 teachers per institution with a framework of public-private-NGO partnership and Sector Wide Approach (SWAp). Increase the number of training institutions and reduction in gender gap are also being targeted in the five-year plan for the year 2020 to 2025.

Also, the **Perspective Plan of Bangladesh (2021-2041)** seeks to ensure 41 percent of TVET enrollment by the year 2041 to accelerate human development. And for achieving this target it also suggests increasing the TVET centered budget, strengthening the development of NSDP 2011, strengthening public private partnership, emphasizing rural training and ensuring spontaneous women participation.

### **5.2 TVET in Education, and Skill Development Policies:**

**The National Skills Development Policy 2011** aims to enhance the social status of TVET. In this regard, skills-based education and training should be recognized as a respected career choice. Also, to raise the status of skills development and TVET, a new partnership among government, employers, workers and the social partners is required. On the other side, the systematic skills training initiatives taken by various agencies, a quality assurance mechanism, and training overlaps due to the lack of coordination are major obstacles towards achieving quality and relevance of skills training. This policy includes a National Skills Qualification Framework (NSQF) to overcome these obstacles.

Increasing competent manpower in diverse sectors including Information and Communication Technology, building up skilled manpower to create opportunities of economic development, creating wide-ranging employment opportunities through the export of skilled manpower and enhancing foreign currency earnings are the major objectives of the **National Education Policy 2010** to ensure quality vocational and technical education for the potential and prospective students of TVET. This policy has come up with 25 strategies for TVET including, pre-vocational education to introduce school-level students to TVET, allocation of a specific budget for this sector, the introduction of the apprenticeship program, sufficient and quality books and practical equipment, strengthening public-private partnership, academic curriculum based on the market demand, etc.

### **5.3 TVET in National Strategy for Promotion of Gender Equality:**

The objective of the **National Strategy for Promotion of Gender Equality** in TVET is to increase the access of women to formal TVET institutions and employment through a number of measures.

Its targets were focusing the year 2020 and those were to increase female TVET participation up to 40 percent by the year 2020; increase 30 percent female employment with 30 percent quotas for female teachers and 20 percent for female staff; ensure gender integration through TVET training system, curriculum, and management, create linkage between industry demand and skill availability, etc. All of these national objectives have several priority actions to be initiated to ensure gender equality in TVET.

Integrate gender equality into the mainstream, design and implement gender-specific action measures to redress the effects discrimination through affirmative action and special measures to empower the disadvantaged group, address both practical and strategic gender needs because the roles and needs of women both in the family and in the workplace are different from those of men are the key strategies for gender mainstreaming. Promoting gender equality which is a major concern of national policy framework for skills development in high demand areas will provide the most concrete and immediate sources of income generating opportunities for women in Bangladesh.

#### 5.4 Population and Health-Related Policies:

According to the Bangladesh **Population Policy 2012** and **National Youth Policy 2017**, encouragement and incentives for non-government training institutes, and the development of skilled manpower for government and non-government sectors through, the development of skilled manpower through appropriate training curricula in government and non-government institutes are essential for generating skilled human resources. Though this policy did not mention TVET while suggesting strategies, it still emphasized on creating a skilled labor force.

**Bangladesh National Adolescent Strategy** states to implement the 7th FYP (2016-2020) that envisaged a 35 percent increase in TVET and reduce peer-to-peer bullying in primary, secondary and TVET institutions.

On the other hand, the **National Health Policy 2011** emphasizes on training nurses, paramedic, technologists, birth attendants so that quality healthcare can be provided with modern technologies and equipment, essential gender sensitivity towards patients, and also, they would be aware of maintaining the quality of the services they would provide.

One of the objectives of the **National Food Policy 2006** of Bangladesh is to develop non-crop agriculture (poultry, livestock and fisheries). Livestock is the source of milk, meat and egg for consumption of balanced and nutritious food. Increasing production of poultry, livestock and fisheries can be considered as one of the sub-sectors in the country's food security and foreign exchange earnings. As a result, the government is encouraging the increased production and development through undertaking various initiatives except encouraging the youths or the non-crop agriculture enthusiasts to be trained in their fields to be knowledgeable about the advanced and appropriate technologies, animal healthcare services, etc., to improve quality and productivity of poultry, fisheries and livestock.

#### 5.5 Challenges of Promotion Phase:

##### Promoting TVET:

##### ***Campaign/ Rally/ Stage Play/ Drama:***

The Directorate of Technical Education arranges campaign in district and sub district level to spread knowledge about TEVT and to inspire people so that they sent their children for attaining TEVT. One of the higher officials of The Directorate of Technical Education stated during the interview that,

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*"The higher authority arrange campaign via local TVET institutions...to let people know about..."*

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Another higher official of the directorate mentioned that, rallies are also being arranged during promotional campaign of TVET. Teachers and students of TVET institutions, staff of BTEB and directorate participate in those rallies.

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*"We do organize rallies in district and sub district level."*

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The BTEB and directorate authorities, teachers of TVET institutions specified that, they organize and stage drama or play in their respective institutions or in the premises of public fields or government schools of the particular regions to encourage guardians and students to get into TVET.

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*"Stage plays or drama are performed during the TEVT week every year. Apart from this, plays are telecast on television or radio as well."*

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#### **Advertisement:**

Government is telecasting advertisements in television and radio channels to promote TEVT to the masses. Apart from this, handbills and leaflets are also being distributed by the TVET institutions during a new academic session to make the locals knowledgeable about TVET.

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*"Yes! If you look carefully, you would see in the scrollbars of television channels...we telecast advertisements there..."*

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#### **Celebrating TVET Week:**

During KII we get to know about TVET week. The Directorate of Technical and BTEB celebrate TVET week every year during the admission session to make people knowledgeable about this special for of education. And also to encourage them to enroll their children in TEVT institutions. One of the directors of the directorate informed about TVET week,

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*"Though it was paused during COVID-19 period, but now the directorate has restarted celebrating TVET week in every year from 2022...During the TEVT week, we promote TEVT through rally, distributing leaflets, performing plays, etc."*

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#### **Social Networking Sites:**

BTEB has its website notices and information are being updated regularly. Apart from this, board itself, our government and institutions do promotion through social networking sites, e.g., Facebook, Instagram, etc. A teacher of a TVET institute said,

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*"In recent time we are focusing on doing promotion through social networking sites to reach the youths."*

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## 5.6 Challenges of Implementation Phase:

### ***Training of the Trainers/ Teachers:***

Both the Directorate of Technical education and BTEB are working together to train the teachers who teach the TEVT students. According to the information provided, they are appointing foreign master trainers to train the teachers. Industrial visits are also arranged by the authorities so that the instructors can also have practical knowledge of what they will be teaching their pupils. But hiring foreign coaches, providing training materials are quite expensive. It is difficult for the board to bear all the expenses with the insufficient budget allotted.

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*"We do not have expert trainers to guide our teachers. Though we often hire foreign experts for providing training, our budget does not support us to arrange trainings more often."*

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### ***Appointing Skilled Teachers:***

Board should take necessary steps to appoint skilled teachers to ensure quality education to the students. Only providing master training will not help. The instructors should be offered a decent amount of salary that do justice to their skills and potentials. One of the BTEB officials stated,

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*"As we cannot offer higher payment, skilled personnel prefer to join private industries or leave for foreign jobs instead of joining any TVET institutions as teachers."*

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The teachers do not get adequate payment to maintain a standard lifestyle. If their payments cannot be upraised, they will loss interest in teaching and might switch their jobs. A TVET teacher said,

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*"One of my friends are working at an MNC (Multi National Company). We graduated from the same institution with almost closer grades. But he is getting a six-digit salary whereas, with the salary I get I fulfill my basic necessities with quite hardships. I am looking for a better job opportunity where I will be paid in accordance to my qualification."*

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### ***Updating Course Curriculum According to Market Demand:***

Course curriculum should be updated after a certain time interval to keep pace with the unceasingly changing market demand and newer technologies. The government officials specified that, they are aware of the constantly changing workforce demand and newfangled technical innovations added to the industries. But changing or updating a course curriculum while an on-going academic session will hamper the education system. For this reason, we do

not update our curriculum in the middle of any session. But we are always up to date regarding the skill needs of the labor market and modify our syllabus accordingly.

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*"We are aware of continuously changing market demands. But we cannot update the curriculum while a session is running. Still, we keep updated with the necessities of global and national labor market and modify our curriculum in accordance with the demand."*

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#### ***Providing Modern Laboratory Equipment to the TVET Institutions:***

Government should ensure that every TVET institution are well equipped with modern laboratory equipment. This equipment can be provided by the government itself or by the private institutions or industries who are in commitment with the government thru public private partnership.

Most of the industries frequently replaces their tools and sell the old machineries at auctions. The key informants suggested that, if the industries donate or sell their old equipment at reasonable amount to the government for the training purpose of the TVET students, not only the students will be able to get professional tools for their training but also this will attract people to send their children to TEVT institutions for acquiring skill-based knowledge.

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*"Industrial equipment are so expensive, it is difficult for any individual institution to afford those. Even the government cannot provide every institution with the expensive machineries...Industries can bestow their unused for old tools to the TVET institutions or their education purpose....."*

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Another utilization of the public private partnership can be organizing industrial visits. If the renowned companies allow the students of technical education to pay a visit to their factories to see how industrial production run, how the machineries are operated, it will boost their enthusiasm towards learning. According to one of the KII respondents,

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*"No institution can provide all kind of practical training to its students because of the massive size and expenses of machineries. For this reason, they need to be sent for industrial visit..... If the students get the opportunity of industrial visits, it will not only enrich their experiences but also inspire them to work hard to achieve their career goals."*

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#### ***Internship and Placement Related Issues:***

Though the TEVT curriculum includes internship as a mandatory part of it. But the policymakers, teachers and students informed that, usually industries they are sent to, do not allow them to participate in production as that might interrupt or slower their work pace. On the others hand, because of not having apprenticeship law students cannot get placement in the institutions they were interns at. One of the directors of BTEB said,

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*"We are trying to make sure that the students doing internship in different industries can have the first-hand knowledge during that six months' time period."*

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### **Apprenticeship Law:**

Apprenticeship law should be initiated and implemented as soon as possible to ensure students can have the fullest opportunity to work at their internship placements. In words of a TVET instructors,

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*"Apprenticeship law has become a must for the TVET students and institutions...."*

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The officials of the directorate and board ensured that they are emphasizing on developing the law. This law will uphold the rights to have practical experience of work of the TVET students during their internship period. This law will include terms and conditions related to job placements, and so on. One of them clarified what the apprenticeship law will advocate,

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*"Apprenticeship law will ensure the placements of students based on their performance during internship. Also this law will ensure that industries utilize the interns during their working period and do not ignore them thinking that they might hamper their continuous production."*

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### **5.7 Challenges of Monitoring Phase:**

Till now, the only way of monitoring the activities of the TVET institutions are yearly audits. Some of the KII respondents said that, beside the annual audits, project-based audits are also been executed to observe the progresses, obstacles and loophole of the TVET dedicated projects. One of the officials of the directorate stated that,

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*"We are now emphasizing on strengthening our monitoring methods. As a part of this process we will set up specialized approaches to observe the activities of private institutions.....institution or industries those will be responsible for the internships..."*

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# CHAPTER SIX: PERCEPTIONS AND ATTITUDES ABOUT TVET AMONG POTENTIAL TVET STUDENTS (GRADE 8 AND 10)

## 6.1 Background of Potential TVET students (Grades 8 & 10):

### Place of Residence

In this study, students from both urban and rural areas were interviewed and this percentage was almost equal. We took both urban and rural areas from each district. Urban areas included not only city corporation area but also the sadar upazila. Figure 1 indicates the percentage of potential students (grade 8 & 10) that is 57.4% (1076) and 42.6% (800) for urban and rural respectively.

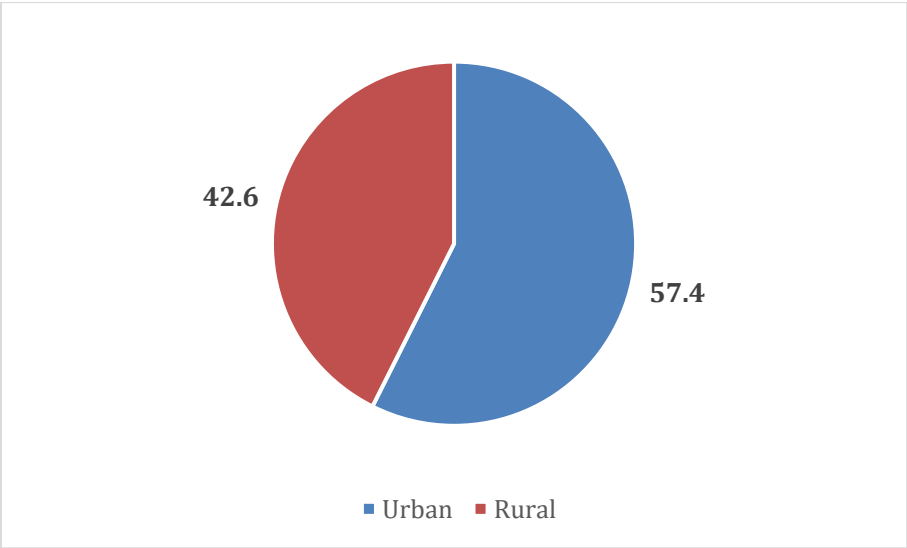


Figure 1: Respondent's place of residence (Percentage)

### School type

Among the respondents, 84.6% (1587) were school student whereas 15.4% (289) were madrasa students. We tried to maintain the existing country-level ratio of students by the institution type (School or madrasa). Among these institutions, two-thirds (66.5%) of the schools were non-governmental institutions and the rest of them were from governmental institutions. This was very much different for

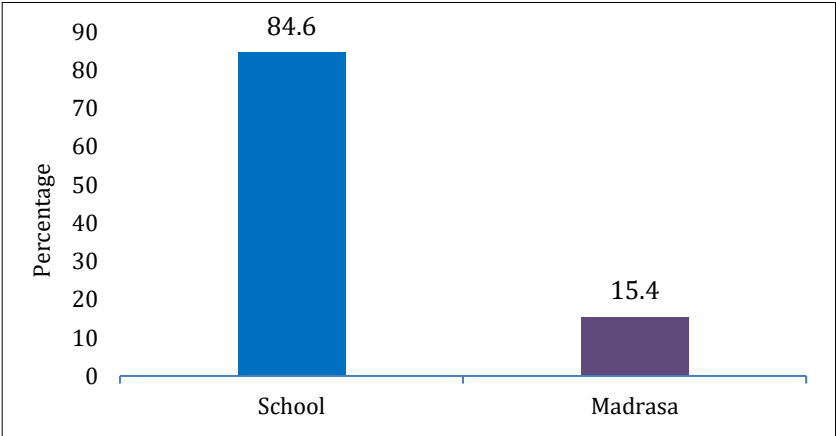


Figure 2: Respondent's institution type (Percentage)

madrasa level. Here, almost all of them (96.9%) were private institutions. This was because most madrasa in the country are owned by private organizations or people rather than by the government.

**Table 6. 1: Student's institution type (school/madrasha & government/non-government)**

Type of institution	Type of institution			Total
		Government	Non-Government	
School		532 (33.5%)	1055 (66.5%)	1587 (100.0%)
Madrasa		9 (3.1%)	280 (96.9%)	289 (100.0%)
Total		541	1335	1876

### 6.1.1 Summary Characteristics of Potential TVET Students:

As our respondents were only two types (grade 8 & 10) of students, their age didn't vary much. Around half of them were age 12 to 14 whereas the other half of them were aged 15 to 17. There was an equal number of male and female respondents. Most of the respondents were Muslim. This study took almost equal number of respondents from the selected Divisions and districts.

32.8% of the respondent's fathers had secondary/Dakhil level education and 22.1% had tertiary level education. Around 17.2% of respondent's father didn't had any education. Almost all of the respondent's father studied from general education stream. Mothers were predominantly (47.7%) secondary/Dakhil passed. 16.8% of the mothers were primary level passed and 10.9% had no education. Mothers were also finished their education mostly from general education stream.

A higher proportion (27.7%) of the respondents were from middle-class family and almost similar number of respondents were from rich or richest group and poor or poorest group. Fathers were mostly businessman (21.2%), private service holder (19.6%), agricultural worker on own land (12.2%), government employee (10.2%). Mothers were predominantly housewife (89.4%) with some having government or private job.

**Table 6. 2: Background Characteristics of Potential TVET Students (Grade 8 and Grade 10)**

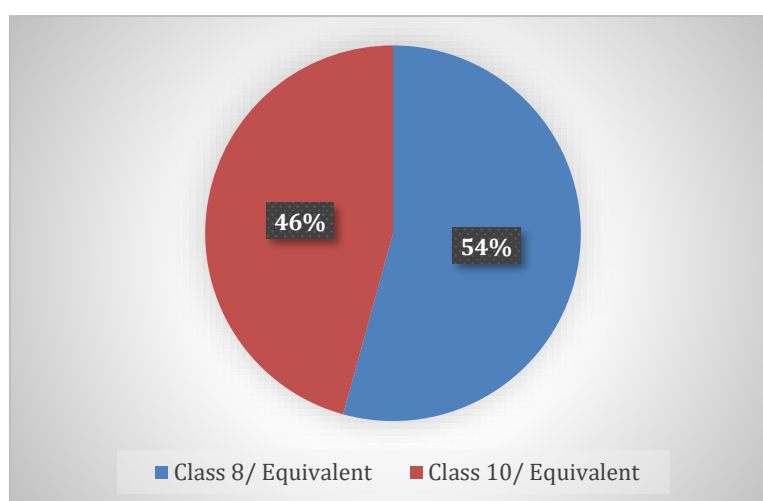
Variable	Percentage (n)
Age	
12 to 14	50.9 (955)
15 to 17	48.2 (904)
18 and above	0.9 (17)
Sex	
Male	50.2 (942)
Female	49.8 (934)
Religion	
Islam	92.3 (1732)
Hindu	7.5 (140)
Christian	.2 (04)
Division	
Barisal	25.0 (469)
Dhaka	24.9 (468)
Rajshahi	25.1 (471)
Sylhet	24.9 (468)
District	
Dhaka	12.5 (234)
Munshiganj	12.5 (234)
Rajshahi	12.5 (234)
Joypurhat	12.6 (237)
Patuakhali	12.5 (234)
Jhalokati	12.5 (234)
Sylhet	12.5 (234)
Sunamganj	12.5 (234)
Father's Education	
No Education	17.2 (323)
Primary/Ebtedayee	17.6 (330)
Secondary/Dakhil	32.8 (615)
Higher Secondary/Alim	10.3 (193)
Above Higher Secondary/Alim	22.1 (415)
Father's Schooling Type	
General	90.6 (1407)
Vocational	0.4 (06)
Others	8.4 (140)
Mother's Years of Schooling	
No Education	10.9 (205)
Primary/Ebtedayee	16.8 (316)
Secondary/Dakhil	47.7 (894)
Higher Secondary/Alim	10.8 (202)
Above Higher Secondary/Alim	13.8 (259)
Mother's Schooling Type	
General	92.7 (1549)
Vocational	0.4 (06)
Others	6.9 (116)
Father's Occupation	
Agricultural work on own land	12.2 (229)
Agricultural work on other's land	2.2 (42)

Day labor	8.2 (153)
Rickshaw/ van-puller	1.7 (32)
Retail Businessman	10.2 (10.2)
Businessman	21.2 (398)
Government employee	10.7 (200)
Private employee	19.6 (367)
Expatriate	4.2 (78)
Unemployed	7.7 (144)
Others (Fishermen, Retired govt. or private employees, Driver)	2.1 (41)
<b>Mother's Occupation</b>	
Housewife	89.4 (1677)
Government service holder	4.6 (87)
Private service holder	4.5 (84)
Others (Agricultural work, day labor, domestic work)	1.5 (28)
<b>Wealth Quintile</b>	
Poorest	17.6 (331)
Poorer	17.1 (320)
Middle Class	27.7 (520)
Rich	17.0 (318)
Richest	20.6 (387)

### 6.1.2 Respondent's Current level of Education & Educational Aspiration:

#### *Level of Education*

Around 46% of our respondents were grade 8 students and rest of them were grade 10 students. As stated in the methodology students from these two grades generally the most potential interms of enrolling in Technical and Vocational Education and Training Sector.



**Figure 3: Current Level of Education of the Respondents (Percentage)**

#### *Grade 8 Student's Future Educational Plan and Reason*

Until grade 8 there were no classification of subjects but when they pass grade 8, they have to choose a subject (Science, Business studies or Humanities) based on their results and

preference. On average more than 70% of the students wanted to take science as their preferable subject for future study. There wasn't much variation in terms of their sex, school type or type of residence (Tabel 6.3).

**Table 6. 3: Future Education Plan of Grade 8 Students**

Background characteristics	Future Education Plan of Grade 8 Students		
	Science (n=745)	Business Studies (88)	Humanities (174)
Type of Residence			
Urban	73.8%	11.0%	14.5%
Rural	72.2%	5.8%	20.4%
Type of School			
Government	79.9%	7.6%	11.1%
Non-Government	70.3%	9.2%	19.4%
Sex			
Male	70.0%	12.1%	15.8%
Female	76.1%	5.5%	18.2%

Our study identified two main reasons for choosing the specific subject (Science, Business studies or humanities) if the students pass grade-9. First of all, students had a future target of what they want to be or what they want to do. For achieving that, they planned to choose the mention subjects. Around 75% students, irrespective of their gender, shared this opinion. Second of all, as they were not old enough their parents played a crucial role in their (students) decision making. 64% male and around 54% female students told that, it was their parent's decision to study in a specific subject. Some of the students also said that, they were not interested in other departments rather than their desired one (around 35% of both male and female). This can be due to the reason mention earlier and student's expectation about employment (19.1% male and 17.1% female) from reading that subject (Table 6.4).

**Table 6. 4: Percentage Distribution of the Reasons behind Selecting Specific Subject**

Reasons	Future Educational Plan, %			
	Science (n=745)	Commerce (n=88)	Humanities (n=174)	Total (1007)
Parent's decision	64.7	50.0	39.7	58.8
Other Subjects are difficult	3.4	25.0	44.8	12.9
Cost of education is low for that subject	1.6	4.5	20.1	5.3
Related to my goals	81.2	73.9	48.3	74.9
Not interested in other departments	34.3	45.5	35.6	35.3
Fear of not getting good results from othe subject	3.1	12.5	19.5	6.9
Will have more Employment opportunities	20.7	18.2	4.6	18.1
Teacher's suggestion	6.4	1.1	6.9	6.0
Friends/ relative's suggestion	5.6	2.3	4.6	5.2

### **Grade 10 student's current subject and reason for choosing that**

In terms of grade 10 students, around half of them were currently studying science in their institutions (414 form 853 students). Similar type of reasons was found to be working on their choice. Their future plan, parent's decision, and not interested in other subject were the main reasons for their choice of subject in grade 10. Interestingly 24.9 percent of the students from science and 18.1% of the students from business studies group stated that they chose this subject because of the potentiality of job from that subject. Another dissimilarity was found I the responses of humanities students. Around 18% of them thought that education cost was low in humanities and it was one of the reasons for choosing that subject (Table 6.5)

**Table 6. 5: Percentage Distribution of the Reasons behind Selecting Specific Subject**

Reasons	Current subject in school, %			
	Science (n=414)	Business Studies (n=127)	Humanities (n=312)	Total (853)
Parent's decision	63.8	44.1	41.0	52.5
Other Subjects are difficult	3.1	16.5	36.5	16.8
Cost of education is low for that subject	0.7	4.7	17.9	7.2
Related to my goals	87.9	71.7	46.8	70.3
Not interested in other departments	34.3	37.0	36.5	35.0
Fear of not getting good result from other subject	6.8	11.0	17.0	10.6
Will have more Employment opportunities	24.9	18.1	8.3	17.4
Teacher's suggestion	10.1	7.1	8.3	8.4
Friends/ relative's suggestion	3.4	5.5	2.2	2.7

## **6.2 Knowledge Related to Technical and Vocational Education:**

### **Source of Knowledge regarding TVET**

Around 1860 students (both grade 8 & 10) students reported that they have heard about TVET. People who generally remain in touch of the students like teacher, parent, siblings, classmate or friends, or neighbor and other relatives were key source for their knowledge regarding this. For example, around 43 percent student heard about TVET from their teacher, 34.7 percent heard about it from their parents, 31.3 percent heard for neighbours or known person, etc. Surprisingly, we didn't found much role of the electronic media or the printing media to provide knowledge of TVET to the potential students. For instance, only 5.4 percent of the students heard about TVET from print media (books, newspaper, magazine) while around 10 percent came to know about this from radio and TV and another 10 percent from internet platform. So, there was a visible gap from these media to enhance student's knowledge about technical and vocational education (Table 6.6).

**Table 6. 6: Source of Student's TVET Related Knowledge**

<b>Respondent's Knowledge Source of TVET</b>	<b>Percentage (n)</b>
Teacher	42.8 (797)
Parents	34.7 (645)
Sibling	24.4 (453)
Classmate/ Friend	23.4 (435)
Neighbor/ Know person	31.3 (582)
Book/ Newspaper/ Magazine	5.4 (100)
Radio/ Television	9.5 (177)
Internet (Google/ Facebook/ Instagram/ Twitter)	10.3 (191)
Relatives	28.3 (526)

### **Knowledge level of TVET**

When students were asked different questions to assess their knowledge level regarding TVET, we found that, they didn't know much about it. For example, around half (56.4%) of the students knew that, TVET is provided in both government and private institutions. 27.7% know that it is only provided through public institutions. Almost 10% of the students couldn't answer what type of institution provide technical education and training. (Table 6.7)

Though most of the students knew if there was a TVET institution in their district or upazila, they had a mixed view regarding the expenses in TVET. Half of the potential students think that the cost of having technical and vocational education and training is less or much less expensive compared to general medium education. Some 16% of them perceived it as more or too much expensive. In terms of scholarship facility, half of them think that there is an opportunity to get scholarship in TVET institution. (Table 6.7)

**Table 6. 7: Respondent's Knowledge about TVET**

<b>Knowledge Indicator</b>	<b>Answers</b>	<b>Percentage (n)</b>
knowledge of knowing known persos (neighbors, friends, relatives) having TVET	Yes	53.1 (987)
	Others	46.9 (873)
Types of institution provide TVET	Government	27.7 (516)
	Private	6.2 (116)
	Both	56.4 (1049)
	Don't Know	9.6 (179)
Availability of TVET institutes in district/ upazila	Yes	83.0 (1544)
	Others	17.0 (316)
Expenses of TVET compared to general education	Too Much/More expensive	15.9 (297)
	Equally expensive	11.1 (207)
	Less/Much less expensive	49.0 (911)
	Don't Know	23.9 (445)
Stipends facility in TVET	Yes	54.0 (1005)
	Others	46.0 (855)

## **Respondent's Future interest in TVET**

### **Reason for interest**

1053 (more than half) students were interested in having technical education. They think technical education will create better job opportunities (66%) compared to general education. However, they also want to have professional training (59%) which can facilitate their plan to get a job faster than other (48%). These three were the main reasons for their choice of interest. Among the other reasons, some 21 percent of the students' families want them to send in TVET and another 22 percent had self interest in technical education. (Table 6.8)

**Table 6. 8: Respondent's Interest in TVET and Reason**

<b>Reasons for planning to come in TVET</b>	<b>Percentage (n)</b>
TVET will create good job opportunities for me	66.0 (695)
Want to take professional training soon	59.0 (621)
Family wants me to get enrolled in TVET	22.3 (235)
Want to get job earlier	48.1 (506)
More interested in TVET than general education	21.1 (222)
TVET is comparatively less expensive	12.4 (131)
TVET is socially recognized	4.7 (50)
TVET graduates are well-regarded	3.9 (41)
Want to have this technical education	2.3 (24)

### **Reason for apathy**

690 (37.1%) students showed no interest in TVET. When they were asked about the reason behind this, we found that majority of them had self-apathy for technical education. Around three-fourth of the students shared the same view. Moreover, one-third of the students told that their families didn't want to enroll the in technical side. (Table 6.9)

**Table 6. 9: Respondent's Apathy in TVET and Reason**

<b>Reasons for planning to come in TVET</b>	<b>Percentage (n)</b>
TVET is very difficult	14.2 (98)
Family's decision	33.3 (230)
More interested in general curriculum	77.0 (537)
TVET is expensive	2.5 (17)
TVET is not socially valued	10.9 (75)
TVET graduate are not prioritized	6.2 (43)
Don't know about TVET	2.8 (19)

## **Respondent's Perceptions and Attitudes towards TVET**

We wanted to know student's view regarding technical and vocational education and training. Table 6.9 shows that, 91% of all students strongly agreed or agreed that TVET creates good job opportunities for people. Moreover, most of them think that after having technical education and training they will have a job more easily and fast. They also believe that TVET should be widespread in schools through teachers of general education (97.8%) and campaign about TVET (97.7%). (Table 6.10)

They shared neutral views or they didn't know about the criteria for having TVET, study fields of TVET. When they were asked about whether they agree or disagree with the view that, TVET graduates have limited job opportunities, two-third of them either didn't know about it or showed neutral view. They also believe that students are less interested in having technical education (58%). (Table 6.10)

Students strongly agree or agreed with the statement of the role of TVET in making students employable (88.2%). Additionally, they think that people consider students from general curriculum are more qualified than TVET students. (Table 6.10)

**Table 6. 10: Perception and Attitudes towards TVET**

<b>Respondent's attitude towards TVET (n=1876)</b>	<b>Strongly agree/Agree</b>	<b>Neutral/Don't know</b>	<b>Strongly disagree/Disagree</b>
TVET creates good job opportunities for students in Bangladesh	91.0	5.1	3.9
TVET students get jobs faster	75.5	15.9	8.6
Only science students can take TVET	14.1	80.9	5.1
TVET is available only in cities	18.7	76.9	4.4
Students given a study gap can have TVET	67.9	26.8	5.3
The main objective of TVET is to make students employable	88.2	7.0	4.8
Vocational education should be provided in every educational institution	97.9	0.6	1.5
Teachers should inform students in schools about TVET	97.8	0.6	1.6
Campaigns should be carried out to inform people about TVET	97.7	0.5	1.9
Practical classes in TVET are very interesting	66.6	5.3	28.1
Students are less interested in TVET	57.9	32.6	9.4
Graduates from TVET have limited employment opportunities	22.9	66.0	11.0
Students who are not good at general education are encouraged to pursue TVET	41.4	54.2	4.4
TVET is very difficult and time-consuming	23.1	63.7	13.2
People consider general curriculum students more qualified than TVET	71.4	23.4	5.2

### ***Teacher's role on providing TVET related knowledge***

We also wanted to know the engagement of the school teachers in terms of providing TVET related knowledge to the students. Among the 1860 students, 1050 students (56.5%) reported that teachers of their school talked about TVET in school. When they were questioned further, majority of the students told that their teacher encouraged them for having technical education. But, very few students knew about the cost of TVET from their teacher. (Table 6.11)

**Table 6. 11: Percentage distribution of Teacher's role on providing TVET knowledge by Background characteristics**

Background Characteristics	Teacher told about TVET (1050)	Teacher encourage to get TVET	Teacher told about the cost of TVET
	Yes, n%	Yes, n%	Yes, n%
Place of Residence			
Urban	56.9	79.5	12.1
Rural	55.9	73.3	13.5
Division			
Barisal	73.8	79.5	11.3
Dhaka	58.8	72.6	5.5
Rajshahi	55.9	75.2	19.1
Sylhet	36.8	81.0	17.3
School type			
Government	57.2	81.0	18.4
Non-Government	56.1	75.2	10.3

There wasn't much variation in the findings when considered the place of residence of the students. Although, students from Sylhet division had the lowest percentage (36.8%) regarding having the information of TVET from the teacher. For the same response, Barisal division had the highest percentage (73.8%). (Table 6.11)

## CHAPTER SEVEN: PERCEPTIONS AND ATTITUDES ABOUT TVET AMONG PARENTS AND COMMUNITY LEADERS

### 7.1 Parents' Perceptions and Attitudes about TVET:

#### 7.1.1 Positive Perceptions and Attitude:

##### Employment

##### ***Availability of Skill based Job Opportunities:***

Job opportunities are available and easily accessible for the TVET students as they are good at technical works. With the rapid development of technology and expansion of industries, skill-based job opportunities are also increasing. One of the parents stated the following statement while IDI,

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*"My brother is an engineer. He suggested me to enroll my son into TEVT... It has an expanded job opportunity...jobs are available."*

---

As there is high demand of skilled workforce in industries, TVET graduates are the most appropriate ones for those employments. Even parents of the TVET students are also aware of it. One of them said,

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*"Nowadays, skill-based employments are available...After graduation my son will not have to struggle looking for a job."*

---

##### ***High Demand in Foreign Labor Market:***

Technically skilled employees are offered lavish salary in foreign labor market. Many of the TVET and non-TVET students' parents perceive TVET positively because they have realized that, in foreign labor market skilled labor force are highly required. They are eager to send their children to abroad for employments so that they can earn higher payment to support themselves and their families. One said,

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*"In Middle East...there is huge demand of skilled workforce. After completing his study, I will send my son there so that he can earn handsome amount of money to improve our financial condition."*

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Another parent said that, he enrolled his child into TVET when he came to know that his neighborhood boys who are TVET graduates went to abroad.

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*"Kids of our neighborhood have gone to abroad for job after passing TEVT. The payment they get there is more than enough to support themselves and their families. Seeing this I decided that my son would also study TVET."*

---

***Entrepreneurships/ Self-employment:***

One of our respondents told that, graduates who are not interested in doing jobs, or cannot get suitable jobs (or anything else) choose to run own businesses. Running own business has different kind of values, one does not have to work under any boss, he/ she can employ staff if they need, they can run their establishments with the fullest freedom. One of the IDI respondents said,

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*"He can even do own business...can set up a shop where he will provide service related electronic stuff....."*

---

***Social Acceptance***

***Supportive Attitude of Relatives/ Neighbors:***

Despite the societies usually do not appreciate studying TVET, many relatives or neighbors do support their choices. One of the parents was telling about how his engineer brother motivated him to enroll his son into TVET as it has a massive job opportunity for the graduates.

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*"My brother who is an engineer encouraged me to admit my son into TEVT."*

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Some parents willingly sent their children to TVET institutions experiencing that people around them appreciate the success of TVET students.

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*"A boy of my neighborhood completed this course from TEVT. As he got succeeded, people around us appreciate our decision of sending my son into a TVET institution."*

---

***Encouragement of the Teachers:***

Teachers of general education are encouraging their students to get enrolled in TEVT explaining them how TEVT is beneficial for the career in future. One non-TVET parents shared that,

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*"I have heard that the teachers in my children's school encourage them for having technical knowledge...I have not decided yet regarding where they will get admission in future."*

---

### **Convenient Cost:**

Some of the TVET parents found the cost of education cheaper than the general education. Thinking of their affordability they made up their mind to admit their off-springs to vocational education.

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*"Cost of TVET education is quite convenient for us that is why my son is studying there."*

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Another parent said,

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*"Education expenses are affordable for me. It would be difficult for me to continue her study at a general institute if I would not switch her here"*

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## **7.1.2 Negative Perceptions and Attitude:**

### **Underestimation of TVET and BTEB**

#### **Superiority of General Education:**

It is a very common perception among the people that students of general education are more meritorious than those of TVET institutions. Parents desire to see their children doing white collar jobs those are mainly dominated by the students of general education. So most of the parents do not want their children to get enrolled into TVET. One of our respondents said that,

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*"After graduating from general education, he can do white color job. From TVET it will be quite impossible for him..."*

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#### **Ignorance/ Negligence of Relatives/ Neighbors:**

Some of the parents were saying that, TVET students are often being taunted, or neglected by their relatives or neighbors as they assume them less intelligent than those of general education. According one parent,

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*"Our neighbors think that my son is not meritorious. They often make fun of us for the decision we made (sending their son to TVET institute)...But we do not care about what others would say."*

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#### **Social Unacceptance:**

This study found that parents are not interested to enroll their children into TVET because the society they live in perceives that general education graduates are more intelligent that TVET

graduates, get suitable employments easily, earn handsome salary, and so on, whereas the TVET graduates are neglected by the society. One of such parents stated that,

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*"Umm...People around us underestimate TVET. My son will not get any respect from them if the study there"*

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#### **Considering TVET Students/ Graduates as Unmeritorious:**

TVET students are not valued by others as people hardly know about the future career opportunities for a TVET student, and they think that students who are not good at study choose TVET to get a certificate by any means. Someone among the respondents mentioned the following statement,

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*"Students who cannot perform well at general education or fail in exams or dropout of general education are enrolled into TVET institutions."*

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#### **Discouragement of the Teachers:**

Some parents mentioned that, though the government is providing training to the teachers of general education to encourage their students about TVET. Curriculum of general education also include information regarding TVET. But because of having narrow mindset regarding TVET, teachers usually discourage their students to go for TVET. One of our respondents informed referring to his child that,

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*"Teachers in school discourage kids regarding vocational education as it has no future."*

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#### **Insufficient Job Opportunities**

##### **Scarcity of Skill Based Job Opportunities:**

Due to societal perceptions, parents also feel that TVET graduates do not get any decent jobs. Unsuccessful cases of TVET graduates also develop discouragement among parents. One of the respondents who's two sons are TVET students shared the reason of his dissatisfaction regarding TVET,

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*"There is no decent job opportunities that recruit TVET graduates. My elder son is a TVET graduate. I admitted him into a TVET school hearing that he will get employment immediately after his graduation. But he is still unemployed. I am not willing to enroll my younger children into TVET anymore."*

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### ***Lack of Quality TVET Institutions***

Though government is taking necessary steps to establish TVET institutions in very upazila of Bangladesh, the quality of those institutions are questionable. Parents loss their interest when they come to know about the poor quality of their nearby institutions. Despite having a TVET school close to their residence, these parents are not interested to TVET, because of quality of the institution,

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*"I do not want to send my children into TVET...no.....there is no good TVET institution in my locality...not even in the nearby districts."*

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## **7.2 Community Leaders' Perceptions and Attitudes about TVET:**

### **7.2.1 Positive Perceptions and Attitude:**

#### **Employment**

##### ***Availability of Job Opportunities:***

According to a community leader, as our government is launching new projects those require skilled workforce, in result availability of skill based employments are increasing. There are vast job openings for the TVET graduates. They will not need to seat unemployed after their graduation due to the expansion of the labor market. One mentioned that,

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*"Yes! There are plenty of jobs..."*

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##### ***High Demand in Industries:***

With the rapid growth of industries demand for skilled labor force is also increasing day by day. One of the respondents specified that the government is establishing new industrial project those require technical experts. Those projects employ specifically TVET graduates to operate the functions. He claimed that,

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*"Government is establishing power plants, high-tech parks and hiring skilled labors to run the systems."*

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##### ***High Demand in Foreign Labor Market:***

A union member was talking about foreign countries recruiting skilled labor from Bangladesh. Government has signed contracts with government of multiple nations to send well-trained labor. In accordance with the terms and conditions of the contracts, government is sending a

huge number of skilled expatriates in countries such as, South Korea, Japan, Qatar, and UAE. According to him,

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*"Government is sending skilled workforce to foreign countries those are signatories of expatriate related agreements."*

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***Entrepreneurships/ Self-employment:***

TVET opens huge opportunity for creating self-employment. One of the community leaders said that, if one cannot get desired employment or do not want to struggle looking for a job can establish own start-up with a minimal amount of investment. Another were focusing on female employment. Women can do short-courses and do income generating tasks sitting at home.

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*"Female can attain short-term courses on crafts or agriculture. Than they can do home-based business of clothing, crafts or poultry, fisheries, etc."*

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**7.2.2 Negative Perceptions and Attitude:**

**Underestimation of TVET and BTEB:**

***Superiority of General Education:***

Like other people of the society, few of the community leader also assume general education graduates are more qualified than TEVT graduates as they pass through several layers of education than the students of TVET, they possess more knowledge that the vocational students. One of the respondents shared his view as,

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*"I think students of general education are more intelligent and spontaneous."*

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***Considering TVET Students/ Graduates as Unmeritorious:***

In no difference from the majority people of the society, these community leaders also consider TVET students as mediocre in compared to the students of general education. According to one of them,

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*"TVET students are not attentive to their studies. They switch to TVET from general education only because they cannot do well in exams."*

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***Scarcity of Skill Based Job Opportunities:***

Scarcity of job is one of the biggest problems in Bangladesh. Moreover, people assume TVET students less proficient than that of general education. According to few respondents, incompetence is the major cause of not

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*"Job opportunities are not readily available for the TEVT graduates. Rather they struggle to get suitable jobs for themselves."*

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## CHAPTER EIGHT: ATTITUDES, PERCEPTIONS AND EXPECTATIONS ABOUT TVET AMONG EMPLOYERS

### 8.1 Positive Perceptions and Attitude:

#### ***Skilled Manpower:***

Employers willingly employ TVET graduates as their job require skilled workforce. Our respondents who employed TVET graduates in their companies were giving emphasis on the hands-on knowledge their staff gained through TVET.

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*"I appointed a TVET graduate because he has first-hand knowledge of technology and is skilled in this field."*

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#### ***Practical Knowledge of Industrial Machineries:***

TVET graduates are more skilled as they have practical knowledge of technical mechanism.

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*"He has practical knowledge of technological niceties."*

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As the curriculum of TVET is focused on training its students on industrial machineries and the graduates have practical knowledge related to technical aspects. Our respondent shared that, his employee acquired knowledge of working with heavy machines during his internship period which is a part of his academic programme.

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*"As he has practical training of handling industrial machineries, he is doing his works are quite neat."*

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#### ***Expert/ Competent Compared to the employees Graduated from General Education:***

According to an employer, as general education graduates do not have technical skills, they are less competent than the graduates of TVET. Because of vast exposure in institutions, opportunities to participate in different activities students of general education are very much sporty or spontaneous. But the students of TVET are usually deprived of these privileges. Despite these lacking, they are more competent than the graduates of general education because of their practical skills of technology.

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*"Technical trainings are compulsory part of their education which make them more compatible with machine works than the students of general education."*

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## 8.2 Negative Perceptions and Attitude:

### ***Unskilled Labor Force:***

Most of the time TVET graduates are underestimated as unskilled labors because of the common perception of assuming the TVET students as unmeritorious. One of the reasons is, in Bangladesh most of the TVET students are dropped out of general education or back benchers who came to TVET just to get a certificate so that it will help them to be employed faster.

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*"I do not feel that TVET students are well-trained. Because majority of them went to TVET as they could not do decent result from general education."*

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### ***Does not have Any Knowledge of Industrial Machineries:***

As the TEVT students cannot experience the practical knowledge of working with industrial machineries, they are often being underestimated. A recruiter said that his employees did not have any first-hand experience of operating industrial equipment as they have not even seen those things during their student life. Again, their institutions do not have such massive budget and area to buy and set up these huge machines.

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*"My employees did not have any experience of working with heavy industrial machineries as those cannot be afforded or used by educational institution because of its financial and space constraints."*

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### ***Lack of Practical Knowledge/ Experience:***

Due to the lack of expert trainers, sufficient practical classes, well-equipped laboratory TVET students often lag behind in practical experiences. One of the employers stated while interviewing,

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*"Though they have done their practical classes in laboratories, they do not have any experience of working at an industrial settings."*

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### ***Less Competent Compared to the employees Graduated from General Education:***

Employers often assume general education graduates are more expert, active and competent. Its because they have vast opportunities to get exposed to various co-curricular and extra-curricular activities which enriched them with several professional qualities, such as, communication skill, leadership, team work, etc. those make them competent with others.

While IDI, an employer said,

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*"Beside theoretical knowledge, students of general education also have practical classes of particular subjects during their school, college, or tertiary stage. So they have both theoretical and practical knowledge, whereas a TVET student has technological knowledge only, which is not sufficient for surviving the rat race of labor market."*

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According to him, TVET graduates do not have the capability to survive into any highly competitive labor market because of their narrow-focused education system.

## CHAPTER NINE: EXPERIENCES OF CURRENT TVET STUDENTS (CHALLENGES OF SKILL DEVELOPMENT/ SKILL ENHANCEMENT)

### 9.1 Summary Characteristics of the Respondents:

Around half of the students who are currently enrolled in technical and vocational education and training were between 16 to 18 years of age. 20.4% of them were between 13 to 15 years of age and around 25% of them were 18 to 22 years of age. Students were predominantly male (68.2%). Most of them were Muslim (92%). (Table 9.1)

Around one-third of the student's father had SSC/Dakhil level education while about 19% had no education. Almost all of them (91.7%) had general background education. Mothers of the students also share similar characteristics. 45.5% of the student's mother were SSC/Dakhil passed. 23.6% of them had primary education while 15.5% had no education. Students' fathers were mainly businessman (22%), farmer (18.1% on own land), private employee (14%) and day laborer (10.5%). Mothers were mainly housewife (91.7%). Poor and poorest group shared almost 50% of the student. While only 6.8% of the students were from middle class family. (Table 9.1)

**Table 9. 1: Background Characteristics of the current TVET students**

Variable Name	Percentage (n)
<b>Age</b>	
13 to 15	20.4 (150)
16 to 18	52.9 (389)
18 to 22	25.1 (185)
23 and above	1.6 (12)
<b>Sex</b>	
Male	68.2 (502)
Female	31.8 (234)
<b>Religion</b>	
Islam	91.7 (675)
Hindu	8.0 (59)
Christian	0.3 (02)
<b>Division</b>	
Barisal	25.0 (184)
Dhaka	25.0 (184)
Rajshahi	25.0 (184)
Barisal	25.0 (184)
<b>District</b>	
Dhaka	12.5 (92)
Munshiganj	12.5 (92)
Rajshahi	12.5 (92)
Joypurhat	12.5 (92)
Patuakhali	12.5 (92)
Jhalokati	12.5 (92)
Sylhet	12.5 (92)
Sunamganj	12.5 (92)

<b>Father's Education</b>	
No Education	18.6 (137)
Primary/Ebtedayee	23.4 (172)
Secondary/Dakhil	34.6 (255)
Higher Secondary/Alim	10.7 (79)
Above Higher Secondary/Alim	12.6 (93)
<b>Father's Schooling Type</b>	
General	95.3 (571)
Vocational	1.5 (09)
Others	3.2 (19)
<b>Mother's Years of Schooling</b>	
No Education	15.5 (114)
Primary/Ebtedayee	23.6 (174)
Secondary/Dakhil	45.5 (335)
Higher Secondary/Alim	10.1 (74)
Above Higher Secondary/Alim	5.3 (39)
<b>Mother's Schooling Type</b>	
General	95.7 (595)
Vocational	0.2 (1)
Others	4.2 (26)
<b>Father's Occupation</b>	
Agricultural work on own land	18.1 (133)
Agricultural work on other's land	3.3 (24)
Day labor	10.5 (77)
Rickshaw/ van-puller	2.0 (15)
Retail Businessman	11.3 (83)
Businessman	22.1 (163)
Government employee	6.9 (51)
Private employee	14.0 (103)
Expatriate	5.6 (41)
Driver	5.6 (41)
Others (Fishermen, Retired govt. or private employees, unemployed)	2.8 (21)
<b>Mother's Occupation</b>	
Housewife	91.7 (675)
Private service holder	4.1 (30)
Others (Agricultural work, day labor, domestic work)	4.2 (31)
<b>Wealth Quintile</b>	
Poorest	23.1 (170)
Poorer	29.1 (214)
Middle Class	6.8 (50)
Rich	21.1 (155)
Richest	20.0 (147)
<b>Total</b>	<b>100.0 (736)</b>

## 9.2 Knowledge of TVET before Coming to This Institution:

Almost all of the respondents knew about technical education before coming to the institution. The main source of this knowledge was mainly teacher (43.2%), internet (40.6%), parents (31.3%), neighbors (31.2%), classmate or friends (27.6%). (Table 9.2 & 9.3)

**Table 9. 2: Knowledge of TVET before enrollement**

Heard about TVET before enrollment	Percentage (n=736)
No	1.9
Yes	98.1

**Table 9. 3: Source of Previous Knowledge about TVET**

Respondent's Knowledge Source of TVET	Percentage (n=722)
Teacher	43.2
Parents	31.3
Sibling	28.3
Classmate/ Friend	27.6
Neighbor/ Know person	31.2
Book/ Newspaper/ Magazine	3.7
Radio/ Television	5.5
Internet (Google/ Facebook/ Instagram/ Twitter)	40.6
Relatives	1.1
Miking	0.1

### 9.3 Availability of Different Facilities of Respondent's Institution:

#### **Availability of Facilities**

We found that around 79% of the respondent's institutions didn't have accommodation facilities in their TVET institution. Among those who had accommodation facilities almost half of them shared their dissatisfaction towards it. 77.9% of the student told to have a library, 92% had a laboratory in their institution. It was found that almost 30% of the student were unsatisfied not only with the laboratory equipment but also with practical classes. (Table 9.4 & 9.5)

**Table 9. 4: Facilities Available in the Institution**

Available facility	Percentage (n=736)
Accommodation facility	
Yes	21.3
No	78.7
Online class facility	
Yes	35.1
Others	64.9
Library facility	
Yes	77.9
Others	22.1
Laboratory facility	
Yes	92.1
Others	7.9
Scholarship opportunities	
Yes	77.6
Others	22.4

Student loan facility	
Yes	4.1
Others	95.9
Provide assistance to get an internship in various factory/facility	
Yes	50.4
Others	49.6
Mandatory internship	
Yes	33.7
Others	66.3
Provide assistance in finding a job	
Yes	49.2
Others	50.8
Disability friendly	
Yes	28.8
Others	71.2

Half of the students told us that their institution assists them in having a job and support them to get an internship opportunity. Though only 33% stated that internship program was mandatory in their institution. Only 29% students think that their institution is disability friendly. Around 31% of the respondents were unsatisfied with the teachers' number but they seemed to be satisfied with teaching methods. (Table 9.4 & 9.5)

**Table 9. 5: Quality of Available facility**

<b>Types of Facilities</b>	<b>Highly satisfied/Satisfied</b>	<b>Neutral</b>	<b>Highly dissatisfied/Dissatisfied</b>
Environment of institution	90.1	0.7	9.2
Teaching methods	91.4	1.6	6.9
Scholarship	53.3	13.2	33.6
Quality of TVET teachers	92.1	2.9	5.0
Number of teachers	64.4	4.8	30.8
Accommodation	14.5	32.3	53.2
Books and reading materials	93.5	3.9	2.6
Practical class	62.2	4.8	33.0
Laboratory equipment	69.7	4.9	25.4

## CHAPTER TEN: DISCUSSION AND LIMITATIONS

### 10.1 Discussion

#### 10.1.1 Introduction

Technical and vocational education and training is one of the potential sectors in achieving Demographic Dividend but still not properly utilized. Students are facing various problems when getting enrolled and after the completion of their study they are not getting proper evaluation. In this chapter, we will discuss the finding of the study and draw out the potentials and challenges regarding TVET in Bangladesh.

#### 10.1.2 Linkage of TEVT with Demographic Dividend

Ensuring quality education is one of the key factors for achieving demographic dividend. As Bangladesh has a large number of populations in youth group, providing eightful education will be the pre-phase for achieving other factors related to demographic dividend. Though this in not a linear path. There are various intermediate factors which are directly related with botha education and DD.

Firstly, TVET helps to generate skilled human resource capable of doing specific work like; mechanical, construction, software build-up, cooking, painting and many more. This is well established as we discussed in chapter three. Several countries like Singapore, Australia, Romania are already made progresss with their youth population by providing them TVET at on side and creating employment opportunities on the other.

Secondly, the industries with need skilled worker, operator or manager related with their available technologies can directly rely on TVET sector. Having a wide range of education and training programme, TVET can be the direct source of human resources for the industries.

Finally, Bangladesh should increase the amount of money it invests in socio-economic development and increase the proportion of GDP for the requirement of having middle-income country status. These require constatnt input regarding skilled labor and opportunity giving to the people who are excluded from the mainstream education. TVET fulfills both of these criteria, making it as a prioritized sector for the upcoming years.

#### 10.1.3 Perception and Attitudes of the Potential TVET Students

Most of the potential TVET students (grade 8 and 10) want to study in science. It is a common pirture of this country or more specifically a misconception among the students and their guardians. Parents don't understand their children's capability for studying science and they influence their children to take science as their main subject of study.

In our study we found liitle role of the printing and electronic media for delivering knowledge of TVEt to the potential students. Though in this modern technological era, children are one the most frequent user of smartphone, TVET related information are not reaching through smart devices. In our qualitative findings from the respective persons who are engaged in TVET related planning and implementation, they claimed of having advertisement of TVET

education during admission season. But, our quantitative findings suggest that it is not adequate. As a result, students are not having proper information of this field. We have found only half of the students don't have proper knowledge regarding source of TVET (institution), expenses or stipends facility. This is a unique finding of this study.

Our study suggests that, more than half of the potential students are interested in TVET and the main reasons for this is that, they think TVET will create better job opportunities and it is a mode of professional training for the earliest stage of employability. Overall, they should positive attitude toward TVET. In some cases, they couldn't express their comments due to lack of knowledge in this. Notably, they had a positive attitude for school and teachers engagement in providing the knowledge of TVET as well as the need for campaign for encouraging them. In our qualitative findings, we found that parents, teachers and community members all felt the need for increasing the campaign outside of admission period.

#### **10.1.4 Challenges of current TVET students**

From the quantitative finding, the main challenges of technical education sector are found as accommodation, internship facility, support in getting job, online class facility and student loan. Very few of the institution had accommodation facility for the students. When we interview the policy planned from BTEB and DTE, we found that there is already a project on-going that building modern technical institution all over the country containing modern laboratory facility and accommodation. When this project will be completed, we can hope for some improvement in this sector.

Though the TVET students were satisfied with teacher availability we found there is a gap of having skilled and adequate teachers for our students from the qualitative findings. Parents, teachers and policy planners shared that there is a need for increasing the number of skilled teachers in this sector. We found many institutions didn't have separate teachers for giving general education and TVET. One of the main reason for this is the, unwillingness of the TVET graduates in teaching sector. Moreover, the institutions which hire the graduates can't provide sufficient remuneration. This is also a unique finding of this study.

#### **10.1.5 TVET graduates and their role in the economy**

TVET curriculum mainly focuses on the practice of related course with machine and other equipments. TVET graduates are equipped with practical knowledge of mechanical instruments and modern skills. Students who are completing diploma courses can have a B.Sc. degree from specialized institution for the TVET graduates. Even they can apply for the scholarship in other countries.

From the case studies of former TVET students, we found that they are contributing to the economy of the country through self-employment, startup business, creating more skilled students, increase in the productivity etc. They think themselves as more productive compared to general students. This also been stated by the employers who hire them. According to them, TVET graduates might need a short training on the work environment but they are more efficient.

Participation of the female graduates in the economy is still low. But, they are making improvement. They are engaging in production of home-based goods like clothing or crafts.

Foreign labor markets are one of the key income generation sectors of the TVET graduates. According to our parents and TVET graduates, skilled students can earn more money in abroad as they have a previous training on the work that they are assigned. This was further validated by the policy planners who shared the availability of the opportunity at abroad. But they think that there is a potential information gap among the graduates in terms of the availability of job sectors in both Bangladesh and abroad.

## 10.2 Limitations

- Firstly, the main objective of this study was to find out the key challenges and future scopes in TVET that will support to achieve demographic dividend; here we focused only on the students who are or were enrolled in formal TVET (long courses; training more than 6 hours). Short courses (3 months and 6 months) are considered as Non-formal TVET in the curriculum system. A significant number of people take part in short courses to achieve some degree of training in technical and vocational sector. It can help them to manage some challenges in their existing work field or get involve in low paying jobs. As we did not include these non-formal students in our study, this can be mentioned as one of the limitations of this study.
- Secondly, though students of class 6 and class 7 can enroll in TVET we did not find any record of them reading in this sector (BANBEIS, 2021). So, this study excluded class 6 and class 7 students as potential TVET students and focused only on class 8 and class 10. Further study can be conducted by considering those students.
- Finally, we found that TVET was only available at class 8 level and SSC level for madrasah background student. But participation rate of madrasah TVET is very low. So, this study also did not take in any participants form madrasah TVET.

## CHAPTER ELEVEN: CONCLUSION AND RECOMMENDATIONS

### 11.1 Conclusion

This study was able to touch a lot of dimension regarding Technical and Vocational Education and Training notably- policies, potentials of such training and education, importance of TVET, key challenges and way forward. To successfully popularize it to the society (still not well-accepted to the people), several initiatives must be taken by the corresponding authorities. This study asked to the respondents about their recommendation regarding TVET in Bangladesh and we have sorted some important aspects from the respondents.

### 11.2 Recommendation

#### *Updated Education Policy*

Firstly, the institutions must be well equipped to integrate the students who are coming to TVET. There are challenges regarding quality teachers, modern laboratory facilities and libraries, modern classroom and time-to-time quality check. No doubt, government has budgetary issues regarding this but it should be the first priority when we are talking about the improvement in TVET. A well planned and updated education policy could be a pathway for this.

#### *Inclusive Governance and Monitoring System*

Secondly, though the government is trying to reach every student around the country through SDG-Action plan for mid-term and long-term, it seems to be scattered in different sectors. For example, private institutions which are proving short course TVET or sometimes long course TVET are not monitored properly. Overtime these institutions discontinue their education and training procedure which makes TVET unreliable to potential students. So, a proper monitoring and evaluation system of the institution is very much needed.

#### *Updating the Curriculum on the Basis of Market Needs*

Thirdly, BTEB and its planners must update the current curriculum with the changing demand of both the market and the students. BTEB officials said that this process is continuous and updated day to day. But, in this changing industrial revolutionized society, they should keep in mind the need of the market and how they can integrate it properly for the upcoming students. This study recommends that a bottom to up approach should be used in updating curriculum by taking account the potential employers and students.

#### *Integration with the Industry & a Search Platform for Employment Opportunities*

Fourthly, one of the crucial aspects of achieving demographic dividend is making employment opportunities for the graduates. The main problem here is the knowledge gap between the industries and the graduates and their institutions. Industries doesn't seem to be aware of the courses offered by TVET institutions. So, they prefer general curriculum students who are completing B.Sc. from engineering universities. Another problem is TVET graduates are not aware of the market. So, our study proposes two recommendation which are gathered form officials, employers and former TVET students. One, an industry apprenticeship law or policy

can be introduced to make the TVET students closer to their potential workplace. Two, a digital platform where graduates can find available jobs related with their trade.

### ***Increasing Social Acceptability***

Finally, social acceptability of technical education is very much needed to ensure the success of this sector. This can be achieved through regular promotion of TVET and social meeting with the guardians. These meetings and promotion will shout out the fruitfulness of TVET and future prospects of this sector. Also, behavioral change communication model can be a successful approach for this.

Regardless of some limitations, this study found the gradual progress of TVET sector. The government has undertaken several projects which are being implemented in phases. Modern institutions with high quality practical facility are being set-up in upazilas. As, Bangladesh is currently going through a window of opportunity due to its huge young and working age population, TVET must be a supplementary for the achievement of Demographic Dividend.

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## APPENDICES

### Appendix A: Survey Questionnaire for Potential TVET Students (Class 8 and 10)

#### Consent Letter

আসসালামু আলাইকুম/আদাব,  
আমার নাম .....। আমি ঢাকা বিশ্ববিদ্যালয়ের পপুলেশন  
সায়েন্সেস বিভাগ থেকে এসেছি। পপুলেশন সায়েন্সেস বিভাগ 'ডেমোগ্রাফিক ডিভিডেন্ড অর্জনে বাংলাদেশে  
কারিগরি ও বৃত্তিমূলক শিক্ষা এবং প্রশিক্ষণ এর সম্ভাব্যতা ও চ্যালেঞ্জ' শীর্ষক একটি গবেষণা কর্ম পরিচালনা  
করছে। এ জরিপে কারিগরি ও বৃত্তিমূলক শিক্ষা এবং প্রশিক্ষণের সম্ভাব্যতা, চ্যালেঞ্জ ও ডেমোগ্রাফিক  
ডিভিডেন্ডের সাথে সম্পর্কিত বিষয়ের উপর বিস্তারিত তথ্য সংগ্রহ করা হবে।  
আপনি অনুমতি দিলে আমি আপনার সাথে কিছু সময় কথা বলতে চাই। আপনার দেওয়া তথ্যাবলি এবং  
মতামত সমূহ সম্পূর্ণভাবে গোপনীয় থাকবে এবং এই গবেষণা ব্যতীত অন্য কোথাও ব্যবহার করা হবে না। এই  
জরিপে অংশগ্রহণ সম্পূর্ণরূপে আপনার ইচ্ছাধীন এবং আপনি চাইলে কোনো প্রশ্নের উত্তর নাও দিতে পারেন  
এবং যেকোনো সময় এই সাক্ষাৎকার বন্ধ করতে বলতে পারে। আমি আশা করবো আপনি এই জরিপে  
অংশগ্রহণ করবেন কারণ, আপনার মতামত অত্যন্ত গুরুত্বপূর্ণ। আপনার মতামতের ভিত্তিতে কারিগরি ও  
বৃত্তিমূলক শিক্ষা, প্রশিক্ষণ খাতে নানাবিধ পরিকল্পনা করা হবে যা বাংলাদেশের ডেমোগ্রাফিক ডিভিডেন্ড  
অর্জনে সহায়ক ভূমিকা পালন করবে।  
আপনি কি আমাদের জরিপ সম্পর্কে আর কিছু জানতে চান? আমি কি এখন সাক্ষাৎকার শুরু করতে পারি?  
উত্তর দিতে রাজি হয়েছেন ১ \*সাক্ষাৎকার গ্রহণ শুরু করুন  
উত্তর দিতে রাজি হয় নি ২ \*ধন্যবাদ জানিয়ে শেষ করুন  
সাক্ষাৎকার গ্রহণকারীর স্বাক্ষর: .....  
সাক্ষাৎকার গ্রহণ করার সময়:      
ঘণ্টা মিনিট

#### General Information of the Respondent

Name of the Respondent	_____		
Division	<input type="text"/>		
District	<input type="text"/>		
Upazila	<input type="text"/>		
Union	<input type="text"/>		
<input type="checkbox"/> Village	<input type="checkbox"/> City Corporation	<input type="checkbox"/> Other City	
Name of the School	_____		
Location			
Division	<input type="text"/>		
District	<input type="text"/>		
Upazila	<input type="text"/>		

Background Information of the Respondent				
Q. No.	Question	Response		Skip
101	How old are you?	..... Years		
	What is your gender?	Male .....	1	
		Female .....	2	
		Transgender .....	3	
103	What is your religion?	Islam .....	1	
		Hindu .....	2	
		Buddhist .....	3	
		Christian .....	4	
		Others (Please Specify) .....	88	
104	Do you have the following things at your home?	Yes	No	
	a. Electricity	1	2	
	b. Solar Electricity	1	2	
	c. Radio	1	2	
	d. Television	1	2	
	e. Mobile Phone	1	2	
	f. Telephone	1	2	
	g. Computer/ Laptop	1	2	
	h. Fridge	1	2	
	i. Wardrobe/ Closet	1	2	
	j. Electric Fan	1	2	
	k. DVD/ VCD	1	2	
	l. Water Pump/ Own Tubewell/ Supply Water System	1	2	
	m. IPS/ Generator			
	n. A. C.			
105	Is your father alive?	Yes .....	1	
		No .....	2	
106	How many years of education did your father have?	..... Years		
		Don't Know .....	97	
107	What kind of educational institution did your father study from?	General .....	1	
		Vocational .....	2	
		NGO/ Community School .....	3	
		Madrasa .....	4	
		Others (Please Specify).....	88	
		Don't Know .....	97	

108	What is/ was your father's main occupation?	Agricultural work in own land ..... 1 Agricultural work in other's land .... 2 Day labor ..... 3 Fisherman ..... 4 Rickshaw/ van-pullar ..... 5 Retail Businessman ..... 6 Businessman ..... 7 Government service holder ..... 8 Private service holder .....9 Retired Government service-holder .....10 Retired Private service-holder .....11 Driver .....12 Expatriate ..... 13 Unemployed ..... 14 Others (Please Specify) ..... 88	
109	Is your mother alive?	Yes ..... 1 No ..... 2	→ )))
110	How many years of education did your mother have?	..... Years Don't Know ..... 97	
111	What kind of educational institution did your mother study from?	General ..... 1 Vocational ..... 2 NGO/ Community School ..... 3 Madrasa ..... 4 Others (Please Specify)..... 88 Don't Know ..... 97	
112	What is/ was your mother's main occupation?	Housewife ..... 1 Agricultural work in own land ..... 2 Agricultural work in other's land .... 3 Day labor ..... 4 Domestic Worker ..... 5 Retail Businessman ..... 6 Businessman ..... 7 Government service holder ..... 8 Private service holder .....9 Retired Government service-holder ..... 10 Retired Private service-holder ..... 11 Driver ..... 12 Expatriate ..... 13 Unemployed ..... 14 Others (Please Specify) ..... 88	
113	How many brothers and sisters do you have besides you?	.....	
114	How many years of education did your mother have? What kind of educational institution did your mother study from? <b>(In descending Order)</b>		

	<table border="1"> <thead> <tr> <th>No.</th> <th>Year of Schooling</th> <th>Type of Educational Institution</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>..... Years</td> <td>Code</td> </tr> <tr> <td>2</td> <td>..... Years</td> <td>Code</td> </tr> <tr> <td>3</td> <td>..... Years</td> <td>Code</td> </tr> <tr> <td>4</td> <td>..... Years</td> <td>Code</td> </tr> <tr> <td>5</td> <td>..... Years</td> <td>Code</td> </tr> <tr> <td>6</td> <td>..... Years</td> <td>Code</td> </tr> </tbody> </table> <p>Codes for Educational Institutions General= 1; Vocational= 2; NGO/ Community School= 3; Madrasa= 4; Others (Please Specify)= 88; Don't Know= 97</p>	No.	Year of Schooling	Type of Educational Institution	1	..... Years	Code	2	..... Years	Code	3	..... Years	Code	4	..... Years	Code	5	..... Years	Code	6	..... Years	Code
No.	Year of Schooling	Type of Educational Institution																				
1	..... Years	Code																				
2	..... Years	Code																				
3	..... Years	Code																				
4	..... Years	Code																				
5	..... Years	Code																				
6	..... Years	Code																				
115	Do you belong to any minority group?	Yes ..... 1 No ..... 2																				

Educational Information of the Respondent			
Q. No.	Question	Response	Skip
201	What class are you studying in?	Class 8 ..... 1 Class 10/ Equivalent ..... 2	→ 204
202	If you pass the ninth grade, which department do you want to study?	Science ..... 1 Commerce ..... 2 Humanities ..... 3	
203	Why do you want to go to that department? <b>(Multiple Answers can be given)</b>	Parents want me to study in that department ..... 1 Other departments are difficult ..... 2 Cost of education is low ..... 3 Related to my goals ..... 4 I am not interested in other departments ..... 5 I will not get good result from other departments ..... 6 Employment opportunities are more ..... 7 Teachers want me to study in that department ..... 8 Friends/ relatives want me to study in that department ..... 9 Others (Please Specify)..... 88	→ 206
204	What is your department in 10th class?	Science ..... 1 Commerce ..... 2 Humanities ..... 3	

205	Why did you take that department? <b>(Multiple Answers can be given)</b>	Parents want me to study in that department ..... 1 Other departments are difficult ..... 2 Cost of education is low ..... 3 Related to my goals ..... 4 I am not interested in other departments ..... 5 I will not get good result from other departments ..... 6 Employment opportunities are more ..... 7 Teachers want me to study in that department ..... 8 Friends/ relatives want me to study in that department ..... 9 Others (Please Specify)..... 88	
206	What kind of profession do you want to join in the future?	Doctor ..... 1 Engineer ..... 2 Banker ..... 3 Armed Forces (Air Force/ Navy/ Army) ..... 4 Police Officer ..... 5 Lawyer ..... 6 Business ..... 7 Teacher ..... 8 Nurse ..... 9 Not decided yet ..... 10 Others (Please Specify) ..... 88	
207	Who made the decisions regarding your education? <b>(Multiple Answers can be given)</b>	Father ..... 1 Mother ..... 2 Elder Brother ..... 3 Elder Sister ..... 4 Self ..... 5 Relative ..... 6 Others (Please Specify)..... 88	

Respondent's Knowledge of TVET			
Q. No.	Question	Response	Skip
301	Do you have any idea about this?	Yes ..... 1 No ..... 2	→ End
302	How did you learn about TVET (TVET) ? <b>(Multiple Answers can be given)</b>	Teacher ..... 1 Parents ..... 2 Sibling ..... 3 Classmate/ Friend ..... 4	

		Neighbour/ Know person ..... 5 Book/ Newspaper/ Magazine ..... 6 Radio/ Television ..... 7 Internet (Google/ Facebook/ Instagram/ Twiter) ..... 8 Relatives ..... 9 Others (Please Specify) ..... 88	
303	Did anyone you know (neighbors, friends, relatives) undergoing TVET?	Yes ..... 1 No ..... 2 Don't Know ..... 97	
304	Do you know what types of institutions, government or private, offer TVET?	Government Institutions ..... 1 Private Institutions ..... 2 Both Government and Private Institutions ..... 3 Don't Know ..... 97	
305	Are there any TVET institutes in your district/ upazila?	Yes ..... 1 No ..... 2 Don't Know ..... 97	
306	Do you know how much more expensive TVET is compared to general education?	Too much ..... 1 More ..... 2 Equal ..... 3 Less ..... 4 Very few ..... 5 Don't Know ..... 97	
307	Do you know if there are any stipends for TVET?	Yes ..... 1 No ..... 2 Don't Know ..... 97	
308	What courses are taught in TVET? <b>(Multiple Answers can be given)</b>	Diploma-in-Technical Education ..... 1 Diploma-in-Vocational Education ..... 2 Diploma-in-Engineering ..... 3 Diploma-in-Textile Engineering ..... 4 Diploma-in-Agriculture ..... 5 Diploma-in-Fisheries ..... 6 Diploma-in-Jute Technology ..... 7 Diploma-in-Forestry ..... 8 Diploma-in-Health Technology ..... 9	

		Diploma-in-Medical            Ultrasound ..... 10 Diploma-in-Animal    Health    and Production Technology ..... 11 HSC    (Business    Management) ..... 12 HSC (Vocational) ..... 13 Diploma-in-Commerce ..... 14 SSC(Vocational) ..... 15 Dakhil(Vocational) ..... 16 Certificate-in- Marine Trade course ..... 17 Skill            Certificate            Course ..... 18 Certificate-in-Vocational    Education ..... 19 Certificate-in-Health            Technology ..... 20 Certificate    in    Poultry    Farming ..... 21 Certificate    in    Animal    Health    & Production ..... 22 Certificate-in-Medical            Ultrasound ..... 23 Professional    Diploma-in-Automobile ..... 24  Others (Please Specify)..... 88  Don't Know ..... 97	
309	Have your teachers ever told you about TVET?	Yes ..... 1 No ..... 2	
310	Do your teachers encourage TVET?	Yes ..... 1 No ..... 2	
311	Do your teachers talk about the cost of TVET?	Yes ..... 1 No ..... 2	
312	Are you interested in enrolling into TVET further?	Yes ..... 1 No ..... 2 Don't Know ..... 97	→ 313 → 314 → 315

313	Why are you interested in TVET? <b>(Multiple Answers can be given)</b>	TVET will create good job opportunities for me ..... 1 I want to take professional training soon ..... 2 My family wants me to get enrolled in TVET ..... 3 I want to get job fast ..... 4 I am more interested in TVET than general education ..... 5 TVET is comparatively less expensive ..... 6 TVET is socially recognized ..... 7 TVET graduates are well-regarded ..... 8 Others (Please Specify)..... 88				
314	Why are you not interested in TVET? <b>(Multiple Answers can be given)</b>	I find TVET very difficult ..... 1 My family does not me to get enrolled in TVET ..... 2 I am more interested in general education than TVET ..... 3 TVET is relatively expensive ..... 4 TVET are not socially valued ..... 5 TVET graduates are not well valued..... 6 Others (Please Specify) ..... 88				
315	What is your opinion about the following comments? There are no right or wrong answer here. 1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly disagree 6= Don't Know					
		Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
TVET create good job opportunities for students in Bangladesh		1	2	3	4	5
TVET students get jobs faster		1	2	3	4	5
Only science students can take TVET		1	2	3	4	5
TVET is available only in cities		1	2	3	4	5
Students given a study gap can undertake TVET		1	2	3	4	5
The main objective of TVET is to make students employable		1	2	3	4	5
Vocational education should be provided in every educational institution		1	2	3	4	5
Teachers should inform students in schools about TVET		1	2	3	4	5

Campaigns should be carried out to inform people about TVET	1	2	3	4	5
Practical classes in TVET are very interesting	1	2	3	4	5
Students are less interested in TVET	1	2	3	4	5
Graduates from TVET have limited employment opportunities	1	2	3	4	5
Students who are not good at general education are encouraged to pursue TVET	1	2	3	4	5
TVET is very difficult and time consuming	1	2	3	4	5
People consider general curriculum students more qualified than TVET	1	2	3	4	5

## Appendix B: Survey Questionnaire for Current TVET Students

### Consent Letter

আসসালামু আলাইকুম/আদাব,  
আমার নাম .....। আমি ঢাকা বিশ্ববিদ্যালয়ের পপুলেশন  
সায়েন্সেস বিভাগ থেকে এসেছি। পপুলেশন সায়েন্সেস বিভাগ 'ডেমোগ্রাফিক ডিভিডেন্ড অর্জনে বাংলাদেশে  
কারিগরি ও বৃত্তিমূলক শিক্ষা এবং প্রশিক্ষণ এর সম্ভাব্যতা ও চ্যালেঞ্জ' শীর্ষক একটি গবেষণা কর্ম পরিচালনা  
করছে। এ জরিপে কারিগরি ও বৃত্তিমূলক শিক্ষা এবং প্রশিক্ষণের সম্ভাব্যতা, চ্যালেঞ্জ ও ডেমোগ্রাফিক  
ডিভিডেন্ডের সাথে সম্পর্কিত বিষয়ের উপর বিস্তারিত তথ্য সংগ্রহ করা হবে।  
আপনি অনুমতি দিলে আমি আপনার সাথে কিছু সময় কথা বলতে চাই। আপনার দেওয়া তথ্যাবলি এবং  
মতামত সমূহ সম্পূর্ণভাবে গোপনীয় থাকবে এবং এই গবেষণা ব্যতীত অন্য কোথাও ব্যবহার করা হবে না। এই  
জরিপে অংশগ্রহণ সম্পূর্ণরূপে আপনার ইচ্ছাধীন এবং আপনি চাইলে কোনো প্রশ্নের উত্তর নাও দিতে পারেন  
এবং যেকোনো সময় এই সাক্ষাৎকার বন্ধ করতে বলতে পারে। আমি আশা করবো আপনি এই জরিপে  
অংশগ্রহণ করবেন কারণ, আপনার মতামত অত্যন্ত গুরুত্বপূর্ণ। আপনার মতামতের ভিত্তিতে কারিগরি ও  
বৃত্তিমূলক শিক্ষা, প্রশিক্ষণ খাতে নানাবিধ পরিকল্পনা করা হবে যা বাংলাদেশের ডেমোগ্রাফিক ডিভিডেন্ড  
অর্জনে সহায়ক ভূমিকা পালন করবে।  
আপনি কি আমাদের জরিপ সম্পর্কে আর কিছু জানতে চান? আমি কি এখন সাক্ষাৎকার শুরু করতে পারি?  
উত্তর দিতে রাজি হয়েছেন ১ \*সাক্ষাৎকার গ্রহণ শুরু করুন  
উত্তর দিতে রাজি হয় নি ২ \*ধন্যবাদ জানিয়ে শেষ করুন  
সাক্ষাৎকার গ্রহণকারীর স্বাক্ষর: .....

সাক্ষাৎকার গ্রহণ করার সময়:

ঘণ্টা

মিনিট

### General Information of the Respondent

Name of the Respondent	_____		
Division	<input type="checkbox"/>		
District	<input type="checkbox"/>		
Upazila	<input type="checkbox"/>		
Union	<input type="checkbox"/>		
<input type="checkbox"/> Village	<input type="checkbox"/> City Corporation	<input type="checkbox"/> Other City	
Name of the School	_____		
Location			
Division	<input type="checkbox"/>		
District	<input type="checkbox"/>		
Upazila	<input type="checkbox"/>		
Union	<input type="checkbox"/>		

Background Information of the Respondent				
Q. No.	Question	Response		Skip
101	What is your current age?	..... Years		
102	What is your sex?	Male ..... 1 Female ..... 2 Transgender ..... 3		
103	What is your religion?	Muslim ..... 1 Hindu ..... 2 Buddhist ..... 3 Christian ..... 4 Others (Please Specify) ..... 88		
104	Do you belong to any minority group?	Yes ..... 1 No ..... 2		→106
105	If yes, What type of minority are you?	.....		
106	Do you have the following things at your home?	Yes	No	
	a. Electricity	1	2	
	b. Solar Electricity	1	2	
	c. Radio	1	2	
	d. Television	1	2	
	e. Mobile Phone	1	2	
	f. Telephone	1	2	
	g. Computer/ Laptop	1	2	
	h. Fridge	1	2	
	i. Wardrobe/ Closet	1	2	
	j. Electric Fan	1	2	
	k. DVD/ VCD	1	2	
	l. Water Pump/ Own Tubewell/ Supply Water System	1	2	
	m. IPS/ Generator	1	2	
	n. A. C.	1	2	
107	Which course are you currently studying under the Bangladesh Technical Education Board (BTEB)?	Diploma-in-Technical Education ..... 1 Diploma-in-Vocational Education ... 2 Diploma-in-Engineering ..... 3 Diploma-in-Textile Engineering ..... 4 Diploma-in-Agriculture ..... 5 Diploma-in-Fisheries ..... 6 Diploma-in-Jute Technology ..... 7 Diploma-in-Forestry ..... 8 Diploma-in-Health Technology ..... 9 Diploma-in-Medical Ultrasound .... 10 Diploma-in-Animal Health and Production Technology ..... 11 HSC (Business Management) ..... 12 HSC (Vocational) ..... 13 Diploma-in-Commerce ..... 14		

		SSC(Vocational) ..... 15 Dakhil(Vocational) ..... 16 Certificate-in- Marine Trade course ..... 17 Skill Certificate Course ..... 18 Certificate-in-Vocational Education ..... 19 Certificate-in-Health Technology ..... 20 Certificate in Poultry Farming ..... 21 Certificate in Animal Health & Production ..... 22 Certificate-in-Medical Ultrasound ..... 23 Professional Diploma-in-Automobile ..... 24 National Skill Standard basic ..... 25 Don't know ..... 97 Others (Please Specify) ..... 88	
108	Is your father alive?	Yes ..... 1 No ..... 2	
109	How many years of education did your father have?	..... Years Don't Know ..... 97	
110	What kind of educational institution did your father study from?	General ..... 1 Vocational ..... 2 NGO/ Community School ..... 3 Madrasa ..... 4 Others (Please Specify)..... 88 Don't Know ..... 97	
111	What is/ was your father's main occupation?	Agricultural work in own land ..... 1 Agricultural work in other's land ..... 2 Day labor ..... 3 Fisherman ..... 4 Rickshaw/ van-pullar ..... 5 Retail Businessman ..... 6 Businessman ..... 7 Government service holder ..... 8 Private service holder ..... 9 Retired Government service-holder ..... 10 Retired Private service-holder ..... 11 Driver ..... 12 Expatriate ..... 13 Unemployed ..... 14 Others (Please Specify) ..... 88	

112	Is your mother alive?	Yes ..... 1 No ..... 2	→ ∞∞																					
113	How many years of education did your mother have?	..... Years Don't Know ..... 97																						
114	What kind of educational institution did your mother study from?	General ..... 1 Vocational ..... 2 NGO/ Community School ..... 3 Madrasa ..... 4 Others (Please Specify) ..... 88 Don't Know ..... 97																						
115	What is/ was your mother's main occupation?	Housewife ..... 1 Agricultural work in own land ..... 2 Agricultural work in other's land .... 3 Day labor ..... 4 Domestic Worker ..... 5 Retail Businessman ..... 6 Businessman ..... 7 Government service holder ..... 8 Private service holder ..... 9 Retired Government service-holder ..... 10 Retired Private service-holder ..... 11 Driver ..... 12 Expatriate ..... 13 Unemployed ..... 14 Others (Please Specify) ..... 88																						
116	How many brothers and sisters do you have besides you?	.....																						
117	How many years of education did your mother have? What kind of educational institution did your mother study from? <b>(In descending Order)</b>																							
	<table border="1"> <thead> <tr> <th>No.</th> <th>Year of Schooling</th> <th>Type of Educational Institution</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>..... Years</td> <td>Code</td> </tr> <tr> <td>2</td> <td>..... Years</td> <td>Code</td> </tr> <tr> <td>3</td> <td>..... Years</td> <td>Code</td> </tr> <tr> <td>4</td> <td>..... Years</td> <td>Code</td> </tr> <tr> <td>5</td> <td>..... Years</td> <td>Code</td> </tr> <tr> <td>6</td> <td>..... Years</td> <td>Code</td> </tr> </tbody> </table> <p>Codes for Educational Institutions General= 1; Vocational= 2; NGO/ Community School= 3; Madrasa= 4; Others (Please Specify)= 88; Don't Know= 97</p>			No.	Year of Schooling	Type of Educational Institution	1	..... Years	Code	2	..... Years	Code	3	..... Years	Code	4	..... Years	Code	5	..... Years	Code	6	..... Years	Code
No.	Year of Schooling	Type of Educational Institution																						
1	..... Years	Code																						
2	..... Years	Code																						
3	..... Years	Code																						
4	..... Years	Code																						
5	..... Years	Code																						
6	..... Years	Code																						

Educational Background of Current Students of TVET			
Q. No.	Question	Response	Skip
201	What type of educational institution did you attend under General Education Board before TVET Institution?	School ..... 1 NGO/Community School ..... 2 Madrasa ..... 3 Others (Please Specify) ..... 88	
202	What was your last exam under General Education Board before TVET?	PSC/Class V/Equivalent ..... 1 JSC/JDC ..... 2 SSC/Dakhil ..... 3 HSC/Alim ..... 4	→ 203 → 203 → 203 → 203
203	Please tell us in detail on how you got admission here after PSC/Class 5 /Equivalent?	.....	
204	What was your GPA in JSC/JDC exam?	.....	301
205	What was your GPA in SSC/Dakhil exam?	.....	
206	What was your group in SSC/Dakhil	Science ..... 1 Commerce ..... 2 Humanities ..... 3	
207	What was your GPA in HSC/Alim exam?	.....	
208	What was your group in HSC/Alim	Science ..... 1 Commerce ..... 2 Humanities ..... 3	301

TVET Enrollment Decision of Current Students of TVET			
Q. No.	Question	Response	Skip
301	Have you ever heard about TVET before getting enrolled here?	Never heard about it before ..... 1 Knew about it before admission ..... 2	
302	How did you about heard about it? (Can select Multiple answers)	Teacher..... 1 Parents ..... 2 Siblings ..... 3 Friends/Classmates ..... 4 Neighbors ..... 5 Relatives ..... 6 Books/Newspaper/Magazine ..... 7 Radio/TV ..... 8	

		Internet Platform (Google search, Facebook, Instagram, Twitter..... 9 Others (Please Specify) ..... 88	
303	What is the number of boys and girls in your class?	..... Boys ..... Girls	
304	Had any of your previous school teacher ever told anything about TVET in classroom?	Yes ..... 1 No ..... 2 Do not know ..... 97	
305	Is there any technical and vocational education and training institutes in your district or upazila?	Yes ..... 1 No ..... 2 Do not know ..... 97	
306	How much expensive is TVET? (Compared to General Education)	Very highly ..... 1 Highly ..... 2 Equally ..... 3 Lower ..... 4 Very lower..... 5 Do not know ..... 97	
307	Did you choose to go for TVET willingly?	Yes ..... 1 No ..... 2	309
308	Why did you want to get enrolled in TVET?  (Do not read answers for the respondents, Probe her/him) (Can select Multiple answers)	Parents' decision ..... 1 To have better job opportunities ..... 2 To get a job early ..... 3 Increasing demand of TVET graduates in job market ..... 4 Less expensive than general education ..... 5 Preferred TVET over general education ..... 6 Encouraged by siblings ..... 7 Encouraged by friends ..... 8 Due to financial crisis ..... 9 Lack of quality general educational institutions ..... 10 Close to residence ..... 11 General education seemed difficult ..... 12 Easy termed student loan ..... 13 Scholarship amenities..... 14 Accommodation facilities ..... 15 Quality education ..... 16 Standard library and laboratory facilities ..... 17 Skilled/ experienced teachers ..... 18 Had some education gap ..... 19	

		TVET is easier than general education ..... 20 Others (Please Specify) ..... 88	
309	Why didn't you want to get enrolled in TVET?  (Do not read answers for the respondents, Probe her/him)  (Can select Multiple answers)	Insufficient job opportunities than general education ..... 1 Unwilling to TVET ..... 2 More difficult than general education ..... 3 Parents disapproval ..... 4 Preferred general education over TVET ..... 5 High educational expenses ..... 6 Discouraged by siblings ..... 7 Discouraged by friends ..... 8 TVET is socially underestimated ..... 9 TVET institution is far from home ..... 10 No quality TVET institutions in my union/ district/ division ..... 11 No/ poor accommodation facility in TVET institution ..... 12 No/ insufficient scholarship facilities ..... 13 Poor teaching quality..... 14 No/ inadequate library and laboratory facilities ..... 15 Unexperienced teachers ..... 16 Others (Please Specify) ..... 88	

Opinion about Own Institution Current Students of TVET			
Q. No.	Question	Response	Skip
401	How far is the TVET institution from your residence?	..... Km.	
402	Does the institution have accommodation facilities?	Yes ..... 1 No ..... 2 Do not know ..... 97	
403	Are you a residential student?	Yes ..... 1 No ..... 2	

404	Does your institution have distance learning/ online class facilities?	Yes ..... 1 No ..... 2 Do not know ..... 97	
405	How are the educational expenses in your institution?	Highly Expensive ..... 1 Expensive ..... 2 Moderate ..... 3 Cheap ..... 4 Very Cheap ..... 5	
406	Does the institution have a library facility?	Yes ..... 1 No ..... 2	
407	Does the institution have a laboratory facility?	Yes ..... 1 No ..... 2	
408	Does the institution have scholarship amenities?	Yes ..... 1 No ..... 2 Do not know ..... 97	
409	Does the institution have student loan amenities?	Yes ..... 1 No ..... 2 Do not know ..... 97	
410	Does your institution provide opportunities for students to work as apprentices/interns in other institutions?	Yes ..... 1 No ..... 2 Do not know ..... 97	
411	Is working as an apprentice/intern mandatory?	Yes ..... 1 No ..... 2 Do not know ..... 97	
412	Do you think it is very necessary for technical students to work as apprentice/intern?	Yes ..... 1 Neutral ..... 2 No ..... 3	
413	Does your educational institution support graduate students to find a job?	Yes ..... 1 No ..... 2 Do not know ..... 97	
414	Does your institution have disability-friendly facilities for students with special needs?	Yes ..... 1 No ..... 2 Do not know ..... 97	
415	How difficult is your course to you?	Easy ..... 1 Neutral ..... 2 Hard ..... 3 Don't know ..... 4	

Perceptions on TVET and General Education						
QN	Statement	Response / Code				
501	To what extent you are agreed or disagreed of each of the following aspects? There are no right or wrong answers.	Strongly agreed	Agreed	Neutral	Disagreed	Strongly disagreed

We just want to know what you think.  1 = Strongly agreed 2 = Agreed 3 = Neutral 4 = Disagreed 5 = Strongly disagreed						
The curriculum of the Bangladesh Technical Education Board (BTEB) is up to date.	1	2	3	4	5	
You will get a job easily after getting TVET degree	1	2	3	4	5	
TVET will ensure better job opportunities	1	2	3	4	5	
TVET will bring financial success	1	2	3	4	5	
TVET graduates have more job opportunities compared to general curriculum students	1	2	3	4	5	
TVET is supportive of an individual's or nation's economic development	1	2	3	4	5	
TVET help creating entrepreneurship	1	2	3	4	5	
TVET is less expensive than general education.	1	2	3	4	5	
TVET students get jobs earlier compared to general students.	1	2	3	4	5	
Dropout students can also get TVET.	1	2	3	4	5	
The main purpose of TVET is to prepare students for skill-based employment.	1	2	3	4	5	
Practical in vocational subjects are quite interesting and fascinating	1	2	3	4	5	
Only students who are not good in general education are encouraged to peruse Technical/Vocational subjects.	1	2	3	4	5	
TVET courses are much harder and time-consuming.	1	2	3	4	5	
People usually underestimate the students of TVET.	1	2	3	4	5	

Students should choose TVET over general education	1	2	3	4	5
TVET institutions have a standard educational system	1	2	3	4	5
Government TVET institutions don't provide standard practical classes	1	2	3	4	5
Private TVET institutions provide better education compared to government TVET institutions	1	2	3	4	5
General education students of class 8 to 10 should be encouraged to choose TVET.	1	2	3	4	5

Opinions on TVET and General Education						
QN	Statement	Response / Code SKIP				
601	<p>To what extent you are satisfied or dissatisfied of each of the following aspects? There are no right or wrong answers. We just want to know what you think.</p> <p>1 = Dissatisfied 2 = Slightly Satisfied 3 = Satisfied 4 = Very Satisfied 5 = Extremely Satisfied</p>	Dissatisfied	Slightly Satisfied	Satisfied	Satisfied	Extremely Satisfied
	Environment of your TVET institution	1	2	3	4	5
	Teaching system of your institutions	1	2	3	4	5
	Scholarship provided by government/institution	1	2	3	4	5
	Quality and experience of the TVET teachers	1	2	3	4	5
	Number of teachers compared to students	1	2	3	4	5
	Accommodation facilities	1	2	3	4	5

Quality of books and other reading materials	1	2	3	4	5
Quality of practical equipment	1	2	3	4	5
Quality of practical classes	1	2	3	4	5

**701.** What do you think are the three main barriers to the expansion of technical and vocational education and training?

1. ....
2. ....
3. ....

**702.** What would be your three suggestions to the Government of Bangladesh to improve the quality of TVET?

1. ....
2. ....
3. ....

**703.** What would be your three suggestions to the Government of Bangladesh to encourage the school level students and their parents for TVET?

1. ....
2. ....
3. ....

## Appendix C: Topic Guide for Case Study of the Former TVET Students

### Consent Letter

আসসালামু আলাইকুম/আদাব,

আমার নাম .....। আমি ঢাকা বিশ্ববিদ্যালয়ের পপুলেশন সায়েন্সেস বিভাগ থেকে এসেছি। পপুলেশন সায়েন্সেস বিভাগ 'ডেমোগ্রাফিক ডিভিডেন্ড অর্জনে বাংলাদেশে কারিগরি ও বৃত্তিমূলক শিক্ষা এবং প্রশিক্ষণ এর সম্ভাব্যতা ও চ্যালেঞ্জ' শীর্ষক একটি গবেষণা কর্ম পরিচালনা করছে। এ জরিপে কারিগরি ও বৃত্তিমূলক শিক্ষা এবং প্রশিক্ষণের সম্ভাব্যতা, চ্যালেঞ্জ ও ডেমোগ্রাফিক ডিভিডেন্ডের সাথে সম্পর্কিত বিষয়ের উপর বিস্তারিত তথ্য সংগ্রহ করা হবে।

আপনি অনুমতি দিলে আমি আপনার সাথে কিছু সময় কথা বলতে চাই। আপনার দেওয়া তথ্যাবলি এবং মতামত সমূহ সম্পূর্ণভাবে গোপনীয় থাকবে এবং এই গবেষণা ব্যতীত অন্য কোথাও ব্যবহার করা হবে না। এই জরিপে অংশগ্রহণ সম্পূর্ণরূপে আপনার ইচ্ছাধীন এবং আপনি চাইলে কোনো প্রশ্নের উত্তর নাও দিতে পারেন এবং যেকোনো সময় এই সাক্ষাৎকার বন্ধ করতে বলতে পারে। আমি আশা করবো আপনি এই জরিপে অংশগ্রহণ করবেন কারণ, আপনার মতামত অত্যন্ত গুরুত্বপূর্ণ। আপনার মতামতের ভিত্তিতে কারিগরি ও বৃত্তিমূলক শিক্ষা, প্রশিক্ষণ খাতে নানাবিধ পরিকল্পনা করা হবে যা বাংলাদেশের ডেমোগ্রাফিক ডিভিডেন্ড অর্জনে সহায়ক ভূমিকা পালন করবে।

আপনি কি আমাদের জরিপ সম্পর্কে আর কিছু জানতে চান? আমি কি এখন সাক্ষাৎকার শুরু করতে পারি?

উত্তর দিতে রাজি হয়েছেন ১ \*সাক্ষাৎকার গ্রহণ শুরু করুন

উত্তর দিতে রাজি হয় নি ২ \*ধন্যবাদ জানিয়ে শেষ করুন

সাক্ষাৎকার গ্রহণকারীর স্বাক্ষর: .....

সাক্ষাৎকার গ্রহণ করার সময়:

ঘণ্টা

মিনিট

### General Information of the Respondent

Name of the Respondent	_____	
Division	_____	
District	_____	
Upazila	_____	
Union	_____	
<input type="checkbox"/> Village	<input type="checkbox"/> City Corporation	<input type="checkbox"/> Other City
Name of the Institution	_____	
Location	_____	
Occupation of the Respondent	_____	
Name of the Institution	_____	
Division	_____	
District	_____	
Contact Number	_____	

Other Basic Information of the Respondent				
Q. No.	Question	Response		Skip
101	How old are you?	..... Years		
102	What is your sex?	Male .....	1	
		Female .....	2	
		Transgender.....	3	
103	What is your religion?	Muslim .....	1	
		Hindu .....	2	
		Buddhist .....	3	
		Christian .....	4	
		Others (Please Specify) .....	88	
	Do you have the following things at your home?	Yes		No
	a. Electricity	1	2	
	b. Solar Electricity	1	2	
	c. Radio	1	2	
	d. Television	1	2	
	e. Mobile Phone	1	2	
	f. Telephone	1	2	
	g. Computer/ Laptop	1	2	
	h. Fridge	1	2	
	i. Wardrobe/ Closet	1	2	
	j. Electric Fan	1	2	
	k. DVD/ VCD	1	2	
	l. Water Pump/ Own Tubewell/ Supply Water System	1	2	
	m. IPS/ Generator			
	n. A. C.			
	Which course are you currently studying under the Bangladesh Technical Education Board (BTEB)?	Diploma-in-Technical Education .....	1	
		Diploma-in-Vocational Education .....	2	
		Diploma-in-Engineering .....	3	
		Diploma-in-Textile Engineering .....	4	
		Diploma-in-Agriculture .....	5	

	Diploma-in-Fisheries ..... 6	
	Diploma-in-Jute Technology ..... 7	
	Diploma-in-Forestry ..... 8	
	Diploma-in-Health Technology ..... 9	
	Diploma-in-Medical Ultrasound ..... 10	
	Diploma-in-Animal Health and Production Technology ..... 11	
	HSC (Business Management) ..... 12	
	HSC (Vocational) ..... 13	
	Diploma-in-Commerce ..... 14	
	SSC(Vocational) ..... 15	
	Dakhil(Vocational) ..... 16	
	Certificate-in- Marine Trade course ..... 17	
	Skill Certificate Course ..... 18	
	Certificate-in- Vocational Education ..... 19	
	Certificate-in-Health Technology ..... 20	
	Certificate in Poultry Farming ..... 21	
	Certificate in Animal Health & Production ..... 22	
	Certificate-in-Medical Ultrasound ..... 23	
	Professional Diploma- in-Automobile ..... 24	
	National Skill Standard basic ..... 25	
	Don't know ..... 97	

		Others (Please Specify) ..... 88	
<b>107</b>	Who is the earning member of your family?	Father ..... 1 Mother ..... 2 Siblings ..... 3 Myself ..... 4 Others (Please Specify) ..... 88	
<b>108</b>	What is your approximate monthly income?	.....	

## Topic Guide for Case Study of the Former TVET Students

### Decisions regarding admission to technical and vocational education and training institutions:

1. Please detail how you came to know about Technical and Vocational Education and Training.
2. What is your attitude towards technical and vocational education and training?
  - a. Have there been any changes in your attitude towards technical and vocational education and training before and after graduation? Please elaborate on this.
3. What made you decide to pursue technical and vocational education and training?
4. What are the reasons for choosing the subject/course you pursued your degree under Bangladesh Technical Education Board? Please elaborate on this.
  - a. What is your opinion about what you read? Please explain why you think so.
  - b. Elaborate your attitude towards the education system of Technical Education Board.

### Technical and Vocational Education and Training and Employment Opportunities:

5. When did you obtain your technical and vocational education and training degree?
6. How was your time before entering the workforce after obtaining the degree? Please share your experience with us.
7. Do you do any kind of business (as an entrepreneur) related to your degree?

If your answer is yes, please answer the following questions-

- a. When did you start this job?
- b. What kind of work do you do?
- c. Describe your experience as an entrepreneur.
- d. What obstacles have you faced in becoming an entrepreneur?
- e. Are you facing any kind of problem in the current workplace? Please tell us the details about it.
- f. Did your family and close people support you?
- g. Have you received any assistance from your educational institution in establishing yourself in the workplace?

### If you are not an entrepreneur, answer question 8-

8. Are you currently working in any organization/factory/shop related to your study? If your answer is yes then answer the following questions-
  - a. When did you start this job?
  - b. What kind of work do you do?

- c. Describe your experience at work.
- d. What barriers have you faced in joining the workforce?
- e. Are you facing any kind of problem in the current workplace? Please tell us the details about it.
- f. Did your family and close people support you?
- g. Have you received any assistance from your educational institution in establishing yourself in the workplace?

**If your answer is no, then answer question no. 9-**

9. What kind of problems are you facing in entering the workplace as a technical and vocational education and training trainee? Please elaborate on.

- a. Have you received any assistance from your educational institution regarding career opportunities?

**Availability of technical and vocational education and training and employment:**

10. What role do you think technical and vocational education and training play in increasing employability? Please discuss your views in detail.

11. Among technical and vocational education and training and general medium students according to you, who is more preferred in the workplace and why?

**Public-Private Partnerships in Technical and Vocational Education and Training:**

12. What role can joint initiatives of public and private institutions play in improving and expanding the quality of technical and vocational education and training?

13. How can joint initiatives by public and private institutions contribute to expanding the employability of technical and vocational education and training degree holders? Please discuss your views in detail.

**Role of Technical and Vocational Education and Training in National Economy:**

14. What role do you think technical and vocational education and training play in creating skilled human resources? Please explain.

15. What do you think is the role of technical and vocational education and training degree holders in the national economy? Tell me in detail.

**Upgrading Technical and Vocational Education and Training in Bangladesh:**

16. As a Technical and Vocational Education and Training degree holder, do you think the Technical and Vocational Education and Training curriculum and training standards in Bangladesh need to be improved? If your answer is yes, in which areas do you think improvement is needed? Please elaborate.

## Appendix D: Topic Guide for the Key-Informants Interview (KII) of the Service Providers

### Consent Letter

আসসালামু আলাইকুম/আদাব,

আমার নাম .....। আমি ঢাকা বিশ্ববিদ্যালয়ের পপুলেশন সায়েন্সেস বিভাগ থেকে এসেছি। পপুলেশন সায়েন্সেস বিভাগ 'ডেমোগ্রাফিক ডিভিডেন্ড অর্জনে বাংলাদেশে কারিগরি ও বৃত্তিমূলক শিক্ষা এবং প্রশিক্ষণ এর সম্ভাব্যতা ও চ্যালেঞ্জ' শীর্ষক একটি গবেষণা কর্ম পরিচালনা করছে। এ জরিপে কারিগরি ও বৃত্তিমূলক শিক্ষা এবং প্রশিক্ষণের সম্ভাব্যতা, চ্যালেঞ্জ ও ডেমোগ্রাফিক ডিভিডেন্ডের সাথে সম্পর্কিত বিষয়ের উপর বিস্তারিত তথ্য সংগ্রহ করা হবে।

আপনি অনুমতি দিলে আমি আপনার সাথে কিছু সময় কথা বলতে চাই। আপনার দেওয়া তথ্যাবলি এবং মতামত সমূহ সম্পূর্ণভাবে গোপনীয় থাকবে এবং এই গবেষণা ব্যতীত অন্য কোথাও ব্যবহার করা হবে না। এই জরিপে অংশগ্রহণ সম্পূর্ণরূপে আপনার ইচ্ছাধীন এবং আপনি চাইলে কোনো প্রশ্নের উত্তর নাও দিতে পারেন এবং যেকোনো সময় এই সাক্ষাৎকার বন্ধ করতে বলতে পারে। আমি আশা করবো আপনি এই জরিপে অংশগ্রহণ করবেন কারণ, আপনার মতামত অত্যন্ত গুরুত্বপূর্ণ। আপনার মতামতের ভিত্তিতে কারিগরি ও বৃত্তিমূলক শিক্ষা, প্রশিক্ষণ খাতে নানাবিধ পরিকল্পনা করা হবে যা বাংলাদেশের ডেমোগ্রাফিক ডিভিডেন্ড অর্জনে সহায়ক ভূমিকা পালন করবে।

আপনি কি আমাদের জরিপ সম্পর্কে আর কিছু জানতে চান? আমি কি এখন সাক্ষাৎকার শুরু করতে পারি?

উত্তর দিতে রাজি হয়েছেন ১ \*সাক্ষাৎকার গ্রহণ শুরু করুন

উত্তর দিতে রাজি হয় নি ২ \*ধন্যবাদ জানিয়ে শেষ করুন

সাক্ষাৎকার গ্রহণকারীর স্বাক্ষর: .....

সাক্ষাৎকার গ্রহণ করার সময়:

ঘণ্টা

মিনিট

### General Information of the Respondent

Name of the Respondent	_____
Designation	_____
Name of the Institution	_____
Type of the Institution	<input type="checkbox"/> Educational Institution <input type="checkbox"/> Ministry/ Directorate <input type="checkbox"/> GO/ NGO <input type="checkbox"/> Education Board
Location	
Contact Number	

## **Topic Guide for the Key-Informants Interview (KII) of the Service Providers**

### **Regarding Inclusion:**

1. How do you think technical and vocational education and training can be promoted?

Inclusion of technical and vocational education and training in the curriculum

- Through teachers
- Through the campaign
- Role of educational institutions

### **Opportunity for the TVET Students:**

2. What barriers do rural students face in accessing technical and vocational education and training? Please give your opinion on this.

3. What barriers do urban students face in accessing technical and vocational education and training? Please give your opinion on this.

4. Do you think the current technical and vocational education and training curriculum is disability friendly?

a. If not, what steps do you think can be taken for this?

b. What opportunities do you think the disabled have in this sector?

### **Aspects Related to Curriculum:**

5. According to you, what are the limitations of the current curriculum in producing skilled degree holders of national and international standards?

a. Discuss the reasons for the limitation.

b. Please, give your opinion on removing these restrictions.

### **Linkage with the Labor Market:**

6. Do you think the current technical and vocational education and training curriculum is sufficiently aligned with the needs of the labor market?

a. Discuss if there are any challenges in this regard.

7. What barriers do degree holders in the technical and vocational education and training sector face in meeting the demands of the current labor market? Let us know your important opinion in this regard.

- In terms of labor market
- In terms of degree holders
- Advice regarding this issue

### **Correlation with the Demographic Dividend**

8. The youth population is a large part of the population of Bangladesh. Do you think there is a need to increase access to technical and vocational education and training to exploit this opportunity? If yes then how do you think it can be done? If not, why do you think so?

### **Cooperation and Coordination:**

9. What do you think are the challenges of the public-private partnership approach in the technical and vocational education and training sector?

10. What do you think could be the reasons?

- Regarding policy
- Regarding the economy
- Regarding infrastructure
- Other

### **Other Issues Related to TVET:**

11. What do you think are the barriers to women's access to technical and vocational education and training? Please elaborate.

12. According to you, how many opportunities do people aged 40 and above have to take up technical and vocational education?

13. According to you, how accessible are job opportunities after technical and vocational education and training for the following population groups? Tell me in detail.

a. Women

b. Person aged 40 years or above

### **Upgrading TVET in Bangladesh:**

13. Do you think Bangladesh's technical and vocational education and training curriculum and training needs upgrading? If your answer is yes, in which areas do you think improvement is needed? Please elaborate.

**Appendix E: Topic Guide for the Key-Informants Interview (KII) of the Service Providers  
(Teachers of TVET Institutions)**

**Consent Letter**

আসসালামু আলাইকুম/আদাব,  
আমার নাম ..... | আমি ঢাকা বিশ্ববিদ্যালয়ের পপুলেশন সায়েন্সেস বিভাগ থেকে এসেছি। পপুলেশন সায়েন্সেস বিভাগ 'ডেমোগ্রাফিক ডিভিডেন্ড অর্জনে বাংলাদেশে কারিগরি ও বৃত্তিমূলক শিক্ষা এবং প্রশিক্ষণ এর সম্ভাব্যতা ও চ্যালেঞ্জ' শীর্ষক একটি গবেষণা কর্ম পরিচালনা করছে। এ জরিপে কারিগরি ও বৃত্তিমূলক শিক্ষা এবং প্রশিক্ষণের সম্ভাব্যতা, চ্যালেঞ্জ ও ডেমোগ্রাফিক ডিভিডেন্ডের সাথে সম্পর্কিত বিষয়ের উপর বিস্তারিত তথ্য সংগ্রহ করা হবে। আপনি অনুমতি দিলে আমি আপনার সাথে কিছু সময় কথা বলতে চাই। আপনার দেওয়া তথ্যাবলি এবং মতামত সমূহ সম্পূর্ণভাবে গোপনীয় থাকবে এবং এই গবেষণা ব্যতীত অন্য কোথাও ব্যবহার করা হবে না। এই জরিপে অংশগ্রহণ সম্পূর্ণরূপে আপনার ইচ্ছাধীন এবং আপনি চাইলে কোনো প্রশ্নের উত্তর নাও দিতে পারেন এবং যেকোনো সময় এই সাক্ষাৎকার বন্ধ করতে বলতে পারে। আমি আশা করবো আপনি এই জরিপে অংশগ্রহণ করবেন কারণ, আপনার মতামত অত্যন্ত গুরুত্বপূর্ণ। আপনার মতামতের ভিত্তিতে কারিগরি ও বৃত্তিমূলক শিক্ষা, প্রশিক্ষণ খাতে নানাবিধ পরিকল্পনা করা হবে যা বাংলাদেশের ডেমোগ্রাফিক ডিভিডেন্ড অর্জনে সহায়ক ভূমিকা পালন করবে।  
আপনি কি আমাদের জরিপ সম্পর্কে আর কিছু জানতে চান? আমি কি এখন সাক্ষাৎকার শুরু করতে পারি?  
উত্তর দিতে রাজি হয়েছেন ১ \*সাক্ষাৎকার গ্রহণ শুরু করুন  
উত্তর দিতে রাজি হয় নি ২ \*ধন্যবাদ জানিয়ে শেষ করুন  
সাক্ষাৎকার গ্রহণকারীর স্বাক্ষর: .....  
সাক্ষাৎকার গ্রহণ করার সময়:      
ঘণ্টা মিনিট

**General Information of the Respondent**

Name of the Respondent	_____
Designation	_____
Name of the Institution	_____
Type of the Institution	<input type="checkbox"/> Educational Institution <input type="checkbox"/> Ministry/ Directorate <input type="checkbox"/> GO/ NGO <input type="checkbox"/> Education Board
Location	
Contact Number	

## **Topic Guide for the Key-Informants Interview (KII) of the Service Providers (Teachers of TVET Institutions)**

### **Regarding Inclusion**

1. How do you think technical and vocational education and training can be promoted?

Inclusion of technical and vocational education and training in the curriculum

- Through teachers
- Through the campaign
- Role of organization

### **Opportunity for the TVET Students:**

2. What barriers do rural students face in accessing technical and vocational education and training? Please give your opinion on this.

3. What barriers do urban students face in accessing technical and vocational education and training? Please give your opinion on this.

4. Do you think the current technical and vocational education and training curriculum is disability friendly?

- a. If not, what steps do you think can be taken for this?
- b. What opportunities do you think the disabled have in this sector?

5. To what extent do you think there is a need to encourage students about technical and vocational education? Please elaborate

### **Admission Procedures:**

6. What kinds of problems do you think students face in the admission process?

- Regarding admission time
- Regarding the duration of the course
- Regarding the admission process

7. What kind of problems do you face regarding the admission of students in your institution?

### **Aspects Related to Curriculum:**

8. According to you, what are the limitations of the current curriculum in producing skilled degreed human resources of national and international standards?

- a. Please, give your opinion on removing these restrictions.

9. Do you think students are more interested in a particular trade? If yes, what do you think could be the reason? Please give your advice on this.

**Infrastructure Related Aspects:**

10. What kind of infrastructure problems do you think your organization currently faces?

- Classroom related
- Regarding practical class equipment
- Regarding residential facilities and environment

**Internship Opportunities:**

11. Does your institution offer internship/work-learning opportunities to pass out students? If so, how good do you think those institutions/factories/workplaces are? Please discuss.

- a. If not, are the students passing for this facing any kind of problem? Please give your feedback.

**Regarding the training of teachers**

12. Do you think teachers in the technical and vocational education and training sector receive adequate training?

- a. If yes, what do you think its value is?  
b. If not, what do you think could be the reason behind it? How can these problems be dealt with?

13. Are the teachers currently working in your institution adequately trained?

- a. If yes, how do you think their skills and teaching quality are?  
b. If not, what do you think could be the reason behind it? What steps can be taken to enhance their skills and improve the quality of teaching in this regard?

**Cooperation and Coordination:**

14. How do you think public-private partnerships can benefit students in the technical and vocational education and training sector?

15. How good are the monitoring and evaluation systems currently in place in your organization? Please elaborate on this

**Linkage with the Labor Market:**

16. Do you think the current technical and vocational education and training curriculum is sufficiently aligned with the needs of the labor market?

- a. Discuss if there are any challenges in this regard.

17. What barriers are graduates in the technical and vocational education and training sector facing in meeting the demands of the current labor market? Let us know your important opinion in this regard.

- In terms of labor market
- In terms of graduates
- Advice regarding this

**Correlation with Demographic Dividend:**

18. The youth population is a large part of the population of Bangladesh. Do you think there is a need to increase access to technical and vocational education and training to exploit this opportunity? If yes, how do you think it can be done?

- Increase training
- Inclusion of underprivileged students
- Evening Course
- Incentives for students

19. In your opinion, how much influence does the technical and vocational education and training sector have on the economic development of a country like Bangladesh? Please say

**Other Issues Related to TVET:**

20. In your opinion, how accessible are technical and vocational education and training opportunities for the following population groups? Tell me in detail.

21. According to you, how accessible are job opportunities after technical and vocational education and training for the following population groups? Tell me in detail.

- a. Women
- b. Person aged 40 years or above

**Upgrading TVET in Bangladesh:**

22. Do you think Bangladesh's technical and vocational education and training curriculum and training needs upgrading? If your answer is yes, in which areas do you think improvement is needed? Please elaborate.

**Appendix F: Topic Guide for the Key-Informants Interview (KII) of the Service Providers  
(Teachers of Non-TVET/ General Education Institutions)**

**Consent Letter**

আসসালামু আলাইকুম/আদাব,  
আমার নাম ..... | আমি ঢাকা বিশ্ববিদ্যালয়ের পপুলেশন সায়েন্সেস বিভাগ থেকে এসেছি। পপুলেশন সায়েন্সেস বিভাগ 'ডেমোগ্রাফিক ডিভিডেন্ড অর্জনে বাংলাদেশে কারিগরি ও বৃত্তিমূলক শিক্ষা এবং প্রশিক্ষণ এর সম্ভাব্যতা ও চ্যালেঞ্জ' শীর্ষক একটি গবেষণা কর্ম পরিচালনা করছে। এ জরিপে কারিগরি ও বৃত্তিমূলক শিক্ষা এবং প্রশিক্ষণের সম্ভাব্যতা, চ্যালেঞ্জ ও ডেমোগ্রাফিক ডিভিডেন্ডের সাথে সম্পর্কিত বিষয়ের উপর বিস্তারিত তথ্য সংগ্রহ করা হবে। আপনি অনুমতি দিলে আমি আপনার সাথে কিছু সময় কথা বলতে চাই। আপনার দেওয়া তথ্যাবলি এবং মতামত সমূহ সম্পূর্ণভাবে গোপনীয় থাকবে এবং এই গবেষণা ব্যতীত অন্য কোথাও ব্যবহার করা হবে না। এই জরিপে অংশগ্রহণ সম্পূর্ণরূপে আপনার ইচ্ছাধীন এবং আপনি চাইলে কোনো প্রশ্নের উত্তর নাও দিতে পারেন এবং যেকোনো সময় এই সাক্ষাৎকার বন্ধ করতে বলতে পারে। আমি আশা করবো আপনি এই জরিপে অংশগ্রহণ করবেন কারণ, আপনার মতামত অত্যন্ত গুরুত্বপূর্ণ। আপনার মতামতের ভিত্তিতে কারিগরি ও বৃত্তিমূলক শিক্ষা, প্রশিক্ষণ খাতে নানাবিধ পরিকল্পনা করা হবে যা বাংলাদেশের ডেমোগ্রাফিক ডিভিডেন্ড অর্জনে সহায়ক ভূমিকা পালন করবে।  
আপনি কি আমাদের জরিপ সম্পর্কে আর কিছু জানতে চান? আমি কি এখন সাক্ষাৎকার শুরু করতে পারি?  
উত্তর দিতে রাজি হয়েছেন ১ \*সাক্ষাৎকার গ্রহণ শুরু করুন  
উত্তর দিতে রাজি হয় নি ২ \*ধন্যবাদ জানিয়ে শেষ করুন  
সাক্ষাৎকার গ্রহণকারীর স্বাক্ষর: .....  
সাক্ষাৎকার গ্রহণ করার সময়:      
ঘণ্টা মিনিট

**General Information of the Respondent**

Name of the Respondent	_____
Designation	_____
Name of the Institution	_____
Type of the Institution	<input type="checkbox"/> Educational Institution <input type="checkbox"/> Ministry/ Directorate <input type="checkbox"/> GO/ NGO <input type="checkbox"/> Education Board
Location	
Contact Number	

## **Topic Guide for the Key-Informants Interview (KII) of the Service Providers (Teachers of Non-TVET/ General Education Institutions)**

### **Concepts Related to TVET:**

1. Do you have any idea about technical and vocational education and training? If so please give details about it.
2. How do you view technical and vocational education and training from the type of education that is generally given in schools and colleges? Please tell in detail.
  - a. If you think it is like general education then why think so?
  - b. If you think it is worse than general education then why do you think so?
  - c. If you think it is better than general education then why do you think so?
3. How important do you think it is to motivate people in the society about technical and vocational education and training?
  - a. If you think it's important, why do you think it is?
  - b. If you think it's not important, why do you think it is?
4. How do you think technical and vocational education and training can be promoted?
  - Inclusion of TVET in the curriculum
  - Through teachers
  - Through the campaign
  - Role of organization
5. What barriers do students face in accessing technical and vocational education and training? Please give your opinion on this.
6. To what extent do you think there is a need to encourage students about technical and vocational education? Please elaborate
7. How much do you think your students will benefit from technical and vocational education and training?
  - a. If you think it will improve, why do you think that?
  - b. If you think there will be no improvement, why do you think so?
8. Do you think teachers in the technical and vocational education and training sector receive adequate training?
  - a. If yes, how do you think their skills and teaching quality are?
  - b. If not, what do you think could be the reason behind it? What steps can be taken to enhance their skills and improve the quality of teaching in this regard?

**Linkage with the Labor Market:**

9. Do you think the current technical and vocational education and training curriculum is sufficiently aligned with the needs of the labor market?

- a. Discuss if there are any challenges in this regard.

**Correlation with Demographic Dividend:**

10. The youth population is a large part of the population of Bangladesh. Do you think there is a need to increase access to technical and vocational education and training to exploit this opportunity? If yes, how do you think it can be done?

- Increase training
- Inclusion of underprivileged students
- Evening Course
- Incentives for students

11. In your opinion, how much influence does the technical and vocational education and training sector have on the economic development of a country like Bangladesh? Please say

**Upgrading TVET in Bangladesh:**

12. Do you think Bangladesh's technical and vocational education and training curriculum and training needs upgrading? If your answer is yes, in which areas do you think improvement is needed? Please elaborate.

**Appendix G: Topic Guide for the In-Depth Interview of the Parents of the Students of Class 8 and 10**

**Consent Letter**

আসসালামু আলাইকুম/আদাব,  
আমার নাম ..... | আমি ঢাকা বিশ্ববিদ্যালয়ের পপুলেশন সায়েন্সেস বিভাগ থেকে এসেছি। পপুলেশন সায়েন্সেস বিভাগ 'ডেমোগ্রাফিক ডিভিডেন্ড অর্জনে বাংলাদেশে কারিগরি ও বৃত্তিমূলক শিক্ষা এবং প্রশিক্ষণ এর সম্ভাব্যতা ও চ্যালেঞ্জ' শীর্ষক একটি গবেষণা কর্ম পরিচালনা করছে। এ জরিপে কারিগরি ও বৃত্তিমূলক শিক্ষা এবং প্রশিক্ষণের সম্ভাব্যতা, চ্যালেঞ্জ ও ডেমোগ্রাফিক ডিভিডেন্ডের সাথে সম্পর্কিত বিষয়ের উপর বিস্তারিত তথ্য সংগ্রহ করা হবে। আপনি অনুমতি দিলে আমি আপনার সাথে কিছু সময় কথা বলতে চাই। আপনার দেওয়া তথ্যাবলি এবং মতামত সমূহ সম্পূর্ণভাবে গোপনীয় থাকবে এবং এই গবেষণা ব্যতীত অন্য কোথাও ব্যবহার করা হবে না। এই জরিপে অংশগ্রহণ সম্পূর্ণরূপে আপনার ইচ্ছাধীন এবং আপনি চাইলে কোনো প্রশ্নের উত্তর নাও দিতে পারেন এবং যেকোনো সময় এই সাক্ষাৎকার বন্ধ করতে বলতে পারে। আমি আশা করবো আপনি এই জরিপে অংশগ্রহণ করবেন কারণ, আপনার মতামত অত্যন্ত গুরুত্বপূর্ণ। আপনার মতামতের ভিত্তিতে কারিগরি ও বৃত্তিমূলক শিক্ষা, প্রশিক্ষণ খাতে নানাবিধ পরিকল্পনা করা হবে যা বাংলাদেশের ডেমোগ্রাফিক ডিভিডেন্ড অর্জনে সহায়ক ভূমিকা পালন করবে।  
আপনি কি আমাদের জরিপ সম্পর্কে আর কিছু জানতে চান? আমি কি এখন সাক্ষাৎকার শুরু করতে পারি?  
উত্তর দিতে রাজি হয়েছেন ১ \*সাক্ষাৎকার গ্রহণ শুরু করুন  
উত্তর দিতে রাজি হয় নি ২ \*ধন্যবাদ জানিয়ে শেষ করুন  
সাক্ষাৎকার গ্রহণকারীর স্বাক্ষর: .....  
সাক্ষাৎকার গ্রহণ করার সময়:   ঘণ্টা   মিনিট

**General Information of the Respondent**

Name of the Respondent	_____
Division	_____
District	_____
Contact Number	_____

## Topic Guide for the In-Depth Interview of the Parents of the Students of Class 8 and 10

1. How are decisions made regarding your child's education? Please tell in detail.
    - a. Who participates in decision making?
    - b. Discuss your views on your child's role in decision making
  2. How satisfied are you with your child's education?
    - a. If satisfied, why are you satisfied?
    - b. If not satisfied, what are the reasons behind it?
  3. Have you heard about technical and vocational education and training? Where did you hear from?
- Clues:** Electronics work, refrigerator/ac repair work, fish and cattle rearing, agriculture etc. are taught.
4. How do you view technical and vocational education and training as opposed to the type of education that is generally offered in schools and colleges? Please tell in detail.
    - a. If you think it is as good as general education then why think so?
    - b. If you think it is worse than general education then why do you think so?
    - c. If you think it is better than general education, why do you think so?
  5. If you enroll your child in a technical and vocational education and training institution, how do you think your relatives will view this decision?
    - a. If they think it's a good initiative, what do you think is the reason?
    - b. If they don't seem to be seeing it well, what do you think is the reason?
  6. How do you think your society will view it if you send your child to technical and vocational education and training?
    - a. If they think it's a good initiative, what do you think is the reason?
    - b. If they don't seem to be seeing it well, what do you think is the reason?
  7. Have you decided to enroll your child in a Technical and Vocational Education and Training Institute? If yes, why did you decide to enroll?
    - a. If not, why did you decide not to admit?
  8. Do you think your child's future will be brighter by taking technical and vocational education and training? Please elaborate on this.
    - a. If yes, why?
    - b. If you don't think so, why?
  9. Do you think Bangladesh's technical and vocational education and training curriculum and training needs upgrading? If your answer is yes, in which areas do you think improvement is needed? Please elaborate.

## Appendix H: Topic Guide for the In-Depth Interview of the Parents of the TVET Students

### Consent Letter

আসসালামু আলাইকুম/আদাব,

আমার নাম .....। আমি ঢাকা বিশ্ববিদ্যালয়ের পপুলেশন সায়েন্সেস বিভাগ থেকে এসেছি। পপুলেশন সায়েন্সেস বিভাগ 'ডেমোগ্রাফিক ডিভিডেন্ড অর্জনে বাংলাদেশে কারিগরি ও বৃত্তিমূলক শিক্ষা এবং প্রশিক্ষণ এর সম্ভাব্যতা ও চ্যালেঞ্জ' শীর্ষক একটি গবেষণা কর্ম পরিচালনা করছে। এ জরিপে কারিগরি ও বৃত্তিমূলক শিক্ষা এবং প্রশিক্ষণের সম্ভাব্যতা, চ্যালেঞ্জ ও ডেমোগ্রাফিক ডিভিডেন্ডের সাথে সম্পর্কিত বিষয়ের উপর বিস্তারিত তথ্য সংগ্রহ করা হবে।

আপনি অনুমতি দিলে আমি আপনার সাথে কিছু সময় কথা বলতে চাই। আপনার দেওয়া তথ্যাবলি এবং মতামত সমূহ সম্পূর্ণভাবে গোপনীয় থাকবে এবং এই গবেষণা ব্যতীত অন্য কোথাও ব্যবহার করা হবে না। এই জরিপে অংশগ্রহণ সম্পূর্ণরূপে আপনার ইচ্ছাধীন এবং আপনি চাইলে কোনো প্রশ্নের উত্তর নাও দিতে পারেন এবং যেকোনো সময় এই সাক্ষাৎকার বন্ধ করতে বলতে পারে। আমি আশা করবো আপনি এই জরিপে অংশগ্রহণ করবেন কারণ, আপনার মতামত অত্যন্ত গুরুত্বপূর্ণ। আপনার মতামতের ভিত্তিতে কারিগরি ও বৃত্তিমূলক শিক্ষা, প্রশিক্ষণ খাতে নানাবিধ পরিকল্পনা করা হবে যা বাংলাদেশের ডেমোগ্রাফিক ডিভিডেন্ড অর্জনে সহায়ক ভূমিকা পালন করবে।

আপনি কি আমাদের জরিপ সম্পর্কে আর কিছু জানতে চান? আমি কি এখন সাক্ষাৎকার শুরু করতে পারি?

উত্তর দিতে রাজি হয়েছেন ১ \*সাক্ষাৎকার গ্রহণ শুরু করুন

উত্তর দিতে রাজি হয় নি ২ \*ধন্যবাদ জানিয়ে শেষ করুন

সাক্ষাৎকার গ্রহণকারীর স্বাক্ষর: .....

সাক্ষাৎকার গ্রহণ করার সময়:

ঘণ্টা

মিনিট

### General Information of the Respondent

Name of the Respondent	_____
Division	_____
District	_____
Contact Number	_____

## Topic Guide for the In-Depth Interview of the Parents of the TVET Students

1. How are decisions made regarding your child's education? Please tell in detail.
  - a. Who participates in decision making?
  - b. Discuss your views on your child's role in decision making
2. How satisfied are you with your child's education?
  - a. If you are satisfied, what are the reasons you are satisfied?
  - b. If not satisfied, what are the reasons behind it?
3. Have you ever heard about this before enrolling your child in a technical and vocational education and training institution? Where did you hear from?

**Clues:** Electronics work, refrigerator/ac repair work, fish and cattle rearing, agriculture etc. are taught.
4. How do you view technical and vocational education and training as opposed to the type of education that is generally offered in schools and colleges? Please tell in detail.
  - a. If you think it is as good as general education then why think so?
  - b. If you think it is worse than general education then why do you think so?
  - c. If you think it is better than general education, why do you think so?
5. How do your relatives feel about sending your child to technical and vocational education and training? If they think it's a good initiative, what do you think is the reason?
  - a. If they don't seem to be seeing it well, what do you think is the reason?
6. How does your society view sending your child to technical and vocational education and training? If they think it's a good initiative, what do you think is the reason?
  - a. If they don't seem to be seeing it well, what do you think is the reason?
7. Why did you send your child to technical and vocational education and training sector? What was the reason behind this?
8. Do you think your child's future will be brighter by taking technical and vocational education and training? Please elaborate on this.
  - a. If yes, why?
  - b. If you don't think so, why?
9. Do you think that technical and vocational education and training curriculum and training in Bangladesh needs improvement? If your answer is yes, in which areas do you think improvement is needed? Please elaborate.

## Appendix I: Topic Guide for the In-Depth Interview of Community Leaders

### Consent Letter

আসসালামু আলাইকুম/আদাব,

আমার নাম .....। আমি ঢাকা বিশ্ববিদ্যালয়ের পপুলেশন সায়েন্সেস বিভাগ থেকে এসেছি। পপুলেশন সায়েন্সেস বিভাগ 'ডেমোগ্রাফিক ডিভিডেন্ড অর্জনে বাংলাদেশে কারিগরি ও বৃত্তিমূলক শিক্ষা এবং প্রশিক্ষণ এর সম্ভাব্যতা ও চ্যালেঞ্জ' শীর্ষক একটি গবেষণা কর্ম পরিচালনা করছে। এ জরিপে কারিগরি ও বৃত্তিমূলক শিক্ষা এবং প্রশিক্ষণের সম্ভাব্যতা, চ্যালেঞ্জ ও ডেমোগ্রাফিক ডিভিডেন্ডের সাথে সম্পর্কিত বিষয়ের উপর বিস্তারিত তথ্য সংগ্রহ করা হবে।

আপনি অনুমতি দিলে আমি আপনার সাথে কিছু সময় কথা বলতে চাই। আপনার দেওয়া তথ্যাবলি এবং মতামত সমূহ সম্পূর্ণভাবে গোপনীয় থাকবে এবং এই গবেষণা ব্যতীত অন্য কোথাও ব্যবহার করা হবে না। এই জরিপে অংশগ্রহণ সম্পূর্ণরূপে আপনার ইচ্ছাধীন এবং আপনি চাইলে কোনো প্রশ্নের উত্তর নাও দিতে পারেন এবং যেকোনো সময় এই সাক্ষাৎকার বন্ধ করতে বলতে পারে। আমি আশা করবো আপনি এই জরিপে অংশগ্রহণ করবেন কারণ, আপনার মতামত অত্যন্ত গুরুত্বপূর্ণ। আপনার মতামতের ভিত্তিতে কারিগরি ও বৃত্তিমূলক শিক্ষা, প্রশিক্ষণ খাতে নানাবিধ পরিকল্পনা করা হবে যা বাংলাদেশের ডেমোগ্রাফিক ডিভিডেন্ড অর্জনে সহায়ক ভূমিকা পালন করবে।

আপনি কি আমাদের জরিপ সম্পর্কে আর কিছু জানতে চান? আমি কি এখন সাক্ষাৎকার শুরু করতে পারি?

উত্তর দিতে রাজি হয়েছেন ১ \*সাক্ষাৎকার গ্রহণ শুরু করুন

উত্তর দিতে রাজি হয় নি ২ \*ধন্যবাদ জানিয়ে শেষ করুন

সাক্ষাৎকার গ্রহণকারীর স্বাক্ষর: .....

সাক্ষাৎকার গ্রহণ করার সময়:

ঘণ্টা

মিনিট

### General Information of the Respondent

Name of the Respondent	_____		
Division	_____		
District	_____		
Upazila	_____		
Union	_____		
<input type="checkbox"/> Village	<input type="checkbox"/> City Corporation	<input type="checkbox"/> Other City	
Identity of the Respondent	<input type="checkbox"/> Imam	<input type="checkbox"/> Chairman/ Member	
Contact Number	_____		
	_____		

## Topic Guide for the In-Depth Interview of Community Leaders

1. Have you heard about technical and vocational education and training? Where did you hear from?

**Clues:** Electronics work, refrigerator/ac repair work, fish and cattle rearing, agriculture etc. are taught.

2. How do you view technical and vocational education and training from the type of education that is generally given in schools and colleges? Please tell in detail.

- a. If you think it is like general education then why think so?
- b. If you think it is worse than general education then why do you think so?
- c. If you think it is better than general education then why do you think so?

3. How important do you think it is to motivate people in the society about technical and vocational education and training?

- a. If you think it's important, why do you think it is?
- b. If you think it's not important, why do you think it is?

4. How would you promote technical and vocational education and training in your area? Please tell in detail.

- a. What role can you play in this regard?

Are there any challenges in performing these roles? If so, please give details about it.

5. How much do you think students in your area can benefit from technical and vocational education and training?

- a. If you think it will improve, why do you think that?
- b. If you think there will be no improvement, why do you think so?

6. Do you think that technical and vocational education and training curriculum and training in Bangladesh needs improvement? If your answer is yes, in which areas do you think improvement is needed? Please elaborate.

## Appendix J: Topic Guide for the In-Depth Interview of Employers

### Consent Letter

আসসালামু আলাইকুম/আদাব,

আমার নাম .....। আমি ঢাকা বিশ্ববিদ্যালয়ের পপুলেশন সায়েন্সেস বিভাগ থেকে এসেছি। পপুলেশন সায়েন্সেস বিভাগ 'ডেমোগ্রাফিক ডিভিডেন্ড অর্জনে বাংলাদেশে কারিগরি ও বৃত্তিমূলক শিক্ষা এবং প্রশিক্ষণ এর সম্ভাব্যতা ও চ্যালেঞ্জ' শীর্ষক একটি গবেষণা কর্ম পরিচালনা করছে। এ জরিপে কারিগরি ও বৃত্তিমূলক শিক্ষা এবং প্রশিক্ষণের সম্ভাব্যতা, চ্যালেঞ্জ ও ডেমোগ্রাফিক ডিভিডেন্ডের সাথে সম্পর্কিত বিষয়ের উপর বিস্তারিত তথ্য সংগ্রহ করা হবে।

আপনি অনুমতি দিলে আমি আপনার সাথে কিছু সময় কথা বলতে চাই। আপনার দেওয়া তথ্যাবলি এবং মতামত সমূহ সম্পূর্ণভাবে গোপনীয় থাকবে এবং এই গবেষণা ব্যতীত অন্য কোথাও ব্যবহার করা হবে না। এই জরিপে অংশগ্রহণ সম্পূর্ণরূপে আপনার ইচ্ছাধীন এবং আপনি চাইলে কোনো প্রশ্নের উত্তর নাও দিতে পারেন এবং যেকোনো সময় এই সাক্ষাৎকার বন্ধ করতে বলতে পারে। আমি আশা করবো আপনি এই জরিপে অংশগ্রহণ করবেন কারণ, আপনার মতামত অত্যন্ত গুরুত্বপূর্ণ। আপনার মতামতের ভিত্তিতে কারিগরি ও বৃত্তিমূলক শিক্ষা, প্রশিক্ষণ খাতে নানাবিধ পরিকল্পনা করা হবে যা বাংলাদেশের ডেমোগ্রাফিক ডিভিডেন্ড অর্জনে সহায়ক ভূমিকা পালন করবে।

আপনি কি আমাদের জরিপ সম্পর্কে আর কিছু জানতে চান? আমি কি এখন সাক্ষাৎকার শুরু করতে পারি?

উত্তর দিতে রাজি হয়েছেন ১ \*সাক্ষাৎকার গ্রহণ শুরু করুন

উত্তর দিতে রাজি হয় নি ২ \*ধন্যবাদ জানিয়ে শেষ করুন

সাক্ষাৎকার গ্রহণকারীর স্বাক্ষর: .....

সাক্ষাৎকার গ্রহণ করার সময়:

ঘণ্টা

মিনিট

### General Information of the Respondent

Name of the Respondent	_____	
Name of the Institution	_____	
Location		
Division		
District		
Upazila		
Union		
<input type="checkbox"/> Village	<input type="checkbox"/> City Corporation	<input type="checkbox"/> Other City
Contact Number	_____	

## **Topic Guide for the In-Depth Interview of Employers**

### **Concepts of Technical and Vocational Education and Training:**

1. How important do you consider technical and vocational education and training and why?
2. Have there been any changes in your thinking about technical and vocational education and training before and after the recruitment of degree holders in technical and vocational education and training? Please elaborate on this.
3. Who do you think is more skilled between a technical and vocational education and training degree worker and a general education graduate? Please explain why you think so.

### **Recruitment of and work experience with technical and vocational education and training:**

4. What factors have you considered in hiring former technical and vocational education and training graduates in your organization? Please tell us the details about it.
5. Are you satisfied with the work/job skills of your technical and vocational education and training graduates? Please state your reasons for such opinion.
  - Work efficiency
  - Method of action
  - Behavior
  - Relationships with other colleagues

6. Does this institution employ women with technical and vocational education and training degrees?
  - a. If yes, what factors are considered in their appointment?
  - b. If not why they are not assigned?

### **Technical and vocational education and training and its role in the national economy:**

7. What role do you think technical and vocational education and training play in creating skilled human resources? Please tell in detail.
8. What is the role of technical and vocational education and training in creating employment opportunities? Please give your opinion on this.
9. What do you think is the role of technical and vocational education and training degree holders in the national economy? Tell me in detail.

### **Upgrading Technical and Vocational Education and Training in Bangladesh:**

10. As an employer, do you think Bangladesh's technical and vocational education and training curriculum and training needs upgrading? If your answer is yes, in which areas do you think improvement is needed? Please elaborate.

## Appendix K: List of Technical Committee Members

পপুলেশন সায়েন্সেস বিভাগ  
ঢাকা বিশ্ববিদ্যালয়



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### List of Technical Committee Members (not according to seniority):

1. **Professor Dr A K M Nurun Nabi**, Founder Chairman, Department of Population Sciences, University of Dhaka
2. **Professor Dr. Syed Shahadat Hossain**, Institute of Statistical Research and Training, University of Dhaka
3. **Dr Abu Jamil Faisel**, Public Health Expert Advisor, Ministry of Health and Family Welfare (MoHFW), Government of the People's Republic of Bangladesh
4. **Professor Dr. Mohammad Ali Zinnah**, Institute of Education and Research, University of Dhaka
5. **Professor Dr. Md. Sheikh Giash Uddin**, Department of Statistics, Jagannath University
6. **Professor Dr. Muhammad Shahadat Hossain Siddiquee**, Department of Economics, University of Dhaka
7. **Dr. Sanzida Akhter**, Associate Professor, Department of Women and Gender Studies, University of Dhaka
8. **Mr. Mohammed Ahsanul Alam**, Director Research (CC) and Line Director OP-TRD, National Institute of Population Research and Training (NIPORT), Dhaka, Bangladesh
9. **Professor Dr. Tehmina Ghafur**, Department of Population Sciences, University of Dhaka  
University of Dhaka
10. **Mr. A H M Kishowar Hossain**, Associate Professor, Department of Population Sciences, University of Dhaka
11. **Ms. Gaylan Peyari Tarannum Dana**, Associate Professor, Department of Population Sciences, University of Dhaka
12. **Ms. Farhana Ferdous Luna**, Assistant Professor, Department of Population Sciences, University of Dhaka
13. **Mr. Md. Zakiul Alam**, Assistant Professor, Department of Population Sciences, University of Dhaka
14. **Mr. Md. Mahir Faysal**, Lecturer, Department of Population Sciences, University of Dhaka

## **Appendix L: Research Team for Household Listing, Data Collection, Data Editing, and Data Entry**

### **Research Assistants:**

1. Anika Tahseen Nuva
2. Md. Fakrul Islam Roni

### **Questionnaire Software Design with Kobo toolbox, SPSS Software template, data cleaning and Field Supervision:**

Asif Hasan, Independent Consultant

### **Field Supervisors and Qualitative Data Collectors:**

1. Jobayer Sikdar
2. Shazidur Rahman
3. Md. Al-Amin
4. Md. Wahidur

### **Field Enumerators:**

1. Md. Nobin Uddin Mondol
2. Kazi Mushfika Hossain
3. Shimu Khatun
4. Mahmuda Siddika
5. Md. Abdul Kuddus
6. Md. Firoz Khan
7. Abdullah Rasel
8. Md. Mizanur Rahman
9. Md. Saiful Islam Sany
10. Md. Abdullah Al-Amin
11. Md. Titul Mia
12. Md. Hasib Shaikh
13. Rabeya Bashri Moni
14. Shirina Khatun
15. Aloka Rani
16. Khondker Waliul Islam
17. Shamsunnahar Luna
18. Md. Mamun Shikdar
19. Md. Asadujjaman Asad
20. Ayrn Akter
21. Hamida Begum
22. Mst. China Khatun
23. Mitaly Parvin
24. Sharmin Akter Asha



