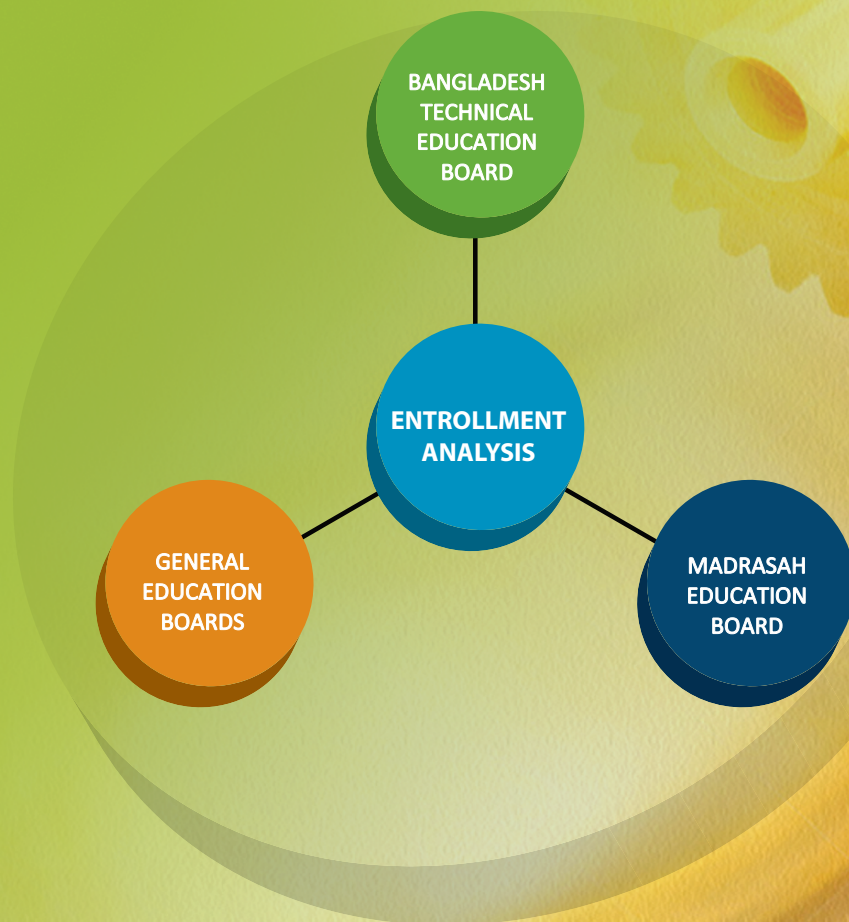
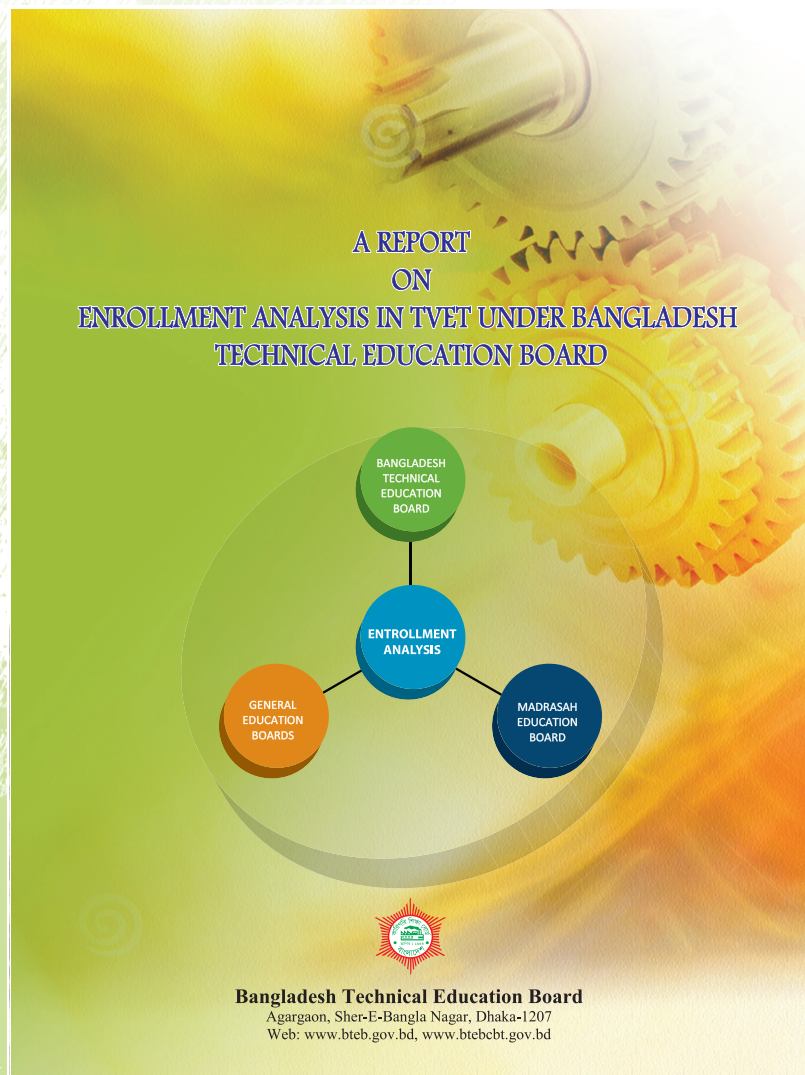


A REPORT ON ENROLLMENT ANALYSIS IN TVET UNDER BANGLADESH TECHNICAL EDUCATION BOARD



Bangladesh Technical Education Board

A REPORT ON ENROLLMENT ANALYSIS IN TVET UNDER BANGLADESH TECHNICAL EDUCATION BOARD



Bangladesh Technical Education Board

Agargaon, Sher-E-Bangla Nagar, Dhaka-1207

Web: www.bteb.gov.bd, www.btebcbt.gov.bd

Published in : August 2016



Message



Nurul Islam Nahid, M. P.

Honorable Minister

Ministry of Education

Government of the People's Republic of Bangladesh

Technical and Vocational Education and Training (TVET) is indispensable for the development of human capital in Bangladesh. Bangladesh is the 8th most populous country in the world which presents an immense opportunity in terms of labor force. Skill training is essential for ensuring the country's competitiveness in the global market and ensuring decent work for all. Skills, knowledge and innovation are driving forces of global economic growth and social development. Government aims to ensure Bangladesh's competitiveness in the global market and reduce poverty by improving the quality of vocational education and training in Bangladesh. Skills development is the potential for economic transformation in Bangladesh. Presently Bangladesh has the best opportunity of demographic dividend.

In National Education Policy 2010, highest importance is given to turn students into competent manpower through technical and vocational education. There is a high demand for skill manpower abroad and in domestic labour market. This will gradually increase in the coming years. Skilled manpower will be able to earn more foreign currency from overseas and contribute country's technical development leading to socio-economic development of the country.

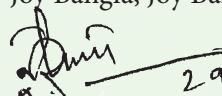
In National Skills Development Policy, 2011 Bangladesh Technical Education Board is mandated to provide relevant, accessible, high quality and efficient technical education and skills development and maintain uniform standard throughout the country.

It is found that labor force increases 2.0 million annually in Bangladesh. Millions of youth are dropped out from schooling. Therefore proper policy interventions needed to accommodate these youth force. For this purpose it is necessary to collect data on this group of youth for mapping enrollment in different curriculum in TVET. The assessment of the demand for skilled workforce in the economy requires enrollment information. A painstaking effort to be adopted by the Government with the authorities concerned, various working groups, employers, industry and expert from the institutions in framing strategies for planning, implementation, employment generation and skill training. In order to match between the population and economic need of the country, the demand for the TVET programs has been recognized by the government. In National Strategy for Accelerated Poverty Reduction II (NSAPR II) paper, the enrollment target for TVET has been set to 20 percent by 2020. So it is essential to determine the future enrollment target of the TVET sector in order to achieve the goal.

I hope that findings from this analysis will contribute on TVET for better informed delivery planning, resource allocation, decisions making and to assess progress of the TVET sector to a large extent.

Best Wishes.

Joy Bangla; Joy Bangabandu.


29.8.2016
(Nurul Islam Nahid, M. P.)



Message



Secretary

Ministry of Education

Government of the People's Republic of Bangladesh

Bangladesh is in need for highly skilled human resources to address the present demand-supply gap in various industries particularly those driving economic transformation. Skills and quality are crucial for poverty reduction, economic upliftment and sustainable development of a country. Growth of industry in Bangladesh is advancing in a fast pace. Overseas market for skilled labor is also expanding rapidly. Huge number of skilled manpower will be required to support the rapid industrial growth and overseas labor market. School dropouts are found suffering without proper channel to acquire a qualification or gain relevant experience which can enable them to enter job market with relevant skill required by the industry. Opportunity for Bangladesh arising from demographic dividend to be harnessed by providing skill to a large number of new entrants into job market every year and up-skill the expanding labor force that is still undereducated and inadequately trained. Training and skills must have a higher tendency to obtain foreign employment and to meet domestic labor market needs. Vocational and technical education is the best path to excellence career. As a consequence, policy attention to Technical and Vocational Education and Training (TVET) for Bangladesh is vital to provide innovative education and training to meet the needs of individuals, communities, industries and the country.

Lack of information about demand leading to training and availability of job is a constraint to formulate an effective TVET system in Bangladesh. A reliable database for enrollment, skills requirements and labor information must be established for implementation of a national quality skills development system.

I hope this report will help in effective financing, encouraging learners for TVET education and identify skills training programs for mutual recognition of global competitiveness.

সোহরাব

২৭.০৮.২০১৬.

(Md. Sohorab Hossain)

Foreword



Government of Bangladesh aims to produce Bangladeshi workforce globally competitive and matching industry specific through a standardized technical education system. It requires to formulate and implement policies, plans and strategies in collaborations with all stakeholders in Technical and Vocational Education and Training (TVET) including the employees in order to maintain an efficient skills development system that meets the challenging needs of the industry. Global labor market is highly competitive and flexible. We have to build-up the capacity to adopt with the changed technology and labor market demand.

The Technical and Vocational Education and Training (TVET) has always been an important component of country's economic and technological development leading to enhancing the living standard of the people of the country.

The economy of the country is still dependent on agriculture to a large extent. Industry and remittance right now share remarkably in country's economic development. There has been much demand for highly skilled craftsmen, technicians and engineers because of the expansion of industry and overseas labor market. Bangladesh has the privileges to have demographic dividend. So we have to gear-up the Technical and Vocational Education and Training (TVET) systems, its structure and programs to meet the future socio-economic demands of the country and to upgrade the vocational and technical education and training programs and activities quantitatively and qualitatively. It is highly required to know the present enrollment status and industry demand scenario for mapping the programs in TVET sector.

I hope this report will immensely help us in policy formulation for the development of TVET system in Bangladesh.

A handwritten signature in black ink, appearing to read 'Ashoke Kumar Biswas', with the date '20.08.2019' written below it.

Ashoke Kumar Biswas
Additional Secretary (Technical)
Ministry of Education
&
Director General (Additional charge)
Directorate of Technical Education
Government of the People's Republic of Bangladesh



Preface

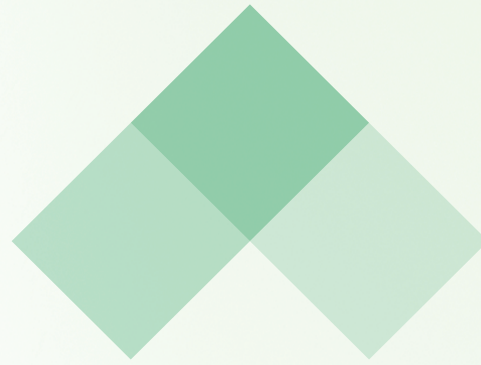
Skills, knowledge and innovation are important driving forces of economic growth and social development in any country. Countries with higher levels of education and skills adjust more effectively to challenges and opportunity in the global economy. In Bangladesh, 23 ministries and agencies impart formal and non-formal trainings in the context of industry and community development. Many private training organizations, NGOs and donor agencies also deliver skill trainings both formal and non-formal. Skill trainings also occur on and off the job in enterprises and as pre-departure trainings for expatriated workers. The skills development system in Bangladesh can be classified five main segments namely public, private with government subsidies, private with commercial mode, NGOs and industry based in the workplace.

In the current system there is a lack of coordination among the training providers. Significant improvements can be made by implementing more effective and nationally consistent policies, system management and quality control.

Developing countries are facing unequal and aggressive competition in the world of business, transport, marketing of products, export of skilled manpower and communication in the international market. For a near midlevel economic country like Bangladesh, opportunities of economic development will be created in this state of unequal competition and the value of physical labour will be enhanced. So the highest importance will be given to turn our students into competent manpower through vocational and technical education and training.

It needs competent manpower to meet up internal needs and there is a high demand of skilled manpower in abroad which will increase gradually over the coming years. Export of skilled manpower can increase our foreign currencies earnings. Development programs will be undertaken to build up competent manpower in view of national and international demands. The mission of Bangladesh government is to develop skill in Bangladesh to support rapid and inclusive economic growth. Higher quality skill outcomes to maintain individual's employability, increase productivity and support higher standard of livings.

The government has already made commitment in NSAPR II to the effect that TVET students shall comprise 20% of all secondary students by 2020. It is required to formulate and implement policies, plans and strategies in collaboration with all stakeholders in education and trainings particularly the employees in order to maintain an efficient technical education and training system which meets challenges, needs of the industry.



The main objectives of TVET in Bangladesh is to standardize vocational skills locally and internationally matching skills with market demand, creates internationally competitive workforce. For effective planning, coordination and monitoring of skill development activities by different ministries, donor agencies, public and private providers, it is essential to know the total enrollment in TVET sub-sectors to achieve the enrollment target 20 percent by 2020.

Quality data is crucial for the effective management and planning of skills development. Government, employers, workers and often stakeholders cannot make decision about what skills are required, what programs should be delivered and where without the demand of skills. Data also needs for the supply of skills, the demand for skills and matching of supply and demand.

In this context, we hope that our enrollment analysis that is reflected in this book will help TVET planners for making strategies and policies. My heartiest gratitude to Honorable Minister, Ministry of Education, Mr. Nurul Islam Nahid, MP for his initiative and encouragement in preparing this study report. My special thanks to Mr Sohorab Hossain, Secretary, Ministry of Education for his kind cooperation.

I am very much thankful to Mr. A S Mahmud, Additional Secretary (Development), Ministry of Education, Mr. A B M Khorshed Alam, CEO, NSDC Secretariat and Mr. Ashoke Kumar Biswas, Additional Secretary (Technical), Ministry of Education & Director General (Additional charge), Directorate of Technical Education for their constant support and cooperation for publishing this report.

I am also grateful to Mr. Md. Fashiullah, Director, Bangladesh Bureau of Educational Information and Statistics (BANBEIS) for his sincere effort and contribution for doing this study and estimating the enrollment.

My thanks to the officers of the Ministry of Education, Directorate of Technical Education, Bangladesh Bureau of Educational Information and Statistics (BANBEIS), NSDC Secretariat, BMET, Bangladesh Technical Education Board and related organizations for extending their sincere cooperation in this regards.

Dr. Md. Mostafizur Rahman
Chairman

Bangladesh Technical Education Board

The Editorial Committee

Chief Advisors

Mr. Ashoke Kumar Biswas	Additional Secretary (Technical) Ministry of Education & Director General (Additional charge) Directorate of Technical Education
Dr. Md. Mostafizur Rahman	Chairman Bangladesh Technical Education Board

Editor

Md. Aktaruzzaman	Director (Curriculum) Bangladesh Technical Education Board
-------------------------	---

Data Analysis & Compilation

Dr. Raju Muhammad Shahidul Islam	Deputy Director (Research) Bangladesh Technical Education Board
---	--

Cooperation

Md. Nayeb Ali Mandal	Secretary, BTEB
Dr. Shah Jahan	Director (Industry & Training Coordination), BTEB
Mahendra Kumar Sikder	Inspector, BTEB
Engr. Md. Shamsul Alam	Project Director, BTEB
Engr. Sushil Kumar Paul	Controller of Examination, BTEB
M. M. Ali Suza	Principal. Graphic Arts Institute
A. K. M. Shamsuzzaman	System Analyst, BTEB
S. M. Shahjahan	Deputy Director (Course Accreditation), BTEB
Md. Mostafizur Rahman Khan	Curriculum Specialist (Diploma), BTEB
Dr. Engr. Zakaria Abbasi	Curriculum Specialist (Vocational), BTEB
Md. Abdul Hamid	Deputy Controller & Curriculum Specialist, (BM), BTEB
Md. Mostofa Kamal	Curriculum Specialist (Agriculture), BTEB
Dr. Mohammad Abu Saime	Deputy Director (Publication) & Curriculum Specialist (Medical), BTEB
Md. Abdulla Al Mabud	Assistant Director (Publication) & Curriculum Specialist (Basic Trade), BTEB
Md. Nowsad Ali	Documentation Officer, BTEB
Md. Arifur Rahman	Junior Instructor, Graphic Arts Institute

Content

List of tables and Figures	8
Acronyms	9
Definitions	10
Executive Summary	11

1. About BTEB

1.1	Background	16
1.2	Controlling Authority	16
1.3	Constitution of the Board	16
	1.3.1 Chairman	16
	1.3.2 Ex-officio Members	16
	1.3.3 Nominated Members	16
1.4	Powers of the Board	16
1.5	Academic Programs or Courses Offered by BTEB	17
1.6	Administrative and Academic Structure of BTEB	27
	1.6.1 Administration	27
	1.6.2 Curriculum	27
	1.6.3 Examination	27
	1.6.3.1 Computer Cell	28
	1.6.3.2 Printing Press	28
	1.6.4 Inspection	28
	1.6.5 Industry and Training Coordination	29

2. TVET Scenario in Bangladesh

2.1	Formal Training under BTEB	30
2.2	Informal and Non Formal Training	31
		32

3. Enrollment in TVET under BTEB Certification

3.1	TVET Policies	33
3.2	Objectives of the Enrollment Analysis	33
3.3	Methodology for Enrollment Analysis	34
	3.3.1 Types of Data used for Enrollment Analysis	34
	3.3.2 Formula used for Enrollment Calculation	35
	3.3.3 Enrollment Projection Calculation	35
	3.3.4 Limitations	35
3.4	Enrollment Analysis	36
	3.4.1 Enrollment of Secondary Education Level-2014	36
	3.4.2 Enrollment of Higher Secondary Education and Diploma (All) 1st & 3rd Semester Level-2014	36
	3.4.3 Total Enrollment Analysis-2014	37
	3.4.4 Enrollment Projection	38
	3.4.4.1 Enrollment Increment Trends in BTEB (2009-2015)	38
	3.4.4.2 Enrollment Increment Trends in Eight General Boards (2008-2014)	38
	3.4.4.3 Enrollment Increment Trends in Madrasah Board (2008-2014)	39
	3.4.4.4 Enrollment Increment Trends in General and Madrasah Board (2008-2014)	40
	3.4.4.5 Projected Enrollment of BTEB up to 2020	41

4. Findings

42

5. References

42

List of Tables and Figures

List of Tables

Table-1	Curriculum wise institute seat capacity	18
Table-2	Curriculum wise name of Technology, Specialization and Trades (up to December 2015)	19
Table-3	National Technical and Vocational Qualification Framework in Bangladesh	29
Table-4	Category of the Courses Enrollment data taken for Calculation	34
Table-5	Enrollment in Secondary Education Level-2014	36
Table-6	Enrollment in Higher Secondary Education and Diploma (All) 1 st & 3 rd Semester Level-2014	36
Table-7	Enrollment in Secondary and Higher Secondary and Diploma (All) 1 st & 3 rd Semester Education Level-2014	37
Table-8	Average Incremental Rate of Enrollment under BTEB	38
Table-9	Average Incremental Rate of Enrollment under Eight General Boards	38
Table-10	Average Incremental Rate of Enrollment under Madrasah Board	39
Table-11	Average Incremental Rate of Enrollment under General and Madrasah Boards	40
Table-12	Projected Enrollment under BTEB with Projected Enrollment of 10 Boards	41

List of Figures

Figure-1	Projected Enrollment under BTEB with Projected Enrollment of 10 Boards	41
-----------------	--	----

Acronyms

BANBEIS	Bangladesh Bureau of Educational Information and Statistics
BM	Business Management
BMET	Bureau of Manpower Employment and Training
BNFE	Bureau of Non Formal Education
BTEB	Bangladesh Technical Education Board
BUET	Bangladesh University of Engineering and Technology
CBT&A	Competency Based Training and Assessment
CS	Competency Standard
DG	Director General
DTE	Directorate of Technical Education
DUET	Dhaka University of Engineering and Technology
EIF	Examination Information Form
GER	Gross Enrollment Ratio
HSC	Higher Secondary Certificate
ICR	Intelligent Character Recognition
MIS	Management Information System
MPO	Monthly Payment Order
NEP	National Education Policy 2010
NER	Net Enrollment Rate
NFE	Non Formal Education
NGO	Non Government Organization
NPVC	National Pre-Vocation Certificate
NSAPR II	National Strategy for Accelerated Poverty Reduction II
NSC	National Skill Certificate
NSDC	National Skills Development Council
NSDP	National Skills Development Policy 2011
NSS	National Skills Standard
NTVQF	National Technical and Vocational Qualification Framework
OMR	Optical Mark Reader
PC	Practical Continuous
PF	Practical Final
RPL	Recognition of Prior Learning
SSC	Secondary School Certificate
TC	Theoretical Continuous
TSC	Technical School and College
TVET	Technical and Vocational Education and Training
UNESCO	United Nations Educational, Scientific and Cultural Organization

Definitions

Enrollment	Number of students officially enrolled in a given grade regardless of age.
Gross Enrollment Ratio	Refers to the total enrollment of students in a grade or level of education, regardless of age expressed as percentage of the corresponding eligible official age group population in a given school year.
Net Enrollment Rate	Refers to the number of students enrolled in the official specific age group expressed as a percentage of the total population in that age group.
% of BTEB Enrollment	Refers to the percentage of BTEB enrollment of SSC (Vocational), Dakhil (Vocational), HSC (Vocational), HSC (Business Management), Basic Trade Course (360 hours), and 1st & 3rd Semesters of Diploma (All) with the total enrollment of 10 Boards of the age group of SSC, HSC level of education.
Enrollment Incremental Rate (%)	Refers to the percentage of BTEB enrollment increased in a given year with respect to the BTEB enrollment in corresponding previous year.
Formal Training	Organized, guided by a formal curriculum, leads to a formally recognized credential such as a high school completion diploma or a degree, and is often guided and recognized by government at some level. Teachers are usually trained as professionals in some way.
Informal Training	No formal curriculum and no credits earned. The teacher is simply someone with more experience such as a parent, grandparent, friend or a boss. A father teaching his child to play catch or a babysitter teaching a child their ABC's is an example of informal education.
Non-Formal Training	Non-formal training is a purposeful and systematically organized form of learning that generally occurs outside the formal educational institutions. It is designed to meet the learning needs of educationally disadvantaged persons of different ages and backgrounds, flexible in terms of organization, time and place and may cover basic and continuing educational programs to impart basic literacy, including life skills, work skills, general culture, and facilitates lifelong learning and enhancement of earning capabilities for poverty reduction.

Executive Summary

Skills, knowledge and innovation are important driving forces of economic growth and social development in any country, and those countries with higher levels of education and skills, adjust more effectively to challenges and opportunities in the global economy. Skilled workforce is an essential concomitant of national development. Methods and strategies of development have changed worldwide on the wake of new innovations and inventions of science. Each and every day, developing countries are facing unequal and aggressive competition in the world of business, transport, marketing of products, export of skilled manpower and communication in the international market. For a near mid level Economic country like Bangladesh, opportunities of economic development will be created in this state of unequal competition and the value of physical labor will be enhanced. So highest importance will be given to turn our students into competent manpower through vocational and technical education with emphasis on science, technology and specially on information technology. It needs competent manpower to meet up internal needs. Moreover, there is a high demand of skilled manpower abroad and this will gradually increase over the coming years. Skilled manpower can increase our foreign currency earning. Skills development brings returns to individual, enterprises and society as a whole. Therefore all stakeholders, including government, public and private enterprises, and individuals as direct beneficiaries.

The vision for skills development shared by government, industry, workers and civil society is that: “Skills development in Bangladesh will be recognized and supported by government and industry as a coordinated and well planned strategy for national and enterprise development. The reformed skills development system will empower all individuals to access decent employment and ensure Bangladesh’s competitiveness in the global market through improved skills, knowledge and qualifications that are recognized for quality across the globe.”

The aims and objectives of vocational and technical education are:

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

The Constitution of the Government of the People’s Republic of Bangladesh states that: “The state is responsible for development of human resources of the country irrespective of gender, and to assist in employment as per the capabilities of every citizen.”

In the National Strategy for Accelerated Poverty Reduction II, emphasis is given to the enhancement of workers’ skills for “Improvement of the percentage of vocational and technical graduates obtaining employment both in the domestic and international markets. This percentage is targeted 20% by 2020.”

Policies and strategies are to be undertaken to build up competent manpower in view of national and international demands. In this situation information regarding enrollment in TVET is crucial. Steps taken for enrollment analysis has attempted to map the sources of TVET related data and assess their availability, reliability. Results of the analysis will contribute to the development of a database on TVET for better planning and resource allocation decisions, introducing programs, assess progress in the TVET sector and future programming for TVET. This is the first time development works in the enrollment assessment to design and implement a system of TVET related data in Bangladesh.

Methodology of the analysis:

Students enrolled in class IX, X, XI and XII has been covered in this analysis. Enrollment analysis has been made based on the students of class IX, X, XI and XII schooling groups. Students of class IX, X, XI and XII schooling groups covered from 8(eight) General Education Boards. Students of class IX (Dakhil), X (Dakhil), XI (Alim)

and XII (Alim) schooling groups covered from Madrasah Education Board. Students of class IX (Vocational), X (Vocational), IX (Dakhil-Vocational), X (Dakhil-Vocational), XI (Vocational), XII (Vocational), XI (HSC-Business Management), XII (HSC-Business Management) schooling groups, 1st semester Diploma students (similar schooling group of 11 class) and 3rd semester Diploma students (similar schooling group of 12 class) covered from Bangladesh Technical Education Board. Students enrolled for National Skill Standard Basic (360 hours) course considered for class IX schooling group.

Sum of students from all 10(ten) boards define as the total enrollment of that specific schooling group. Percentage of BTEB enrollment has been calculated based on BTEB enrollment with total enrollment of that schooling group of students. Enrollment here calculated on the basis of enrollment of students in 2014.

Source of Data:

1. Table 2.3.19 Enrollment by Grade and Management, 2008, National Education Survey (Post-Primary)-2008 Statistical Report, BANBEIS, page-63;
2. Table 3.3.3 Enrollment by Sex, Grade and Management, 2008, National Education Survey (Post-Primary)-2008 Statistical Report, BANBEIS, page-103;
3. Table 4.3.6 Grade wise Enrollment by Management, Type and Sex, 2008, National Education Survey (Post-Primary)-2008 Statistical Report, BANBEIS, page-147;
4. Table 4.3.7 Grade wise Enrollment (Grade 11-12), 2008, National Education Survey (Post-Primary)-2008 Statistical Report, BANBEIS, page-147;
5. Table 2.3.1 Number of Enrollment by Level and Management, 2009, Bangladesh Educational Statistics-2009, BANBEIS, page-33;
6. Table 2.3.4 Number of Enrollment, Promotion, Fail, Repeater, Dropout etc. in 2009, Bangladesh Educational Statistics-2009, BANBEIS, page-36;
7. Table 3.3.3 Enrollment by Sex, Grade and Management, 2009, Bangladesh Educational Statistics-2009, BANBEIS, page-78;
8. Table 4.3.6 Grade wise Enrollment by Management, Type and Sex, 2009, Bangladesh Educational Statistics-2009, BANBEIS, page-111;
9. Table 4.3.7 Grade wise Enrollment (Grade 11-12), 2009, Bangladesh Educational Statistics-2009, BANBEIS, page-112;
10. Table: Number of Student by Grade, Gender and Management, 2010, Pocket Book on Education Statistics-2010, BANBEIS, page-21;
11. Table: Enrollment by Sex, Grade and Management, 2010, Pocket Book on Education Statistics-2010, BANBEIS, page-54;
12. Table: Grade wise Enrollment by Management, Type and Sex, 2010, Pocket Book on Education Statistics-2010, BANBEIS, page-66;
13. Table: Grade wise Enrollment (Grade 11-12), 2010, Pocket Book on Education Statistics-2010, BANBEIS, page-66;
14. Table 2.3.2 Number of Students by Grade and Management in the Secondary School, 2011, Pocket Book on Education Statistics-2011, BANBEIS, page-39&40;
15. Table 3.3.7 Enrollment by Gender, Grade and Management, 2011, Pocket Book on Education Statistics-2011, BANBEIS, page-71;
16. Table 4.3.5 Grade wise Enrollment by Management, Type and Gender, 2011, Pocket Book on Education Statistics-2011, BANBEIS, page-90;

17. Table 4.3.6 Grade wise Enrollment (Grade 11-12), 2011, Pocket Book on Education Statistics-2011, BANBEIS, page-90;
18. Table 3.3.2 Number of Student by Grade and Management in the Secondary School, 2012, Bangladesh Education Statistics-2012, BANBEIS, page-94&95;
19. Table 4.3.5 Enrollment by Gender, Grade and Management, 2012, Bangladesh Education Statistics-2012, BANBEIS, page-174;
20. Table 5.3.5 Grade wise Enrollment by Management, Type and Gender, 2012, Bangladesh Education Statistics-2012, BANBEIS, page-211;
21. Table 5.3.6 Grade wise Enrollment (Grade 11-12), 2012, Bangladesh Education Statistics-2012, BANBEIS, page-211;
22. Table 3.3.2 Number of Student by Grade and Management of Education in the Secondary School, 2013, Bangladesh Education Statistics-2013, BANBEIS, page-101&102;
23. Table 4.3.5 Enrollment by Gender, Grade and Management, 2013, Bangladesh Education Statistics-2013, BANBEIS, page-191;
24. Table 5.3.5 Grade wise Enrollment by Management, Type and Gender, 2013, Bangladesh Education Statistics-2013, BANBEIS, page-232&233;
25. Table 5.3.6 Grade wise Enrollment (Grade 11-12), 2013, Bangladesh Education Statistics-2013, BANBEIS, page-233;
26. Table 3.3.1 Number of Students by Level of Education in the Secondary School, 2014, Bangladesh Education Statistics-2014, BANBEIS, page-97;
27. Table 3.3.2 Number of Students by Grade and Management of Education in the Secondary School, 2014, Bangladesh Education Statistics-2014, BANBEIS, page-97;
28. Table 4.3.5 Enrollment by Gender, Grade and Management, 2014, Bangladesh Education Statistics-2014, BANBEIS, page-163&164;
29. Table 5.3.5 Grade wise Enrollment by Management, Type and Gender, 2014, Bangladesh Education Statistics-2014, BANBEIS, page-200;
30. Table 5.3.6 Grade wise Enrollment (Grade 11-12), 2014, Bangladesh Education Statistics-2014, BANBEIS, page-200;
31. BTEB Computer Cell.

Findings:

- Percentage of BTEB enrollment for Secondary students (Class IX and X) = 11.01 (360 hrs short courses students included as class IX).
- Percentage of BTEB enrollment for Higher Secondary students (Class XI and XII) = 16.18 (Diploma 1st semester students included as schooling group of Class XI and Diploma 3rd semester included as schooling group of class XII).
- Percentage of BTEB enrollment for Secondary and Higher Secondary schooling group of students (Class IX, X, XI and XII) = 13.11.
- Diploma 1st and 3rd semester students includes as schooling group XI and XII.

Enrollment Projection:

1. Enrollment data of 2009-2015 for both the 10(ten) boards have been considered in calculating enrollment projection. It was observed that average trends of increment of enrollment for 8(eight) general education boards is 5.81, Madrasah board 4.24 and BTEB is 13.84. Average trends of increment of enrollment for 8(eight) general education boards and Madrasah board is 5.54. Enrollment projection for 2014-2020 has been prepared considering increment of enrollment for 8(eight) general education boards and Madrasah board is 6% and Bangladesh Technical Education Board is 14%. The enrollment under Bangladesh Technical Education Board would be 20.82% by the year 2020, if other educational factors remain unchanged.

Limitations:

- The enrollment data includes students enrolled in both public and private institutes covering formal courses only under registration of 10 (ten) Boards
- After publishing NSDC's census data, BTEB will incorporate enrollment data of informal sector along with formal sector.
- Data of Similar school aged population out of education and enrollment in O & A level education are not included.
- Data of enrollment in SSC & HSC level courses of Bangladesh Open University are not included.



Entrollment Analysis in TVET Under Bangladesh Technical Education Board

1. About BTEB

1.1 Background

Bangladesh Technical Education Board (BTEB) was established through Parliament Act (www.bteb.gov.bd). The Board is located at Agargaon, Sher-e-Bangla Nagar, Dhaka-1207.

Bangladesh Technical Education Board (BTEB) has been working under the supervision of Ministry of Education.

1.2 Controlling Authority

The President of Bangladesh shall be the Controlling Authority of the Board. The status of the Controlling Authority in relation to the Board shall be similar to that of the Chancellor in relation to a University.

1.3 Constitution of the Board

The Board shall be constituted as follows, namely:-

1. Chairman
2. Ex-officio Members (4 persons)
3. Nominated Members (9 persons)

1.3.1 Chairman

Chairman is to perform his duties as a full time officer of the Board. According to the act he is appointed by the Controlling Authority.

1.3.2 Ex-officio Members

- A. Director General (DG), Directorate of Technical Education.
- B. Director General (DG), Directorate of Secondary and Higher Education.
- C. Principal, Dhaka Engineering College (Present the Vice- Chancellor, Dhaka University of Engineering and Technology) Gazipur.
- D. Principal, Technical Teachers Training College, Dhaka.

1.3.3 Nominated Members

- A. Director General (DG), Bureau of Manpower Employment and Training (BMET).
- B. Vice- Chancellor, Bangladesh University of Engineering and Technology (BUET) or a Professor to be nominated by him.
- C. Three Principals from the Polytechnic and Monotechnic Institutes to be nominated by the Ministry of Education.
- D. Four Persons interested in the Education to be nominated by the Controlling Authority.

1.4 Powers of the Board

- 1.4.1 Subject to the provisions of this Act, the Board shall have power to organize, regulate, supervise, control and develop Technical Education within the country.
- 1.4.2 In particular and without prejudice to the generality of the power conferred by sub-section (1.4.1), the Board shall have the powers-
 - a) to prescribe courses of instruction for its examination as detailed in the Schedule to this Act,

- b) to grant recognition to or to withhold or withdraw recognition from educational institutions offering courses in Technical Education after considering inspection reports from its own Inspection Officer or Officers deputed in that behalf by the Board:

Provided that no recognition from any such educational institutions shall be withheld or withdrawn without hearing the institution concerned,

- c) to prescribe conditions governing admission of students to and transfer of students from one institution to another prosecuting studies under the same curricula,
- d) to prescribe the manner and mode of inspection of institutions offering Technical Education,
- e) to cause inspection, if necessary, of any institution under its control by the officers of the Board or by any other person or persons it considers suitable,
- f) to hold, conduct and regulate examinations on completion of course and curricula of Technical Education,
- g) to publish the results of examinations held by the Board,
- h) to grant Diplomas/Certificates to persons who have passed examinations held by the Board,
- i) to arbitrate or arrange for arbitration in disputes between teachers and Governing Bodies or Managing Committees of Institutions offering Technical Education,
- j) to submit to the Controlling Authority its views on any matter with which it is concerned,
- k) to determine the number, designation and pay and allowances of the officers and staff of the Board, and to appoint such experts and consultants as it may consider necessary for the purpose of carrying out the provisions of this Act,
- l) to regulate and decide all administrative matters including the creation and abolition of posts:

Provided that the Chairman shall have the power to create temporary posts for a period not exceeding six months,

- m) to fix, demand and receive such fees as may be prescribed by regulations,
- n) to hold and manage endowments and to institute and award scholarships, medals and prizes,
- o) to enter into and carry out contracts in exercise of powers and performance of duties assigned to it by this Act and the regulations,
- p) to make provisions for buildings, premises, furniture, apparatus, books and other means needed for carrying on its work, and
- q) to do such other acts and things as it may consider necessary for the purposes of organizations, regulation, supervision, control and development of Technical Education.

- 1.4.3 The Board may delegate any of its powers to the Chairman or any other officer of the Board or to a Committee or Sub-Committee constituted under this Act as it may deem fit, and withdraw any such delegation:

Provided that the power to make any regulation shall not be delegated.

1.5 Academic Programs or Courses Offered by BTEB

BTEB has developed 28 different curriculums for offering different types of course or program in different engineering trade, technology and specializations. BTEB also has affiliated a total of 7773 public and private institutes with seat capacity of 714,644 up to December 2015. It is observed that only 9% of the total seat capacity is under public institutes and rest 91% are in private institutes. The curriculum wise institute seat capacity are mentioned in the following table:-

Table-1: Curriculum wise institute seat capacity (upto December 2015)

Sl. No.	Name of the Curriculum Curriculum	Trade/ Technology/ Specialization (Nos.)	Duration (Year)	Public (Nos.)		Private (Nos.)		Total (Nos.)	
				Institute	Seat	Institute	Seat	Institute	Seat
1	Diploma in Technical Education	3	1	1	120	-	-	1	120
2	Diploma in Vocational Education	8	1	1	80	-	-	1	80
3	Diploma in Engineering	34	4	55	21,200	410	60,000	465	81,200
4	Diploma in Textile Engineering	3	4	4	400	126	12,060	130	12,460
5	Diploma in Agriculture	1	4	16	2,910	169	10,000	185	12,910
6	Diploma in Fisheries	1	4	1	40	48	2,498	49	2,538
7	Diploma in Fisheries (In Service)	1	3	3	120	-	-	3	120
8	Diploma in Forestry	1	4	1	50	-	-	1	50
9	Diploma in Forestry (In Service)	1	2	2	50	-	-	2	50
10	Diploma in Medical Technology	8	4	-	-	226	23,040	226	23,040
11	Diploma in Medical Ultrasound	1	1	-	-	18	720	18	720
12	Diploma in Animal Health & Production (In Service)	1	2	3	400	-	-	3	400
13	HSC (Business Management)	5	2	3	180	1,802	189,700	1,805	189,880
14	HSC (Vocational)	14	2	64	8,370	-	-	64	8,370
15	Diploma in Commerce	2	2	-	-	7	616	7	616
16	SSC (Vocational)	31	2	141	18,900	2,230	171,220	2,371	190,120
17	Dakhil (Vocational)	31	2	-	-	285	18,300	285	18,300
18	Certificate in Marine Trade	4	2	1	160	-	-	1	160
19	Skill Certificate Course	6	1	1	200	-	-	1	200
20	Certificate in Vocational Education	9	1	1	180	-	-	1	180
21	Certificate in Health Technology	10	1	-	-	156	8,010	156	8,010
22	Certificate in Poultry Farming	1	1	-	-	1	30	1	30
23	Certificate in Animal Health & Production	1	1	-	-	1	30	1	30
24	Certificate in Medical Ultrasound	1	6 months	-	-	14	420	14	420
25	National Skills Standard-II	14	1	-	-	9	3,780	9	3,780
26	National Skills Standard-III	14	1	-	-	9	3,780	9	3,780
27	Professional Diploma in Automobile	1	6 months	-	-	1	40	1	40
28	National Skill Standard Basic (360 hours)	95	3 months/ 6 months	142	13,710	1,821	143,330	1,963	157,040
Total				440	67,070	7,333	647,574	7,773	714,644

Source: Computer Cell & Documentation Section, BTEB

Table-2: Curriculum wise Name of Technology, Specialization and Trades (up to December 2015)

Sl. No.	Name of Academic Programs/ Courses	Entry Requirement	Sl. No.	Name of Technologies/ Specializations/Trades
Diploma Level Courses				
1.	Diploma-in-Technical Education (03 Technology)	Diploma-in-Engineering	1.	Civil
			2.	Electrical and Electronics
			3.	Mechanical
2.	Diploma in Vocational Education (08 Technology)	Certificate in Vocational Education	1.	Automotive
			2.	Carpentry
			3.	Electrical
			4.	Farm Machinery
			5.	Machinist
			6.	Radio-TV
			7.	Refrigeration
			8.	Welding
3.	Diploma in Engineering (34 Technology)	SSC/ Equivalent	1.	Automobile
			2.	Air Craft Maintenance (Aerospace)
			3.	Air Craft Maintenance (Avionics)
			4.	Architecture
			5.	Architecture & Interior Design
			6.	Ceramics
			7.	Chemical
			8.	Civil
			9.	Civil (Wood)
			10.	Computer
			11.	Computer Science & Technology
			12.	Construction
			13.	Data Telecommunication & Networking
			14.	Electrical
			15.	Electro Medical
			16.	Electronics
			17.	Environmental
			18.	Food
			19.	Footwear
			20.	Glass
			21.	Graphics Design
			22.	Instrumentation & Process Control
			23.	Leather
			24.	Leather Products and Accessories
			25.	Marine
			26.	Mecatronics
			27.	Mechanical
			28.	Mining & Mine Survey
			29.	Power
			30.	Printing
			31.	Refrigeration & Air Conditioning
			32.	Ship Building
			33.	Surveying
			34.	Telecommunication

Sl. No.	Name of Academic Programs/ Courses	Entry Requirement	Sl. No.	Name of Technologies/ Specializations/Trades
4.	Diploma-in-Textile Engineering (03 Technology)	SSC/ Equivalent	1	Garments Design and Pattern Making Technology
			2	Jute Technology
			3	Textile Technology
5.	Diploma in Agriculture	SSC/ Equivalent	1	Agriculture
6.	Diploma in Fisheries	SSC/ Equivalent	1	Fisheries
7.	Diploma in Fisheries (In Service)	SSC/ Equivalent	1	Fisheries in Service
8.	Diploma in Forestry	SSC/ Equivalent	1	Forestry
9.	Diploma in Forestry (In Service)	SSC/ Equivalent	1	Forestry in Service
10.	Diploma-in-Health Technology (08 Technology)	SSC/ Equivalent	1	Dental
			2	Integrated Medical
			3	Labratory Medical (Pathology)
			4	Patient Care (Nursing)
			5	Pharmacy
			6	Physiotherapy
			7	Optical Refraction
			8	Radiology and Imaging
11.	Diploma in Medical Ultrasound	MBBS/ Equivalent	1	Medical Ultrasound
12.	Diploma in Animal Health and Production in Service	HSC	1	Animal Health and Production in Service
Higher Secondary Certificate (HSC) Level Courses				
13.	HSC (Vocational) (14 Trades)	SSC (Vocational)	1	Agro Machinery
			2	Automobile
			3	Building Construction and Maintenance
			4	Clothing and Garments Finishing
			5	Computer Operation and Maintenance
			6	Drafting and Civil
			7	Electrical Works and Maintenance
			8	Electronic Control and Communication
			9	Fish Culture and Breeding
			10	Machine Tools Operation and Maintenance
			11	Poultry Rearing and Farming
			12	Refrigeration and Air Conditioning
			13	Welding and Fabrication
			14	Wood and Design
14.	HSC (Business Management) (05 Specializations)	SSC/ Equivalent	1	Banking
			2	Accounting
			3	Computer Operation
			4	Entrepreneurship Development
			5	Secretarial Science

Sl. No.	Name of Academic Programs/ Courses	Entry Requirement	Sl. No.	Name of Technologies/ Specializations/Trades
15.	Diploma-in-Commerce (02 Specializations)	SSC/ Equivalent	1	Accountancy
			2	Secretarial Science

Secondary School Certificate (SSC) Level Courses

16.	SSC (Vocational) (31 Trades)	JSC	1.	Agro based Food
			2.	Architectural Draft with CAD
			3.	Automotive
			4.	Building Maintenance
			5.	Ceramic
			6.	Civil Construction
			7.	Civil Drafting with CAD
			8.	Computer and Information Technology
			9.	Dress Making
			10.	Dying, Printing and Finishing
			11.	Electrical Maintenance Works
			12.	Farm Machinery
			13.	Fish Culture and Breeding
			14.	Food Processing and Preservation
			15.	Fruit and Vegetable Cultivation
			16.	General Electrical Works
			17.	General Electronics
			18.	General Mechanics
			19.	Glass
			20.	Livestock Rearing and Farming
			21.	Machine Tools Operation
			22.	Mechanical Drafting with CAD
			23.	Knitting
			24.	Patient Care
			25.	Plumbing and Pipe Fitting
			26.	Poultry Rearing and Farming
			27.	Refrigeration and Air Conditioning
			28.	Shrimp Culture and Breeding Preservation
			29.	Weaving
			30.	Welding and Fabrication
			31.	Wood Working

Sl. No.	Name of Academic Programs/ Courses	Entry Recuirement	Sl. No.	Name of Technologies/ Specializations/Trades
17.	SSC (Dakhil-Voc) (31 Trades)	JDC	1.	Agro based Food
			2.	Architectural Draft with CAD
			3.	Automotive
			4.	Building Maintenance
			5.	Ceramic
			6.	Civil Construction
			7.	Civil Drafting with CAD
			8.	Computer and Information Technology
			9.	Dress Making
			10.	Dying, Printing and Finishing
			11.	Electrical Maintenance Works
			12.	Farm Machinery
			13.	Fish Culture and Breeding
			14.	Food Processing and Preservation
			15.	Fruit and Vegetable Cultivation
			16.	General Electrical Works Technology
			17.	General Electronics
			18.	General Mechanics
			19.	Glass
			20.	Livestock Rearing and Farming
			21.	Machine Tools Operation
			22.	Mechanical Drafting with CAD
			23.	Knitting
			24.	Patient Care
			25.	Plumbing and pipe Fitting
			26.	Poultry Rearing and Farming
			27.	Refrigeration and Air Conditioning
			28.	Shrimp Culture and Breeding Preservation
			29.	Weaving
			30.	Welding and Fabrication
			31.	Wood Working
Other Courses				
18.	Certificate in Marin Trade (04 Trades)	SSC/ Equivalent	1.	Marine Diesel and Engine Artificer
			2.	Ship Building
			3.	Ship Building Welding
			4.	Ship Fabrication
19.	Skill Certificate Course (06 Trades)	SSC/ Equivalent	1.	Automobile
			2.	Civil Construction
			3.	Electrical
			4.	Electronics
			5.	Mechanical
			6.	Refrigeration and Welding

Sl. No.	Name of Academic Programs/ Courses	Entry Requirement	Sl. No.	Name of Technologies/ Specializations/Trades
20.	Certificate-in-Vocational Education (09 Trades)	NSS-II with SSC/ Equivalent	1.	Automotive
			2.	Carpentry
			3.	Civil Drafting
			4.	Electrical
			5.	Farm Machinery
			6.	Machinist
			7.	Radio-TV
			8.	Refrigeration and Air Conditioning
			9.	Welding
21.	Certificate in Health Technology (10 Technology)	SSC/ Equivalent	1.	Dental
			2.	Integrated Medical
			3.	Laboratory Medical (Pathology)
			4.	Medical Marketing and Management
			5.	Optical Refraction
			6.	Paramedical
			7.	Patient Care
			8.	Pharmacy
			9.	Physiotherapy
			10.	Radiology and Imaging
22.	Certificate in Poultry Farming	SSC/ Equivalent	1.	Poultry Farming
23.	Certificate in Animal Health and Production	SSC/ Equivalent	1.	Animal Health and Production
24.	Certificate in Medical Ultrasound	MBBS/ Equivalent	1.	Medical Ultrasound
25.	National Skill Standard II (14 Trades)	NSS-III	1.	Automotive
			2.	Carpentry
			3.	Civil Construction (Masonry)
			4.	Drafting (Civil)
			5.	Drafting (Mechanical)
			6.	Electrical
			7.	Electronics
			8.	Farm Machinery
			9.	General Mechanics
			10.	Machinist
			11.	Plumbing and Pipe Fitting
			12.	Radio and Television
			13.	Refrigeration and Air Conditioning
			14.	Welding

Sl. No.	Name of Academic Programs/ Courses	Duration (Year)	Sl. No.	Name of Technologies/ Specializations/Trades
26.	National Skill Standard-III (14 Trades)	JSC/JDC	1.	Automotive
			2.	Carpentry
			3.	Civil Construction (Masonry)
			4.	Drafting (Civil)
			5.	Drafting (Mechanical)
			6.	Electrical
			7.	Electronics
			8.	Farm Machinery
			9.	General Mechanics
			10.	Machinist
			11.	Plumbing and Pipe Fitting
			12.	Radio and Television
			13.	Refrigeration and Air Conditioning
			14.	Welding
27.	Professional Diploma in Automobile	SSC/ Equivalent	1.	Automobile
28.	National Skill Standard Basic (360 hrs)	JSC/JDC	1.	CNC Machine Operator (Lathe)
			2.	Embroidery Machine Operator and Maintenance
			3.	Basic Creative Fine Art's Application
			4.	Dairy Farm Management
			5.	Fire Science and Occupational Safety
			6.	Weaving (Textile)
			7.	Building Construction Painting
			8.	Auto Mechanics
			9.	ARC Welding
			10.	ARC & Gas Welding
			11.	Armature Welding
			12.	Building Maintenance
			13.	Building and Architectural Drafting
			14.	Computer Operator
			15.	Electrical House Wiring
			16.	Electrical Line Maintenance
			17.	Farm Machinery
			18.	Furniture and Cabinet Making
			19.	General Mechanics
			20.	Machinist
			21.	Maintenance of Electrical Equipment
			22.	Mechanical Drafting
			23.	Plumbing and Pipe Fitting
			24.	Radio and Television Servicing
			25.	Refrigeration and Air Conditioning
			26.	IT Support Technician
			27.	Dress Making and Tailoring

<i>Sl. No.</i>	<i>Name of Academic Programs/Courses</i>	<i>Duration (Year)</i>	<i>Sl. No.</i>	<i>Name of Technologies/Specializations/ Trades</i>
			28.	Motor Cycle and Mishuk Mechanics
			29.	Mid Level Supervisor
			30.	Food Processing and Preservation
			31.	General Electrician
			32.	AutoCAD
			33.	Mobile Phone Servicing
			34.	Mason
			35.	Electrician
			36.	Food & Beverage Production
			37.	Food & Beverage Service
			38.	Front Office Management
			39.	House Keeping
			40.	Telecommunication & Cable Laying
			41.	Certificate-in-Beautification
			42.	Certificate in-Screen Printing
			43.	Leather Goods & Footwear
			44.	Civil Construction
			45.	Aminship
			46.	Graphics & Animation
			47.	Acting & Presentation
			48.	Art of Still Photography
			49.	Camera and Lighting Technique
			50.	Direction of TV Journalism
			51.	Video Editing & Sound Recording
			52.	Masonry And Rod Binding
			53.	Carpentry (Door, Window of Shutters etc.)
			54.	Electrical Machine Maintenance
			55.	Drafting Civil
			56.	Audio Video
			57.	Rod Binding And Masonry
			58.	Apparel Merchandising
			59.	Pattern Making, Cutting and Grading
			60.	Work Study Production Planning & Control for Apparel Manufacturing
			61.	Bash Bate And Pati Shilpo
			62.	Pastry And Bakery Production
			63.	Travel Tour Operation
			64.	Welding
			65.	Driving Cum Auto Mechanics
			66.	Interior Decoration (Gypsum Decoration)
			67.	Welding And Fabrication
			68.	Ducting And Fabrication
			69.	Hair Dressing
			70.	Certificate in Pattern Making
			71.	Secretarial Science

<i>Sl. No.</i>	<i>Name of Academic Programs/Courses</i>	<i>Duration (Year)</i>	<i>Sl. No.</i>	<i>Name of Technologies/Specializations/ Trades</i>
			72.	Building and Architectural Drafting with AutoCAD
			73.	Computer Office Application
			74.	Hardware And Networking
			75.	Computer Programming
			76.	Database Programming
			77.	Object Oriented Programming
			78.	Graphics Design and Multimedia Programming
			79.	Ship Fabrication
			80.	Welding 4g
			81.	Welding 6G
			82.	Industrial Sewing Machine And Maintenance
			83.	TIG and MIG
			84.	Sweater Knitting Machine Operation & Maintenance
			85.	Tiles & Setting
			86.	Air Hostess & Cabin Crew
			87.	Aviation Management
			88.	Travel Tourism & Ticketing
			89.	Diesel Mechanics
			90.	Basic Trade Course in Insurance
			91.	Programmable Logic Controller
			92.	General Electronics
			93.	Block Batik & Printing
			94.	Proficiency in English Communication
			95.	Marine Electrician

1.6 Administrative and Academic Structure of BTEB

The Board is headed by a Chairman with the following four divisions under him for carrying out the different activities of the Board. The major functions of these five divisions are as follows-

- Curriculum Development;
- Institute Affiliation;
- Monitoring and Evaluation;
- Examination Conduct;
- Certification;
- Implementation of NTVQF in Bangladesh;

1.6.1 Administration

This division is headed by a Secretary. He is assisted by one Deputy Secretary (Administration), one Deputy Secretary (Registration), one Assistant Secretary, one Deputy Director (Accounts and Audit), one Assistant Director (Accounts and Audit), one Section Officer and other Supporting Staff for smooth functioning of the wing. The major functions of this division are as follows-

- All administrative works in respect of appointment;
- Granting of leave etc, of employees;
- Preparation and submission of annual budget of the Board for approval;
- Keeping records of income, expenditure and preservation of Board's funds etc;
- Assemble all committee meetings in respect of finance and administration including Board's session;
- Carry out all other administrative works as and when assigned by the Chairman/Board;

1.6.2 Curriculum

This division is headed by Director (Curriculum). He is assisted by one Deputy Director (Research), one Evaluation Officer, one Deputy Director (Publication), seven Curriculum Specialists, one Assistant Director (Publication), one Documentation Officer, one Section Officer and other supporting staff. The major functions of this division are as follows-

- Responsible for development, evaluation, revision and introduction of new curriculum for various approved and affiliated courses;
- To produce appropriate learning materials and writing of books of various technological fields, Preparation and revision of academic regulations;
- Providing affiliation to the institutions and assessing the standard for affiliation and of academic activities;
- Examining all cases of equivalence;
- Carrying out any other duties as assigned by the chairman/Board;

1.6.3 Examination

The Examination division of the Board is headed by a Controller of Examination. He is assisted by five Deputy Controller, one System Analyst, two Programmers, eight Assistant Controllers, three Assistant Programmers, one Press Manager, one Section Officer and other supporting staff. The major functions of this division are as follows-

- Responsible for arranging and conducting examinations of the affiliated courses in the approved centers;
- To look after the works of appointments of head examiners, paper setters, printing of the question papers and timely distribution of activities relating to examinations conduct rules;
- Publication of the results timely;
- Issuing of the same to the respective centers;
- Scrutinizing of examination scripts and tabulation of marks;
- To execute disciplinary activities relating to examinations conduct rules;
- Issuing of mark sheets and certificates and preservation of records of them etc;
- Also responsible for calling meetings relating to examination matters;
- Carry out any other duties and responsibilities as may be assigned by the Chairman/Board;

1.6.3.1 Computer Cell

One of the most important section of BTEB functioning under the Examination Division, headed by a System Analyst. He is assisted by two Programmers, three Assistant Programmers, one lab Attendant and other Supporting Staff for smooth functioning of the cell. The major functions of this cell are as follows-

- Dealing with computerized Management Information System (MIS) regarding affiliated institutions;
- To collect data through Online for Registration of the candidates of the affiliated academic programs and process them;
- To collect data through Online/EIF (Examination Information Form) for Admit Cards of the candidates of the affiliated academic programs and process them;
- To print out Registration Cards and Admit Cards of the candidates;
- To process data of the first part and second part of the litho Code of Answer Sheets obtained from Examination Center with OMR (Optical Mark Reader) machine;
- To Collect and process marks of theoretical and practical Continuous (TC/PC/PF) of the candidates participated in the examination through Online/ICR (Intelligent Character Recognition) form;
- Process the Marks of industrial attachment of the candidates received through Online/ICR (Intelligent Character Recognition) sheet within the given date published by the board;
- Process the results of the examinations of the affiliated academic programs held under BTEB;
- Print academic transcripts and certificates and preserve records etc;
- Publishing results of the examinations held under BTEB, Advertisement/ Notice and so on through Web Site (www.bteb.gov.bd);
- Perform any other duties as and when assigned by the Chairman/supervisors;

1.6.3.2 Printing Press

The press is being functioned under Examination Division, headed by a Press Manager. The major functions of this press are as follows-

- All kinds of printing such as certificates, mark sheets, answer scripts, question papers, tabulation sheets, application forms of admission, receipt books, syllabus of various academic programs, progress card, industrial attachment books and so on are done by the press;

1.6.4 Inspection

This division is headed by an Inspector. He is assisted by three Deputy Inspectors, one Quality Assurance Officer, one Section Officer and other supporting staff. The major functions of this division are as follows-

- To inspect all the institutes affiliated by BTEB;
- Monitoring of academic programs or activities of the affiliated institutions of the board;
- Evaluation of academic programs;
- Problem identifying and Reporting etc;
- Carry out any other duties and responsibilities as may be assigned by the Chairman/Board;

1.6.5 Industry and Training Coordination

This division is headed by a Director (Industry and Training Coordination). He is assisted by one Deputy Director (Course Accreditation), one Curriculum Specialist, one Industry Liaison Officer, and other supporting staff. The utmost function of this division is to implement National Technical and Vocational Qualification Framework (NTVQF) in Bangladesh. The framework is shown in the following table along with general job classifications relevant to each level of the NTVQF.

Table-3: National Technical and Vocational Qualification Framework in Bangladesh

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

The major functions of this division to implement the NTVQF in our country are as follows-

- Developing and implementation of nationally recognized Competency Standards (CS) based on industry requirements;
- Accreditation and registration of training organizations to deliver competency based training;
- To strengthen inspection and monitoring to ensure the Competency Standards (CS) based training;
- Development and implementation of assessment system for Recognition of Prior Learning (RPL) of the workforces;
- Accreditation and registration of Assessment Centers to undertake competency based assessment;
- Training, assessment and certification of trainers and assessors using Competency Based Training and Assessment (CBT&A) methodology;
- Maintenance of an NTVQF Management Information System (MIS);

2. TVET Scenario in Bangladesh

There are 160 million people live in 147570 square kilometer area of Bangladesh. Among them 4.52 million are found as Higher Secondary aged population (16-17 Years) in 2014 (Table 4.4.5, BANBEIS Report-2014, page-42). It has been found in the table 4.1.2 namely 'Gross and Net Enrollment Rate by Gender in Secondary Level of Education, 2014' (page-40) of Bangladesh Education Statistics-2014, BANBEIS that the Gross Enrollment Rate and Net Enrollment Rate of secondary level education are 69.23% and 62.25% respectively. Similarly, it has also been found in the table 4.1.5 namely 'Gross and Net Enrollment Rate in College and Madrasah (11&12 Class), 2014' (page-42) of Bangladesh Education Statistics-2014, BANBEIS that the Gross Enrollment Rate and Net Enrollment of higher secondary level education are 46.61% and 33.16% respectively in the year 2014.

In addition, it has also been found in the table 4.1.6 namely 'Completion Rate, Dropout Rate, Survival Rates and Coefficient of Internal Efficiency by Sex in Higher Secondary Level of College and Madrasah (11+12), 2014' and in the table 4.1.7 namely 'Dropout and Completion Rate, GER and NER (%) in Secondary Level 2008-2014' (page-43) of Bangladesh Education Statistics-2014, BANBEIS that the Dropout Rate of secondary and higher secondary level education are 41.59% and 21.37% respectively in the year 2014.

At present, Bangladesh needs skill human resources to support rapid industrial growth and earnings remittance. TVET is the only source in Bangladesh by which we can have economic developments. We need to make our manpower with having global competitiveness. We need to introduce courses to match industry need and opportunities of demographic dividend to be harnessed. In this regard strategic planning is required to develop TVET system.

A large number of people of Secondary and Higher secondary Schooling group is out of Schooling. Technical and Vocational Education and Training (TVET) is one and only educational mechanism to convert these population to employable workforce to contribute to develop the national economy of our country. The major targets of expanding TVET in our country as follows-

- Skilled workers to satisfy the growing needs of industry;
- A high level means to facilitate job for unemployed youth and widespread underemployment;
- Competencies need to find employment;
- Match the requirements of the private sector;
- Skills for the job market in line with labor market demands;
- Understand the attitudes expected in the industry area;
- Gain insights into the kind of career;
- Make informed decisions about further training and study;
- Become more employable;
- To be better equipped for business and employment opportunities;
- Aims to improve socio-economic conditions create jobs and alleviate poverty as a key element of any policy initiatives
- Promote industrial linkages in the skill training delivery to produce young skilled workforce for the market needs;

There are mainly two types of TVET in our country, such as-

A. Formal Training (28 curriculum)

B. Informal and Non-Formal Training

2.1 Formal Training under BTEB

1. Short Course

a. Basic Trade Course (360 hours, 95 trades) - Institutes Namely:

- i. Govt. Technical School and Colleges;
- ii. Govt. Technical Training Centers;
- iii. Govt. Polytechnic Institutes;
- iv. Private Polytechnic Institutes;
- v. Private Training Institutes;

b. CBT&A Course (51 Occupations) - Institutes Namely:

- i. Govt. Technical School and Colleges;
- ii. Govt. Technical Training Centers;
- iii. Govt. Polytechnic Institutes;
- iv. Private Polytechnic Institutes;
- v. Private Training Institutes;

2. Secondary Level

a. SSC Vocational Course (31 trades) - Institutes Namely:

- i. Govt. Technical School and Colleges;
- ii. Govt. Textile Vocational Institutes;
- iii. Govt. Technical Training Centres;
- iv. MPO secondary schools;
- v. Non MPO secondary schools;
- vi. NGOs;

b. Dakhil (Vocational) offered by Madrasahs

3. Higher Secondary Level

a. HSC (Vocational) Course (14 trades) - Institutes Namely:

- i. Govt. Technical School and Colleges;

b. HSC (Business Management) - Institutes Namely:

- i. Govt. colleges;
- ii. MPO colleges;
- iii. Non MPO colleges;
- iv. Private Institutes;

c. Diploma in Commerce - Institutes Namely:

i. Private Training Institutes

4. Diploma Level

a. Diploma in Engineering Course (34 technologies) - Institutes Namely:

i. Govt. Polytechnic and Mono-technic Institutes;

ii. Private Polytechnic Institutes;

b. Diploma in Textile Engineering Course (3 technologies) - Institutes Namely:

i. Govt. Textile Institutes;

ii. Private Polytechnic & Textile Institutes;

c. Diploma in Agriculture Course - Institutes Namely:

i. Govt. Agricultural Training Institutes;

ii. Private Agricultural Training Institutes;

d. Diploma in Fisheries Course - Institutes Namely:

i. Govt. Fisheries Training Institute;

ii. Private Agricultural & Fisheries Training Institutes;

e. Diploma in Forestry Course - Institutes Namely:

i. Govt. Forestry Training Institute;

f. Diploma in Medical Technology Course (8 technologies) - Institutes Namely:

i. Private Medical Training Institutes;

5. Others Professional Level Courses - Institutes Namely:

ii. Govt. Institutes;

iii. Private Institutes;

2.2 Informal and Non Formal Training

- 23 ministries are conducting skill training and maximum of those graduates are not certified by BTEB.
- Only SSC (vocational) and other SSC status vocational course conducted by some of those ministries are affiliated with BTEB. Rests are not affiliated with BTEB.
- Industry and Private organization also conduct skill training not affiliated with BTEB.
- Some NGOs are conducting training not affiliated with BTEB.

Initiative has taken for informal and CBT&A courses conducted by other agencies to bring under BTEB certification.

3. Enrollment in TVET under BTEB Certification

3.1 TVET Policies

It is mentioned in the article 3.6.2 namely Technical and Vocational Education and Training (TVET) of 'Outline Perspective Plan of Bangladesh 2010-2021-Making Vision 2021 A Reality' (Page-30) and the article 11.4 namely Education, Training, and Skills Development for Human Capital Formation of 'Perspective Plan of Bangladesh 2010-2021-Making Vision 2021 A Reality' (Page-87) as implementation outcomes that

- all new entrants in the 20-24 age group to the work force are trained formally by 2021 for ensuring full-scale vocational training with adequate practical exposure to enhance their knowledge, skill, and creativity for enhancing productivity.

In addition, it is mentioned in the article 4.5 namely 'Strategic Block V: Human Development' (Page-112) of 'Moving Ahead-National Strategy for Accelerated Poverty Reduction II (FY 2009-11), October 2008' and in the article 3.5.1 namely 'Improving Knowledge Base: Education, Training and Research' (Page-52) of 'Steps Towards Change-National Strategy for Accelerated Poverty Reduction II (Revised) FY 2009-11, December 2009' that

- the proportion of participants in TVET need to be increased to 20 percent of the students enrolled in the secondary stage by 2020.

In the Chapter-5 namely 'Vocational and Technical Education' of National Education Policy (NEP) 2010 (Page-24) emphasis given:

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

Moreover, the National Skills Development Policy (NSDP)-2011 represents a key commitment to strengthening and further growth of skills development in Bangladesh aligning with the targets of NSAPR-II. It is mentioned in the article 22 namely "Future Growth of the Sector" of NSDP-2011 (Page-37) that:

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

3.2 Objectives of the Enrollment Analysis

As mentioned in the NSAPR-II, NEP-2010, NSDP-2011 and other policies taken by the Government of Bangladesh to enhance human productivity, it is found that there is no alternative of providing TVET to the workforce.

BTEB is the only statutory body to ensure TVET certification. As the target set by the government is to ensure TVET enrollment 20% by the year 2020, BTEB has to find out the present enrollment of formal TVET under BTEB in the secondary and higher secondary class of education. This is required for strategy to be taken to enhance TVET enrollment to meet the national demand.

The major objectives of this enrollment analysis are as follows-

1. To know the existing enrollment rate of TVET under BTEB;
2. To make future projection of TVET enrollment;
3. To take necessary strategy to enhance TVET enrollment;
4. Financing in the development of TVET;
5. Mapping TVET Programs;

3.3 Methodology for Enrollment Analysis

3.3.1 Types of Data used for Enrollment Analysis

As BTEB is the statutory body for ensuring TVET enrollment in our country, it has to know the present situation of enrollment under BTEB courses with the total enrollment of SSC and HSC level of education under different Education Boards. To do so, the secondary and higher secondary enrollment data has been taken from the different publications namely National Education Survey (Post-Primary)-2008 Statistical Report, Bangladesh Education Statistics-2009, Pocket Book on Education Statistics-2010, Bangladesh Education Statistics-2011, Bangladesh Education Statistics-2012, Bangladesh Education Statistics-2013, Bangladesh Education Statistics-2014 of Bangladesh Bureau of Educational Information and Statistics (BANBEIS) for the enrollment under General & Madrasah Education Boards. Data of enrollment in TVET under BTEB formal courses has been taken from BTEB Computer Cell in 2014 as a baseline data. Some considerations are as follows-

- Enrollment of Class-IX of SSC Vocational and Dakhil Vocational courses is similar schooling group of Enrollment of Class-IX of General SSC and Dakhil courses;
- Enrollment of Class-X of SSC Vocational and Dakhil Vocational courses is similar schooling group of Enrollment of Class-X of General SSC and Dakhil courses;
- Enrollment of Basic Trade (360 hours) course is similar schooling group of Enrollment of Class-IX of General SSC and Dakhil courses;
- Enrollment of Class-XI of HSC Vocational course is similar schooling group of Enrollment of Class-XI of General HSC and Alim courses;
- Enrollment of Class-XII of HSC Vocational course is similar schooling group of Enrollment of Class-XII of General HSC and Alim courses;
- Enrollment of Class-XI of HSC (Business Management) course is similar schooling group of Enrollment of Class-XI of General HSC and Alim courses;
- Enrollment of Class-XII of HSC (Business Management) course is similar schooling group of Enrollment of Class-XII of General HSC and Alim courses;
- Enrollment of 1st semester of Diploma (All) course is similar schooling group of Enrollment of the age group of student of Class-XI of General and Madrasah Education Boards;
- Enrollment of 3rd semester of Diploma (All) course is similar schooling group of Enrollment of the schooling group of student of Class-XII of General and Madrasah Education Boards;

Table-4: Category of the Courses Enrollment data taken for Calculation

Enrollment in SSC Level Course		Enrollment in HSC and Diploma Level Course	
Class-IX	Class-X	Class-XI	Class-XII
General Boards Class-IX	General Boards Class-X	General Boards Class-XI	General Boards Class-XII
Madrasah Board (Dakhil) Class-IX	Madrasah Board (Dakhil) Class-X	Madrasah Board (Alim) Class-XI	Madrasah Board (Alim) Class-XII
BTEB SSC (Vocational) Class-IX	BTEB SSC (Vocational) Class-X	BTEB HSC (Vocational) Class-XI	BTEB HSC (Vocational) Class-XII
BTEB Dakhil (Vocational) Class-IX	BTEB Dakhil (Vocational) Class-X	BTEB HSC (Business Management) Class-XI	BTEB HSC (Business Management) Class-XII
National Skill Standard Basic (Basic Trade Course -360 hours)	-	Students of Diploma in 1 st Semester (All) which is equivalent to the schooling group of Class XI	Students of Diploma in 3 rd Semester (All) which is equivalent to the schooling group of Class XII

3.3.2 Formula used for Enrollment Calculation

As per the Education Indicator Technical Guidelines published by UNESCO Institute for Statistics, November 2009, total enrollment in a specific level of education, regardless of age, expressed as a percentage of the eligible official school-age population corresponding to the same level of education in a given school year. It can be calculated as divide the number of students enrolled in a given level of education regardless of age by the population of the age group which officially corresponds to the given level of education, and multiply the result by 100. This is called Gross Enrollment Ratio (GER). It can be a complementary indicator to Net Enrollment Rate (NER) by indicating the extent of over-aged and under-aged enrollment.

With the help of the definition of GER & NER and considering the strategy of NSAPR-II and NSDP-2011, BTEB calculated its formal TVET enrollment under its jurisdiction as percentage of BTEB Enrollment with the Total Enrollment (10 Boards) of the schooling group of SSC & HSC level education of the year 2014. It is calculated as follows-

$$\% \text{ of BTEB Enrollment} = \frac{\text{BTEB Enrollment}}{\text{*Total Enrollment (10 Boards)}} \times 100$$

*Total Enrollment (10 Boards) = Enrollment under BTEB + Enrollment under Eight (8) General Education Boards + Enrollment under Madrasah Education Board.

3.3.3 Enrollment Projection Calculation

For ensuring future growth of TVET enrollment of BTEB harmonizing with the target to enhance 20% by 2020, a projection has to be made by calculating the incremental trends of enrollment of last couple of years and data taken from National Education Survey (Post-Primary)-2008 Statistical Report, Bangladesh Education Statistics-2009, Pocket Book on Education Statistics-2010, Bangladesh Education Statistics-2011, Bangladesh Education Statistics-2012, Bangladesh Education Statistics-2013, Bangladesh Education Statistics-2014 of Bangladesh Bureau of Educational Information and Statistics (BANBEIS) and BTEB Computer Cell.

Firstly, an average incremental rate of TVET enrollment under BTEB in the year 2010 to 2015 was determined with the baseline data taken as the enrollment in 2009. It is noted that BTEB Enrollment includes SSC Voc (Class-IX & X); Dakhil Voc (Class-IX & X); HSC Voc (Class-XI & XII); HSC BM (Class-IX & X); 1st & 3rd Semester of Diploma (All); and National Skill Standard Basic (360 hours).

Similarly, an average incremental rate of total enrollment of General and Madrasah Education Boards (9 Boards) in the year 2009 to 2013 was determined with the baseline data taken as the enrollment in 2008.

$$\text{Enrollment Incremental Rate (\%)} = \frac{\text{E}_{sy} - \text{E}_{py}}{\text{E}_{py}} \times 100$$

Here,

E_{sy} = Total Enrollment in the Specific Year (in number)

E_{py} = Total Enrollment in the Previous Year (in number)

Finally, with the help of the average incremental rate of enrollment the future projection was made up to 2020.

3.3.4 Limitations

- The enrollment data includes students enrolled in both public and private institutes covering formal courses only.
- After publishing NSDC's census data, BTEB will incorporate enrollment data of informal sector along with formal sector.
- Data of school aged population out of education and enrollment in O & A level education are not included.
- Data of enrollment in SSC & HSC level courses of Bangladesh Open University are not included.

3.4 Enrollment Analysis

3.4.1 Enrollment of Secondary Education Level-2014

Table-5: Enrollment in Secondary Education Level-2014

Class	BTEB	Madrasah Education	General Education
IX	163943	333529	1431393
X	103553	302374	1187601
Basic Trade (360 hrs)	135460	-	-
Total	402956	635903	2618994

Source:

1. Table 3.3.1 Number of Students by Level of Education in the Secondary School, 2014, Bangladesh Education Statistics-2014, BANBEIS, page-97;
2. Table 3.3.2 Number of Students by Grade and Management of Education in the Secondary School, 2014, Bangladesh Education Statistics-2014, BANBEIS, page-97;
3. Table 5.3.5 Grade wise Enrollment by Management, Type and Gender, 2014, Bangladesh Education Statistics-2014, BANBEIS, page-200;
4. BTEB Computer Cell.

Total Enrollment in Secondary Education (10 Boards): 402956+635903+2618994 = 3657853

BTEB Enrollment in Secondary Education = 402956

$$\% \text{ of BTEB Enrollment} = \frac{402956}{(402956+635903+2618994)} \times 100 = 11.01\%$$

Therefore, Percentage of BTEB Enrollment in Secondary Education-2014 is 11.01%

3.4.2 Enrollment of Higher Secondary Education and Diploma (All) 1st & 3rd Semester Level-2014

Table-6: Enrollment in Higher Secondary Education and Diploma (All) 1st & 3rd Semester Level-2014

Class	BTEB	Madrasah Education	General Education
XI	10670	114219	985874
XII	12008	108210	897816
HSC (BM)-XI	134648	-	-
HSC (BM)-XII	95462	-	-
Diploma (1st Sem)	83135	-	-
Diploma (3rd Sem)	70556	-	-
Total	406479	222429	1883690

Source:

1. Table 4.3.5 Enrollment by Gender, Grade and Management, 2014, Bangladesh Education Statistics-2014, BANBEIS, page-163&164;
2. Table 5.3.6 Grade wise Enrollment (Grade 11-12), 2014, Bangladesh Education Statistics-2014, BANBEIS, page-200;
3. BTEB Computer Cell.

Total Enrollment in Higher Secondary Education (10 Boards) = (406479+222429+1883690) = 2512598

BTEB Enrollment in Higher Secondary Education = 406479

$$\% \text{ of BTEB Enrollment} = \frac{406479}{2512598} \times 100 = 16.18\%$$

Therefore, Percentage of BTEB Enrollment in Higher Secondary Education and Diploma (All) 1st & 3rd Semester -2014 is 16.18%.

3.4.3 Total Enrollment Analysis-2014

Table-7: Enrollment in Secondary and Higher Secondary and Diploma (All) 1st & 3rd Semester Education Level-2014

Class	BTEB	Madrasah Education	General Education
IX & X	267496	635903	2618994
XI & XII	22678	222429	1883690
HSC (BM)-XI & XII	230110	-	-
Diploma (1st & 3rd Semester)	153691	-	-
Basic Trade (360 hrs)	135460	-	-
Total	809435	858332	4502684

Source:

1. Table 3.3.1 Number of Students by Level of Education in the Secondary School, 2014, Bangladesh Education Statistics-2014, BANBEIS, page-97;
2. Table 3.3.2 Number of Students by Grade and Management of Education in the Secondary School, 2014, Bangladesh Education Statistics-2014, BANBEIS, page-97;
3. Table 4.3.5 Enrollment by Gender, Grade and Management, 2014, Bangladesh Education Statistics-2014, BANBEIS, page-163&164;
4. Table 5.3.5 Grade wise Enrollment by Management, Type and Gender, 2014, Bangladesh Education Statistics-2014, BANBEIS, page-200;
5. Table 5.3.6 Grade wise Enrollment (Grade 11-12), 2014, Bangladesh Education Statistics-2014, BANBEIS, page-200;
6. BTEB Computer Cell.

$$\begin{aligned} \text{Total Enrollment in Secondary \& Higher Secondary Education (10 Boards)} &= (809435+ 858332+4502684) \\ &= 6170451 \end{aligned}$$

BTEB Enrollment in TVET = 809435

$$\% \text{ of BTEB Enrollment} = \frac{809435}{6170451} \times 100 = 13.11\%$$

Therefore, Percentage of BTEB Enrollment in Secondary and Higher Secondary Education-2014 is 13.11%.

3.4.4 Enrollment Projection

3.4.4.1 Enrollment Increment Trends in BTEB (2009-2015)

Table-8: Average Incremental Rate of Enrollment under BTEB

Year	*BTEB Enrollment	Enrollment Incremental Rate (%)
2009	427,604	Baseline data
2010	488,767	14.30%
2011	527,075	7.84%
2012	673,423	27.77%
2013	768,023	14.05%
2014	809,435	5.39%
2015	920,305	13.70%
Average Incremental Rate of Enrollment under BTEB (%)		13.84%

Source:

1. BTEB Computer Cell.
2. *BTEB Enrollment includes SSC Voc (Class-IX & X); Dakhil Voc (Class-IX & X); HSC Voc (Class-XI & XII); HSC BM (Class-IX & X); 1st & 3rd Semester of Diploma (All); and Basic Trade Course (360 hours).

Therefore, it was assumed that the average Enrollment Increment trend in BTEB is approximately 13.84% tends to 14%.

3.4.4.2 Enrollment Increment Trends in Eight General Boards (2008-2014)

Table 9: Average Incremental Rate of Enrollment under Eight General Boards

Year	Enrollment in General Education (in number)							Enrollment Incremental Rate (%)
	Grade-IX	Grade-X	Total (IX-X)	Grade-XI	Grade-XII	Total (XI-XII)	Total (IX-XII)	
2008	1,155,863	999,977	2,155,840	550,660	508,153	1,058,813	3,214,653	Baseline
2009	1,238,252	1,130,340	2,368,592	606,231	589,984	1,196,215	3,564,807	10.89%
2010	1,255,554	1,119,914	2,375,468	745,932	635,073	1,381,005	3,756,473	5.38%
2011	1,124,111	1,136,417	2,260,528	831,325	762,293	1,593,618	3,854,146	2.60%
2012	1,235,013	1,057,315	2,292,328	896,065	820,428	1,716,493	4,008,821	4.01%
2013	1,267,578	1,130,420	2,397,998	880,674	900,456	1,781,130	4,179,128	4.25%
2014	1,431,393	1,187,601	2,618,994	985,874	897,816	1,883,690	4,502,684	7.74%
Average Incremental Rate in General Education								5.81%

Source

1. Table 2.3.19 Enrollment by Grade and Management, 2008, National Education Survey (Post-Primary)-2008 Statistical Report, BANBEIS, page-63;
2. Table 3.3.3 Enrollment by Sex, Grade and Management, 2008, National Education Survey (Post-Primary)-2008 Statistical Report, BANBEIS, page-103;

3. Table 2.3.1 Number of Enrollment by Level and Management, 2009, Bangladesh Educational Statistics-2009, BANBEIS, page-33;
4. Table 2.3.4 Number of Enrollment, Promotion, Fail, Repeater, Dropout etc. in 2009, Bangladesh Educational Statistics-2009, BANBEIS, page-36;
5. Table 3.3.3 Enrollment by Sex, Grade and Management, 2009, Bangladesh Educational Statistics-2009, BANBEIS, page-78;
6. Table: Number of Student by Grade, Gender and Management, 2010, Pocket Book on Education Statistics-2010, BANBEIS, page-21;
7. Table: Enrollment by Sex, Grade and Management, 2010, Pocket Book on Education Statistics-2010, BANBEIS, page-54;
8. Table 2.3.2 Number of Students by Grade and Management in the Secondary School, 2011, Pocket Book on Education Statistics-2011, BANBEIS, page-39&40;
9. Table 3.3.7 Enrollment by Gender, Grade and Management, 2011, Pocket Book on Education Statistics-2011, BANBEIS, page-71;
10. Table 3.3.2 Number of Student by Grade and Management in the Secondary School, 2012, Bangladesh Education Statistics-2012, BANBEIS, page-94&95;
11. Table 4.3.5 Enrollment by Gender, Grade and Management, 2012, Bangladesh Education Statistics-2012, BANBEIS, page-174;
12. Table 3.3.2 Number of Student by Grade and Management of Education in the Secondary School, 2013, Bangladesh Education Statistics-2013, BANBEIS, page-101&102;
13. Table 4.3.5 Enrollment by Gender, Grade and Management, 2013, Bangladesh Education Statistics-2013, BANBEIS, page-191;
14. Table 3.3.1 Number of Students by Level of Education in the Secondary School, 2014, Bangladesh Education Statistics-2014, BANBEIS, page-97;
15. Table 3.3.2 Number of Students by Grade and Management of Education in the Secondary School, 2014, Bangladesh Education Statistics-2014, BANBEIS, page-97;
16. Table 4.3.5 Enrollment by Gender, Grade and Management, 2014, Bangladesh Education Statistics-2014, BANBEIS, page-163&164;

Therefore, it was measured that the average Enrollment Increment trend in general education under eight general boards is approximately 5.81%.

3.4.4.3 Enrollment Increment Trends in Madrasah Board (2008-2014)

Table-10: Average Incremental Rate of Enrollment under Madrasah Boards

Year	Enrollment in General Education (in number)							Enrollment Incremental Rate (%)
	Grade-IX	Grade-X	Total (IX-X)	Grade-XI	Grade-XII	Total (XI-XII)	Total (IX-XII)	
2008	301,304	229,243	530,547	81,795	62,421	144,216	674,763	Baseline
2009	339,703	250,741	590,444	84,228	77,624	161,852	752,296	11.49%
2010	362,268	286,547	648,815	95,354	83,939	179,293	828,108	10.08%
2011	275,880	326,282	602,162	99,596	90,352	189,948	792,110	-4.35%
2012	316,853	265,724	582,577	124,518	102,292	226,810	809,387	2.18%
2013	337,019	285,283	622,302	114,758	120,507	235,265	857,567	5.95%
2014	333,529	302,374	635,903	114,219	108,210	222,429	858,332	0.09%
Average Incremental Rate in Madrasah Education								4.24%

Source:

1. Table 4.3.6 Grade wise Enrollment by Management, Type and Sex, 2008, National Education Survey (Post-Primary)-2008 Statistical Report, BANBEIS, page-147;
2. Table 4.3.7 Grade wise Enrollment (Grade 11-12), 2008, National Education Survey (Post-Primary)-2008 Statistical Report, BANBEIS, page-147;
3. Table 4.3.6 Grade wise Enrollment by Management, Type and Sex, 2009, Bangladesh Educational Statistics-2009, BANBEIS, page-111;
4. Table 4.3.7 Grade wise Enrollment (Grade 11-12), 2009, Bangladesh Educational Statistics-2009, BANBEIS, page-112;
5. Table: Grade wise Enrollment by Management, Type and Sex, 2010, Pocket Book on Education Statistics-2010, BANBEIS, page-66;
6. Table: Grade wise Enrollment (Grade 11-12), 2010, Pocket Book on Education Statistics-2010, BANBEIS, page-66;
7. Table 4.3.5 Grade wise Enrollment by Management, Type and Gender, 2011, Pocket Book on Education Statistics-2011, BANBEIS, page-90;
8. Table 4.3.6 Grade wise Enrollment (Grade 11-12), 2011, Pocket Book on Education Statistics-2011, BANBEIS, page-90;
9. Table 5.3.5 Grade wise Enrollment by Management, Type and Gender, 2012, Bangladesh Education Statistics-2012, BANBEIS, page-211;
10. Table 5.3.6 Grade wise Enrollment (Grade 11-12), 2012, Bangladesh Education Statistics-2012, BANBEIS, page-211;
11. Table 5.3.5 Grade wise Enrollment by Management, Type and Gender, 2013, Bangladesh Education Statistics-2013, BANBEIS, page-232&233;
12. Table 5.3.6 Grade wise Enrollment (Grade 11-12), 2013, Bangladesh Education Statistics-2013, BANBEIS, page-233;
13. Table 5.3.5 Grade wise Enrollment by Management, Type and Gender, 2014, Bangladesh Education Statistics-2014, BANBEIS, page-200;
14. Table 5.3.6 Grade wise Enrollment (Grade 11-12), 2014, Bangladesh Education Statistics-2014, BANBEIS, page-200;

Therefore, it was measured that the average Enrollment Increment trend in madrasah education under madrasah board is approximately 4.24%.

3.4.4.4 Enrollment Increment Trends in General and Madrasah Board (2008-2014)

Table 11: Average Enrollment Increment Trends in General and Madrasah Board

Year	Total Enrollment in Class IX to XII (in number)			%
	General Boards	Madrasah Board	Total	
2008	3,214,653	674,763	3,889,416	Baseline
2009	3,564,807	752,296	4,317,103	11.00%
2010	3,756,473	828,108	4,584,581	6.20%
2011	3,854,146	792,110	4,646,256	1.35%
2012	4,008,821	809,387	4,818,208	3.70%
2013	4,179,128	857,567	5,036,695	4.53%
2014	4,502,684	858,332	5,361,016	6.44%
Average Incremental Rate of Enrollment under General & Madrasah Boards				5.54%

Source:

1. Total Enrollment in General & Madrasah Education Boards include SSC (Class-IX & X); Dakhil (Class-IX & X); HSC (Class-XI & XII); and Alim (Class-XI & XII).

Therefore, it was measured that the average Enrollment Increment trend in general and madrasah education under General and Madrasah Education Boards is approximately 5.54%.

3.4.4.5 Projected Enrollment of BTEB up to 2020

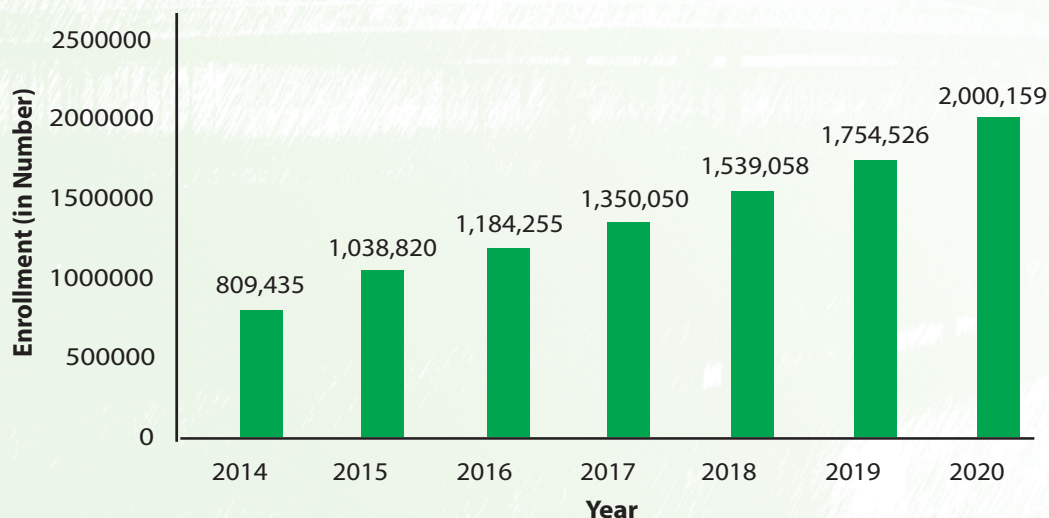
It was assumed that the average Enrollment Increment trends in General and Madrasah Education Boards in SSC and HSC level is approximately 6% and 14% in BTEB.

Table-12: Projected Enrollment under BTEB with Projected Enrollment of 10 Boards

Year	Projected Enrollment			% of BTEB Projected Enrollment
	General & Madrasah Boards (assuming 6% Incremental Rate)	BTEB (assuming 14% Incremental Rate)	Total (10 Boards)	
2014	5,361,016	809,435	6,170,451	13.11
2015	5,682,677	1,038,820	6,721,497	15.46
2016	6,023,638	1,184,255	7,207,892	16.43
2017	6,385,056	1,350,050	7,735,106	17.45
2018	6,768,159	1,539,058	8,307,217	18.53
2019	7,174,249	1,754,526	8,928,774	19.65
2020	7,604,704	2,000,159	9,604,863	20.82

Source:

1. BTEB Enrollment in 2014 includes SSC Voc (Class-IX & X); Dakhil Voc (Class-IX & X); HSC Voc (Class-XI & XII); HSC BM (Class-IX & X); 1st & 3rd Semesters of Diploma (All); and Basic Trade Course (360 hours).
2. Actual enrollment of BTEB in the year 2015 has been taken.

**Figure-1: Projected Enrollment under BTEB with Projected Enrollment of 10 Boards**

4. Findings

1. Percentage of BTEB Enrollment in Secondary Education-2014 is 11.01%;
2. Percentage of BTEB Enrollment in Higher Secondary Education and Diploma (All) 1st & 3rd Semester -2014 is 16.18%;
3. Percentage of BTEB Enrollment in Secondary and Higher Secondary Education-2014 is 13.11%;
(Diploma 1st and 3rd semester students included as schooling group xi and xii)
4. The average Enrollment Increment trend in BTEB is approximately 13.84% which tends to 14%.
5. The average Enrollment Increment trend in general education under eight general boards is approximately 5.81%;
6. The average Enrollment Increment trend in madrasah education under madrasah board is approximately 4.24%;
7. The average Enrollment Increment trend in general and madrasah education under General and Madrasah Education Boards is approximately 5.54% which tends to 6%.
8. The enrollment under Bangladesh Technical Education Board would be 20.82% by the year 2020, if other educational factors remain unchanged.

5. References

1. The Technical Education Act 1967
2. General Economics Division, Planning Commission, June 2010, Outline Perspective Plan of Bangladesh 2010-2021-Making Vision 2021 A Reality (Final Draft), Government of The People's Republic of Bangladesh, p-30.
3. General Economics Division, Planning Commission, April 2012, Perspective Plan of Bangladesh 2010-2021-Making Vision 2021 A Reality, Government of The People's Republic of Bangladesh, p-87.
4. General Economics Division, Planning Commission, October 2008, Moving Ahead-National Strategy for Accelerated Poverty Reduction II (FY 2009-11), Government of The People's Republic of Bangladesh, p-112.
5. General Economics Division, Planning Commission, December 2009, Steps Towards Change-National Strategy for Accelerated Poverty Reduction II (Revised) FY 2009-11, Government of The People's Republic of Bangladesh, p-52.
6. Ministry of Education, 2010, National Education Policy, Government of The People's Republic of Bangladesh, p-24.
7. National Skills Development Council, 2011, National Skills Development Policy-2011, Government of The People's Republic of Bangladesh, p-37.
8. UNESCO Institute for Statistics, November 2009, Education Indicator Technical Guidelines, United Nations Educational, Scientific and Cultural Organization, p-9-11.

9. Ministry of Primary and Mass Education, 2006, Non Formal Education (NFE) Policy, Government of The People's Republic of Bangladesh, p-4.
10. Bangladesh Bureau of Educational Information and Statistics (BANBEIS), March 2015, Bangladesh Education Statistics-2014, Ministry of Education, p-40, 42, 43, 97, 163, 164, & 200.
11. Bangladesh Bureau of Educational Information and Statistics (BANBEIS), August 2014, Bangladesh Education Statistics-2013, Ministry of Education, p-101, 102, 191, 232 & 233.
12. Bangladesh Bureau of Educational Information and Statistics (BANBEIS), December 2013, Bangladesh Education Statistics-2012, Ministry of Education, p-94, 95, 174, 211.
13. Bangladesh Bureau of Educational Information and Statistics (BANBEIS), December 2012, Pocket Book on Education Statistics-2011, Ministry of Education, p-39, 40, 71 & 90.
14. Bangladesh Bureau of Educational Information and Statistics (BANBEIS), August 2011, Pocket Book on Education Statistics-2010, Ministry of Education, p-21, 54, & 66.
15. Bangladesh Bureau of Educational Information and Statistics (BANBEIS), December 2010, Bangladesh Educational Statistics-2009, Ministry of Education, p-33, 36, 78, 111 & 112.
16. Bangladesh Bureau of Educational Information and Statistics (BANBEIS), December 2009, National Education Survey (Post-Primary)-2008 Statistical Report, Ministry of Education, p-63, 103 & 147.
17. <http://www.bteb.gov.bd/>, dated: 22 December 2015.
18. <http://www.btebcbt.gov.bd/login/auth>, dated: 22 December 2015.
19. <https://drsaraheaton.wordpress.com/2010/12/31/formal-non-formal-and-informal-learning-what-are-the-differences>, dated 22 December 2015.
20. https://en.wikipedia.org/wiki/Nonformal_learning, dated 22 December 2015.



বাংলাদেশ কারিগরি শিক্ষা বোর্ড

Bangladesh Technical Education Board

Agargaon, Sher-E-Bangla Nagar, Dhaka-1207

Web: www.bteb.gov.bd, www.btebcbt.gov.bd