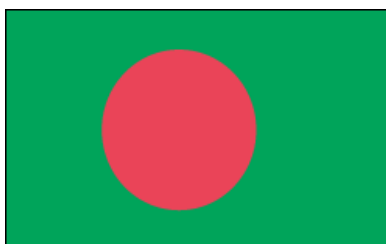


Country Paper

BANGLADESH



**REORIENTING TVET POLICY TOWARDS EDUCATION FOR
SUSTAINABLE DEVELOPMENT**

MS. RAZIA BEGUM
ADDITIONAL SECRETARY
MINISTRY OF EDUCATION
BANGLADESH

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ABSTRACT:

The Technical and Vocational Education (TVE) system is the main producer of job market of the mid level technical manpower in Bangladesh. Therefore, the planning of TVE system and its implementation strategies are required to keep pace with the very fast changing technology and means and methods of providing products and services. Performance competencies of students must be tuned to the emerging needs of the job market. Graduates of Technical and Vocational Institutions must be ready to take command over managerial, technological, supervisory and frontline works. But unfortunately our technical institutions are still unable to produce fully equipped graduates as per the demand of the job market. To improve the situation large investment is needed for the improvement of the physical facilities and training of teachers. Educational planning is an integral part of overall planning of the economy and that manpower planning is an extension of educational planning through which the educational and the economic system of a country are interrelated. It is in this context, it is necessary to formulate a comprehensive plan for skill development and gainful employment of the available labor force.

1.0 Introduction

As per World Development Report 1995 of the World Bank, people in the low –and middle -income countries remain in poverty not for lack of work but for lack of skills or for lack of kind of economic environment in which they can use their skills to work more productively for higher pay. Focusing such need for poor of the nation, for poverty elevation and sustainable development of the country, TVET effort includes government and private funded projects. TVET programs are governed by the ministry of education and under the direct management of directorate of technical education. Despite various limitations of financial, infrastructure and knowledge resources, TVET has successfully implemented many projects and are in the process of development, plan and envisioning. The TVET system has a large role to play in economic growth and social development as provider of trained human resources to the labor market and as provider of skills to those who are looking for employment. NSAPR recognizes the potential contribution of TVET in reducing poverty while supporting economic growth by providing employable skills particularly to those who dropped out of school early and are already of employable age and to the large pool of unemployed and underemployed adults.

The current formal TVET system lacks linkage with and, therefore, relevance to the labor market. The capacity of the existing system to meet the needs of the labor market is small. Employers are looking for more people who can fill their semi-skilled and skilled requirements. There is mismatch between the outputs of the TVET system and the needs of the employment sectors in at least three areas: (i) the trades or occupations where programs are being offered; (ii) the competencies acquired do not meet the requirements of industries or what is needed to take advantage of self-employment opportunities; and (iii) the lack of practical experience of the students. The practical component of the curriculum is not effectively taught.

The majority of TVET teachers lack pedagogical training and practical skills, and have no industrial experience. In addition, TVET institutions suffer from poorly equipped workshops, lack of teaching and training materials, and inadequate classrooms and workshops.

The formal TVET system also provides limited opportunities to the primary target beneficiaries. The successful completion of Class VIII is required for entry into the formal TVET programs in the Secondary School Certificate (Vocational) [SSC(Voc)] and thus excludes the majority who do not complete schooling up to that level. Its main clientele are the young adolescents who complete Class VIII, can afford to stay more years in school, and have strong white-collar job aspirations. The NPRS calls for a reform of the TVET system by making it more market-responsive, addressing training needs of the underprivileged who do not complete Class VIII, collaborating with the private sector and NGOs, and making its training programs more flexible in terms of duration, curriculum, and students' academic qualifications, among others.

2.0 Present Status on TVET Program

2.1 Different level of Institutes

There are three levels of educational institutes under Directorate of Technical education.

a) Certificate level Institutes:

(i) Govt. Technical School and Colleges:

These type of institutes conducts SSG (Voc) and HSC (Voc) certificate courses.

- SSG (Voc) 10 years Schooling program
- HSC (Voc) 12 years Schooling program (prerequisite qualification SSG (Voc))
- Besides this, Technical School and Colleges conducts short courses for different time period.

(ii) Non-Govt. Schools:

- These type of schools conducts SSG (Voc) Course

b) Diploma level institutes:

- Polytechnic institutes and similar type institutes
- These type of institutes conducts 4 years diploma in Engineering, Survey, Glass and ceramic, graphic arts and printing courses
- Pre-requisite qualification is: SSG, SSC(voc) and equivalent.

(c) Degree level institutes:

- These institutes conduct 4 years BSC in Engineering, Leather Technology, Textile technology and Technical Education courses.
- Prerequisite qualification required to enroll these courses: HSC, HSC (voc) and equivalent.

2.2 List of Affiliated Institutes, Specialization and Intake Capacity in TVET Sector are given below:

I. Diploma in Technical Education

Number of Institutes .			Intake Capacity
Public	Private	Total	
1	-	1	120

Area: Electrical & Electronic, Civil, Mechanical

II. Diploma in Vocational Education:

Number of Institutes .			Intake Capacity
Public	Private	Total	
1	-	1	80

Area: Electrical, Automotive, Refrigeration, Radio-TV, Carpentry, Machinist, Welding, Farm Machinery

III. Diploma in Engineering:

Number of Institutes .			Intake Capacity
Public	Private	Total	
47	128	175	35832

Area: Architecture, Automobile, Chemical, Civil, Civil (Wood), Computer, Electrical, Electronic, Food, Mechanical, Power, Refrigeration and Air-Condition, Offset Printing, Graphic Reproduction Printing, Ceramic, Glass, Marine, Shipbuilding, Aircraft Maintenance (Aerospace), Aircraft Maintenance (Avionics), Computer Science, Data Telecommunication and Networking, Surveying, Architecture and Interior Design, Construction, Electro medical, Environmental, Garments Design and Pattern Making, Instrumentation and Process Control, Mechatronics, Mining and Mine Survey, Telecommunication.

IV Diploma in Textile Engineering:

Number of Institutes .			Intake Capacity
Public	Private	Total	
03	-	03	150

Area: Yarn Manufacturing, Fabric Manufacturing, Wet Processing, Garments & Clothing.

IV. Diploma in Forestry:

Number of Institutes .			Intake Capacity
Public	Private	Total	
06	20	26	2,280

VI. Diploma in Agriculture:

Number of Institutes .			Intake Capacity
Public	Private	Total	
13	90	103	10,010

VII. Diploma in Animal Health and Production:

Number of Institutes .			Intake Capacity
Public	Private	Total	
03	-	03	300

VIII Diploma in Health Technology:

Number of Institutes			Intake Capacity
Public	Private	Total	
-	52	52	1,920

Area: Medical Ultrasound, Dental Laboratory, Physiotherapy, Radiology and Imaging, Pharma, Integrated Medical, Patient care.

IX. Certificate in Health Technology:

Number of Institutes			Intake Capacity
Public	Private	Total	
-	67	67	2,180

X. HSC (Business Management)

Number of Institutes			Intake Capacity
Public	Private	Total	
-	1327	1327	1,19,250

Area: Computer Operation, Secretarial Science, Accounting, Banking, Entrepreneurship.

XI.

Number of Institutes			Intake Capacity
Public	Private	Total	
64	-	64	16,740

Area: Electrical Works & Maintenance, Clothing & Garments Finishing, Agro-Machinery, Computer Operation & Maintenance, Electronic Control & Communications, Machine Tools Operations & Maintenance, Automobile, Refrigeration & Air Conditioning, Welding & Fabrications, Fish Culture & Breeding, Building Construction & Maintenance, Poultry Rearing & Farming, Wood & Design, Drafting & Civil.

XII. SSC (Vocational)

Number of Institutes			Intake Capacity
Public	Private	Total	
129	1597	1726	1,25,000

Area: Audio Video System, Agro Based Food, Automotive, Building Maintenance, Civil Construction, Computer, Drafting (Civil), Drafting (Mechanical), Dress Making & Tailoring, Farm Machinery, Fish Culture & Breeding, Fruit & Vegetable Cultivation, Food Processing & Preservation, General Mechanics, General Electrical Works, Livestock Rearing & farming, Poultry Rearing & Farming, Refrigeration & Air Conditioning, Welding Works, Electrical Maintenance Works, Dying Printing & Fishing, Glass, Wood Working, Ceramic, Machine Tools Operation, Knitting, Plumbing & Pipe Fitting, Weaving, Welding & Fabrications, Architectural Drafting With AutoCAD, Electrical Machine Maintenance, Industrial Electronics, Nursing & Midwifery, Hotel Management & Catering, Foundry Works, Shrimp Culture & Breeding.

XIII. Dhakil (Vocational)

Number of Institutes			Intake Capacity
Public	Private	Total	
-	100	100	6,000

XIV. Certificate in Vocational Education:

Number of Institutes			Intake Capacity
Public	Private	Total	
01	-	01	120

XV. Computer Training Program:

Number of Institutes			Intake Capacity
Public	Private	Total	
03	472	475	14,000

XVI. Basic Trade Course (360 Hours):

Number of Institutes			Intake Capacity
Public	Private	Total	
09	160	169	8,275

2.3 Bangladesh Vocational Qualification Framework (present)

NSS Basic	Basic skilled	360 hours Basic Trade Course
NSS III	Semi skilled	SSC (Voc) Class IX
NSS II	skilled	SSC (Voc) Class X
NSS I	Highly skilled	HSC (Voc) Class XI & XII
NSS Master	Master craftsman	Industry Assessed

2.4 Role of government in educational development

- Govt. Establishes new educational institute on regular basis from its won fund.
- Govt. prepares syllabuses through its agencies.
- Govt. conducts examination
- Govt. prepares education policy
- Govt. contributes full fund for govt. educational institutes and 90% salari~s for the Non-Govt. educational institutes
- Govt contributes to international organization for improving quality of Technical Vocational Education.

2.5 Role of community participation in education

- Industry people are involved in preparing syllabuses to make syllabus market oriented
- Industry linkage is being maintained with educational institutes and students are getting opportunity for industrial attachment program in the industries.
- At present some Non-govt. organizations are conducting Technical and vocational education program
- Some private organizations are conducting diploma and degree courses on

2.6 Sustainability aspects

- Syllabuses are being updated and rationalized with job market demand.
- New technologies are being introduced
- Emerging technologies are being identified and introduced.
- Relevancies of courses are being analyzed in a continuous process.
- Putting more emphasis on quality of education
- Steps taken to ensure skill
- Linkage is being developed with International Agencies.

3.0 Best Practices on Education for Sustainable Development

3.1 Ensuring access

- New institutes are established to enhanced enrollment and 18320 enrollment capacity increased for the last three years.
- Special quota facilities for tribal (2/4 each institutes), freedom fighters dependant (2 each group of each department), and women (10%) and vocational back ground students (15%) of capacity are provided.
- 4 separate polytechnic institutes for women is established intake capacity is 680 (enrollment= 680*4 years course =2720).
- Double shift program launched with the existing infrastructure through paying only 30% of basic salary and capacity becomes double of those institutes where double shift program running and increased intake capacity number is 14630.

3.2 Quality and relevancy

- Syllabuses updated with market demand.
- Monitoring tools designed and monitoring is done accordingly.
- Industrial linkage enhanced for getting practical experience.
- New equipment supplied for updated skill.
- Training facilities arranged for the teachers' and staff both home and overseas.
- Linkage is being maintained with International Agencies for exchanging technical knowledge.

3.3 Local resource mobilization

- Maximum of our educational institutes are funded through Govt. own resources.
- Infrastructure of Non-Govt. School is built through community/private funding

3.4 International Accreditation

- MOU (Memorandum of Understanding) has been signed with Asia Pacific Accreditation and Certification Commission (APACC) for accreditation. Steps have been taken to get APACC accreditation.

3.5 Ensuring good governance in education sector

- Teachers' are provided training on guidance and counseling.
- Teachers' are given training on Competency Based Training on TVET.
- Guardians' day is observed annually in the institutes.

3.6 Sustainability of educational achievements

- New technologies introduced.
- Emerging technologies introduced.
- Syllabuses updated with market demand
- Industries linkage enhanced for getting practical skill.
- Training facilities arranged for the teachers' and staff both home and overseas.
- Linkage is being maintained with International Agencies for exchanging technical knowledge.

4.0 Educational Financing

4.1 Funding Modalities: Vocational/ Technical Education

Financial contribution for Technical and Vocational Education institutes are made by govt. for Govt. Certificate level institutes like; Technical School and Colleges ,Diploma level institutes like; Polytechnic Institutes & similar type Institutes and Degree level Institutes like, Engineering Colleges, Textile college, Leather college and Teaching Training College from revenue budget.

4.2 Share/Participation on Educational Financing

a) Revenue Budget for Directorate of Technical Education (DTE)

(Amount in taka and in million)

Total Budget for B d t Percent(%)

.Ministry of u ge. share by DTE

(Amount in taka and in million)

Fiscal	Total Budget for Ministry of Education (MOE)	Budget allocation for DTE	Percent (%) share by DTE out of total MOE	Remarks
2003-04	26067.95	427.12	1.64	
2004-05	29626.42	460.50	1.55	

2005-06	41599.29	771.10	1.85	
2006-07	46581.89	946.80	2.03	
2007-08	51904.80	1225.32	2.36	
2008-09	58892.51	1370.81	2.33	
2009-10	63145.94	1146.09	1.81	

b) Development Budget for Directorate of Technical Education (DTE)

(Amount in taka and in million)

Fiscal	Total Budget for Ministry of Education (MOE)	Budget allocation for DTE	Percent (%) share by DTE out of total (MOE)	Remarks
2003-04	22831.1	1094.9	4.80	
2004-05	20487.3	1652.7	8.07	
2005-06	27551.3	1252.7	4.55	
2006-07	35808.2	828.6	2.31	
2007-08	33957.1	1426.0	4.20	
2008-09	31638.0	830.1	2.62	

c) Budget Allocation (Revenue & Development) for Directorate of Technical Education (DTE)

(Amount in taka and in million)

Fiscal	Total Budget for Ministry of Education (MOE)	Budget allocation for DTE	Percent (%) share by DTE out of total (MOE)	Remarks
2003-04	48899.1	1522.0	3.11	
2004-05	50113.7	2113.2	4.22	
2005-06	69150.6	2023.4	2.93	
2006-07	82390.0	1775.4	2.15	
2007-08	85861.9	2651.3	3.09	
2008-09	90530.5	2200.9	2.43	

4.3 Procedure of School funding

Non-Govt. school funding for Technical section is done through MPO (Monthly Payment Order). Salary contribution of teachers' and staff for govt. portion is estimated on the basis of basic salary. 100% of the basic salary is contributed from govt. for Non-govt. schools teachers' and staff. Directorate office checks some specific criterion and then issues monthly payment order for the Non-Govt. schoolteachers' and staff. At present Directorate of Secondary and Higher Education (DSHE) is conducting all the procedure. Recently Govt. made an office order to perform technical side by Directorate of Technical Education (DTE).

5.0 Issues and Challenges In TVET on Education for Sustainable Development

5.1 Improvement of Training Quality to achieve desired Skill

- lack of practical facility & infrastructure.
- Shortage of qualified teachers.
- Absence of Teachers Training.
- low quality Technical books & learning Materials.
- lack of monitoring and effective quality assurance mechanism.

5.2 Improvement of capacity utilization

- High drop-out percentage (above 20%).
- Poor social perception.
- Management issue.

5.3 Improvement of industry-institution Linkage

- Establishment of Private Public partnership.
- Curriculum development.
- Institutional Management.
- Industrial Training.

5.4 Updating Present Curriculum

- Competency based.
- Introduction of need based job oriented courses.

5.5 Achieving NSAPR Targets

- Substantially increase the post-primary student enrollment in TVET (20% in secondary stage at present about 8.0%).
- Expansion of Public or Private sector.
- Improvement of TVET graduate, employability both in domestic & international market.
- Increasing girls participation in TVET.
- More attention to under privileged groups.

5.6 Capacity building of private TVET providers for quality improvement

- Expansion without proper facilities.
- Providing infrastructure & equipment
- Teacher's Training

5.7 Updating labour Market Information

- Lack of job market information regarding demand of different trades, skill level & quantity for both domestic & overseas market is exists.

6.0 Major Programs Undertaken for Re-Orienting TVET Policy

- Review and strengthen TVET policies, systems and legislation at the central and decentralized levels.
- Enhance flexibility, quality and relevance of TVET.
- Strengthen TVET institutions through improved knowledge and skills of managers and teachers.
- Develop National Technical and Vocational Qualification Framework
- Improve skills development resulting in enhanced productivity and competitiveness in key growth and export-oriented industries in the formal industrial sector.
- Increase access of underprivileged groups to TVET.
- Establish partnerships with industry; Focus: RMG and textiles, Construction, Light engineering, Leather, Agro-food, IT and Transport equipment.
- Develop competency and training standards.
- Develop curricula, teacher guides, learning materials and assessment tools.
- Develop capacity in external competency assessment.
- Upgrading Teacher training Institutions.
- Strengthen the capacity of DTE for planning, research & development and social marketing.
- Deliver skills training in poor communities. '
- To create facilities for introduction of one technical subject from class VI to class VIII, SSC (vocational) and short training courses with a view to expand vocational education & training, "Establishment of Technical School (TS) in each Upazilla" project has been taken.

7 .0 Conclusion

Human resource development plays a critical role in the socio-economic development of a country. It is an investment towards improving the quality of human life. Although development brings economic gains to society in general, specific measures become necessary to ensure that they reach the disadvantaged and the weaker sections of the population such as women, children, the disabled, the elderly, and the destitute. The welfare and development of these weaker sections of the society largely depend upon suitable policy directions executed through appropriate programmes and strategies. As a developing country we invest less in human resource development and end up with less educated and less qualified labour force. Many of the dropouts are engaged in technical jobs, like RMG, carpentry, construction, nursery and Poultry farming, with meager training, or even just with courage and enthusiasm. If we can arrange vocational training for them, we can bring about an industrial revolution in the country and can also export skilled manpower.

8.0 APPENDICES

Appendix-I: Students Appearing SSG (Voc) Examination

Year No. of No. of Student
Institution appearing SSG (Voc)

Year	No. of institutes	No. of Student appearing SSC (Voc)	Pass rate (%)	Growth rate (%)
2000	427	14560	61.85	-
2001	535	20055	57.16	37.74
2002	680	25590	43.45	27.60
2003	687	31627	38.92	23.59
2004	870	31452	51.16	-0.55
2005	950	35779	51.44	13.76
2006	1227	48309	61.37	35.02
2007	1338	64637	51.08	33.80
2008	1463	82375	62.88	27.44

Appendix-II: Comparison of General & Vocational Education at Secondary Level SSG Examinee % of Vocational

Year	SSC Examinee		% of Vocational Education
	Total	Vocational	
2003	1084241	31627	2.92
2004	964507	31452	3.26
2005	944015	35779	3.76
2006	995123	48309	4.86
2007	1024537	64637	6.31
2008	1006569	82375	8.18