



Technical Education for Human Resource Development in Bangladesh

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INTRODUCTION

1. Human resource means the effective utilization of the human capital for the development activities of a country. It develops the inner potential and capabilities of an individual. Its objective is to utilize the dynamic skill for individual or organizational development. For any developing country human resources development is very important for fighting against poverty, and it also enhances economic development. Human resource development is one of the major issues in the world. Developed countries around the world could make successful use of their population, supported by modern technologies and well coordinated skill based training.
2. Bangladesh is one of the poorest countries of the world, characterized by extremely high population density and less natural resources. Over population creates pressure on to the economy, and it also affects the development process of the country. Such a poor country with a big population must utilize her human potential for the development activities. Population of Bangladesh can be a great asset for the country. Burden of huge population can be turned into a huge human resource, and they can make a great contribution for the development of the country
3. The article will be done following both primary and secondary methods. Important data have been collected from different related books and views from interviews of associated scholars. Since the subject is very vast and difficult to be covered fully in this short time of research, the focused will be narrowed down. To study the subject 'Technical Education for Human Resource Development in Bangladesh'. Firstly, the paper will discuss the technical education and human resources development in general. Thereafter, it will analyse the existing technical education of Bangladesh and find out its weaknesses. Then it will find out measures for the improvement of technical education for human resource development in Bangladesh. Finally, the paper will put forward some suggestions.

TECHNICAL EDUCATION AND HUMAN RESOURCE DEVELOPMENT

Technical Education

4. **What is Technical Education?** Technical education is a comprehensive term referring to those aspects of educational processes involving, in addition to general education, the study of technologies, related science, acquisition of practical skill, attitudes, understanding, and knowledge relating to occupations in various sectors of economic and social life.
5. **Relation between Technical Education and General Education.** Technical Education prepares the learners for jobs that are based in manual or practical activities. It is traditionally non-academic and totally related to a specific trade, occupation or vocation. It is referred to as technical education, because the learner directly develops expertise in a particular group of techniques or technology. Technical education might be classified as teaching procedural knowledge. Technical education is different from general education.
6. **Focus of Technical Education.** Until the end of the twentieth century, technical education focused on specific trades such as for example, an automobile mechanic or welder. Therefore, it was associated with the activities of labours and lower social classes. As a result, it attracted a level of stigma. Technical education is related to the age-old apprenticeship system of learning.

Human Recourses Development

7. **What is Human Resource?** The importance of human being as a resource has been realized since time immemorial. Human resource is a term which many organizations describe as the combination of administrative personnel with performance. The concepts developed in industrial psychology. The objective of human resources is to maximize the return on investment from the organization's human capital, and at the same time it minimizes financial risk.

8. **Human Resource Development.** People are the real wealth of nations. Human resources development can be defined simply as developing the most important section of any business its human resource by, "attaining or upgrading the skills and attitudes of employees at all levels in order to maximize the effectiveness of the enterprise. Human resources development is a framework for the expansion of human capital within an organization.

9. **Focus of Human Resource Development.** The development of human resource in an organization lead them to be strategic assets rather than simple production output . It emphasizes and develops individual potential and skills. Human resources development can be in-room group training, tertiary, vocational courses, or coaching by senior employees with the aim for a desired outcome that will develop the individual's performance. A successful Human Resources Development program will prepare the individual to undertake a higher level of work.

10. **Modern Concept of Human Resource Development.** Though human resources have been part of business and organizations since the first days of agriculture, the modern concept of human resources began in the early 1900s. By 1920, psychologists and employment experts in the United States started the human relations movement, which viewed workers in terms of their psychology and fit with companies, rather than as interchangeable parts.

EXISTING TECHNICAL EDUCATION IN BANGLADESH

Technical Education System in Bangladesh

11. Technical education is designed to provide opportunities to the students to acquire employment skill. It orients students with skill based training through formal and non-formal education programmes. The technical education integrates general education and vocational education. This education is designed at various levels:

- a. Short courses/basic trade courses.
- b. Secondary level.
- c. Higher secondary level.
- d. Diploma and engineering level.

Short Courses/Basic Trade Courses

12. **Courses under Bangladesh Technical Education Board (BTEB).** There are many courses conducted under Bangladesh Technical Education Board. These courses are the basic trade courses and introduced in 1964-65. These fall under National Skill Standard (NSS - Basic) level and conducted for a short period of time, normally for one to six months.

13. **Major Short Courses under Different Ministries (Not Affiliated with BTEB).** Many courses are conducted in various institutions under the Ministry of Youth & Sports, Ministry of Civil Aviation and Tourism, Ministry of Labour and Employment, Ministry of Expatriates, Welfare and Overseas employment, Ministry of Woman and Children Affairs, Ministry of Industry, and different other ministries of the government.

a. **Directorate of Youth Development, Ministry of Youth & Sports.** The Directorate of Youth Development conduct many courses on agro-based trade, computer, electronics, block batik, electrical, garment , and other related subjects. These courses are scheduled for one to six months, and are conducted in 60 training centres including 53 Youth Training Centre (YTC) in various places of the country.

b. **National Hotel and Tourism Training Institute, Ministry of Civil Aviation and Tourism.** There are many short courses conducted under the Ministry of Civil Aviation and Tourism on food & beverage production & service. They also conducts course on hotel management, tourism, and on other related subjects.

a. **Bureau of Manpower Employment & Training (BMET), Ministry of Labour and Employment & Ministry of Expatriates, Welfare and Overseas employment.** The Bureau of Manpower Employment & Training have number of technical training centres all

over the country. The Bureau of Manpower Employment & Training analyse the job market and prepare the technical personnel to meet the requirement.

b. **Directorate of Social Welfare, Ministry of Social Welfare.** The Directorate of Social Welfare supports short training programmes for children and orphans. The basic and important subjects are included in these programmes. It helps the children specially orphans and poor children for their self employment.

c. **Directorate of Woman and Children Affairs, Ministry of Woman and Children Affairs.** The Directorate of Woman and Children Affairs run one short course under Bangladesh Technical Education Board. They conduct short courses for the poor and middle class women.

d. **Ministry of Industry.** Under the Ministry of Industry, Bangladesh Small and Cottage Industries Corporation conduct short courses for one to three months duration on handicrafts & self employment.

e. **Ministry of Textile.** Under the Ministry of Textile, Bangladesh Handloom Board conducts short courses for weavers. Duration of these courses varies from one to three months. In addition to these courses Bangladesh Knit Wear Board also conduct short training programmes on textile following own curriculum.

14. **Short Course under NGOs.** Many NGOs of Bangladesh conduct short course of their own for self employment & skill development. Some of the NGOs are Mirpur Agricultural Workshop and Training School (MAWTS), Underprivileged Children Education Programme (UCEP), CARITAS and Bangladesh Rural Advancement Committee (BRAC).

a. **Mirpur Agricultural Workshop and Training School (MAWTS).** Mirpur Agricultural Workshop and Training School conducts short courses on different trades for skill development, self employment & overseas employment. Duration of these courses vary from one week to six months.

b. **Underprivileged Children Education Programme (UCEP).** Underprivileged Children Education Programme supports short courses on different trades for under privileged children. These skill development programmes provide self employment opportunities.

c. **CARITAS/Bangladesh Rural Advancement Committee (BRAC).** In addition to the courses of MAWTS and UCEP, CARTTAS and BRAC also conduct short courses. Every year they train a good number of people on handicrafts. BRAC has a vast organization, and they conduct these courses in different parts of the country.

15. **Private Providers not Affiliated with BTEB.** BGMEA & BKMEA conduct short courses for garments sector. These courses run following their own development curriculum. Duration of these courses vary from one week to one year. Many private providers conduct short courses on computer and different trades for local and overseas employment following different curriculum.

Higher Secondary Level

16. **Vocational Trade Integrated in HSC (Science) Course.** To make the education system technical oriented SSC Vocational course was introduced in 1997. Entry qualification for this course is SSC Vocational. A student needs to undergo 2 years programme for this course. At present there are 64 public institutions in the country and can take an intake of about 8400 students.

17. **Areas of Specialization.** There are many subjects integrated in the HSC Vocational course. The specialization is done in following subjects:

- a. Electrical works & maintenance.
- b. Clothing & garments finishing.
- c. Agro-machinery.
- d. Computer operation & maintenance.
- e. Electronic control & communications.
- f. Machine tools operations & maintenance.
- g. Automobile, welding, and fabrications.
- h. Refrigeration & air conditioning.

- j. Fish culture & breeding.
- k. Building construction & maintenance.
- l. Poultry rearing & farming.
- m. Drafting, wood & design.

WEAKNESSES OF EXISTING TECHNICAL EDUCATION

18. **General.** Analysis of different aspects of technical education, its different levels, course duration, intake capacity, number of technical centres, institutes, areas of specialization, integration of technical education with general education, roles of non-governmental and private organizations and above all the demand for and supply of skilled manpower emerges with a number of issues. Moreover, from the study of the subject and also from the interviews of related experts, important weaknesses of technical education has been brought out and important among them are discussed below.

19. **Inadequate Allocation.** Allocation is an important aspect for any kind of development activities. Technical education is basically technique and technology oriented which require huge monetary involvement.

20. **More Pressure on Secondary Education.** Government has taken the steps to make the primary education compulsory. Thereby, number of students has become more in the school and it entailed large number of intake in secondary and higher secondary level education.

21. **Inadequate Training Resource.** Technical education is involved with number of modern training materials and other related equipment. Adequate training resource is a prerequisite for effective technical education. Bangladesh does not have the resources to make every school capable to provide technical education.

22. **Internal Job Demand Not Fulfilled.** In modern days, life has become technology oriented. With this development of life standard, more job opportunities created and most of these are technical in nature.

23. **Overseas Job Demand Remain Unmet.** Developed countries in the world use machinery almost in every kind of job, and these countries have a huge demand for skilled workers. Bangladesh, very often, exports manpower to such countries, but this manpower is basically unskilled manpower.

24. **Non-Standard and Non-Formal Training Courses.** Technical education is provided by various public, private and non-governmental organizations. Various institutions providing technical education operate under various departments of the country.

25. **Limited Enterprise-based Training.** Technical education is very much job oriented. Each type of employment requires separate type of training, designed to suit the requirement of that job.

26. **Lack of Proper Coordination.** From the analysis of existing technical education in Bangladesh, it is observed that various types of courses are conducted in different institutions.

27. **Lack of Expert Teachers.** Expert teachers are very essential specially for technical education. These teachers should be training both in home and abroad so that they can orient themselves with latest technology, and make them expert on the subject they deal with.

28. **Less Priority than General Education.** Basically, Technical education is job oriented, and its demand is increasing day by day. With the development of the technology its demand will be huge with in a short time.

29. **Lack of Modern Equipment.** The revolution in technology has moved farther than the institutions. Days are changing with the advancement of technology. So, modern equipment is prerequisite for technical education. Many of the technical training centres and institutions are still running with old equipment.

30. **Lack of Continuous Survey and Modification.** As the technology is advancing rapidly, technical education also should be modified

accordingly. Recent job market should be studied in detail, and survey should be continued to make necessary modification in the course curriculum.

MEASURES FOR IMPROVEMENT

31. **Improvement of Education Quality.** Quality of the education is very important for fulfilling the demand of internal and external job market. The teachers must be oriented with modern technology so that they can provide effective training to the students.
32. **Improvement of Industry-Institution Linkage.** The training institutions must have very good links with industry. Technical education is very much job oriented. Each type of employment requires separate type of training, designed to suit the requirement of that job.
33. **Increasing Budget Allocation.** Allocation is an important aspect for any kind of development activities. Technical education is basically technique and technology oriented which require huge monetary involvement. Modern training materials and necessary equipment are very costly.
34. **Skill Standardization.** Technical education is provided by various public, private and non-governmental organizations. Various institutions providing technical education operate under various departments of the country.

35. **Detail Survey of Internal Job Demand.** In modern days, life has become technology oriented. With this development of life standard, more job opportunities created and most of these are technical in nature. In Bangladesh, there is a good demand for technical oriented jobs, but the market study is not carried out periodically.

36. **Detail Survey of Overseas Job Demand.** Developed countries in the world use machinery almost in all kind of jobs, and these countries have a huge demand for skilled workers. Bangladesh very often exports manpower to those countries, but this manpower is basically unskilled manpower.

37. **Provision of Modern Learning Materials.** Technical education is involved with number of modern training materials and equipment. Adequate training resource, specially modern training material, is a prerequisite for effective technical education.

38. **Effective Coordination among Training Institutions.** Various types of courses are conducted in different institutions. There is no effective coordination between the courses conducted by Bangladesh Technical Education Board, Bureau of Manpower Employment and Training, Various departments of different ministries, private and non-governmental organizations.

39. **Provision of Expert Teachers.** Expert teachers play vital roles, specially in technical education. These teachers should be training both in home and abroad so that they can orient themselves with latest technology, and make them expert on the subjects they deal with.

40. **Social Awareness.** Technical education is basically job oriented, and its demand is increasing day by day. With the development of the technology, its demand will be huge with in a short time.

41. **Provision of Modern Equipment.** Days are changing with the advancement of technology. So, modern equipment is very essential for technical education. Most of the technical training centres and institutions require modern machineries.

42. **Updating Labour Market Information.** As the technology is advancing rapidly, technical education also should be modified accordingly. Recent job market should be studied in detail, and survey should be continued to make necessary modification in the course curriculum.

CONCLUSION

43. Bangladesh is one of the poorest countries of the world. The country has extremely high population density and very less natural resources. Such a poor country with a huge population must make the best use of her human potential for the development activities. Load of huge population can be turned into human resources, and they can make a great contribution for the development of the country.

44. Technical education is the study of technologies, related science and acquisition of practical skill, attitudes, understanding, and knowledge relating to occupations in various sectors of economic and social life. Technical education is also an integral part of general education. Technical Education prepares learners for jobs that are based in manual or practical activities. It is traditionally non-academic, and totally related to a specific trade, occupation or vocation. Technical education might be classified as teaching procedural knowledge. It differs from general education which is

concentrated on theory and conceptual knowledge.

45. Human resource is the combination of administrative personnel with performance. The objective of human resource is to maximize the return on investment from the organization's human capital and to minimize financial risk. The people within an organization are its human resource. A good social welfare system makes the entire economy more productive. Human resources development upgrades the skills and attitudes of employees at all levels in order to maximize the effectiveness of the enterprise. Human resources development is a combination of training and education. It ensures individual development, potential, and also satisfies the organization's goals. It views employees as an asset to the enterprise whose value will be enhanced by development. Its primary focus is on growth and employee development. It emphasizes developing individual potential and skills.

46. At secondary level, SSC Vocational course was introduced to make the education system technical oriented. Entry qualification for this course is Class VIII. A student needs to undergo two years programme for this course. At present there are 1706 institutions, which conduct SSC Vocational Course. Out of these 1706 institutions, 139 are public, and 1567 are private institutions. There are many subjects integrated in the SSC Vocational course considering the present day's requirements.

RECOMMENDATIONS

47. Basing on the study and analysis of the subject following steps are recommended to improve the existing technical education system for human resource development in Bangladesh:

- a. A well coordinated national policy for the technical education has to be formulated so that overall standard of technical education can be improved and maintained.
- b. Quality of the technical education must be improve by provisioning required infrastructures, modern equipment, expert teachers, and related training materials.
- c. Enterprise-based training should be introduced and good link must be established between public, private, and non-governmental institutes and industries.
- d. Budget allocation must be increased to support the effective skill based technical education.
- e. Detail survey of internal and overseas job market must be carried out to get the demand so that the workers can be trained for the demanded jobs.
- f. Good coordination among Bangladesh Technical Education Board, Bureau of Manpower Employment and Training, various departments of different ministries, other private and non-governmental organizations has to be maintained
- g. Labour market information for both home and abroad should be updated continuously to fulfil the demand.
- h. Future prospect of technical education must be highlighted, and social awareness must be grown so it gets due priority, and meritorious students are motivated for technical education.