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Eradicating Prime Problems of TVET for Ensuring Worth Human Resources in Bangladesh

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Abstract

The developing countries like Bangladesh have a large number of unskilled and unemployed people. The Government of the Peoples' Republic of Bangladesh has been trying to develop TVET sectors. To enhance productivity, stimulate competitiveness, and bring about economic development, skill developments are key aspects for ensuring quality of Technical and vocational education and training (TVET). TVET is the provision of skills, knowledge, attitude, and values needed for the place of work. TVET has been used by several developed countries as an instrument of development. However, in Bangladesh TVET has been left to the periphery and its significance has not really been embraced. TVET training centres have been neglected or overtaken by institutions concentrating on purely academic education. Thus the aims of the article were to explain the essential roles of TVET for human resource development (HRD) and to explore the inherent problems associated in TVET programs in Bangladesh. The article has addressed four roles of TVET for HRD (i) Socio-economic development, (ii) Global Competitiveness, (iii) Career mobility, and (iv) Flexibility in Qualifications Recognition. The common problems of TVET program have been identified with some literature review and documents analysis; the categories of those problems were (i) Engaging community and industry in TVET, (ii) Financial difficulties, (iii) TVET students to pursue higher education, (iv) Relevance to the labour market and traineeships, (v) Difficulties faced by TVET teachers, and (vi) Some emerging problems of TVET. The expected outcomes of the articles were to consider the problems of TVET program to improve its quality. The researchers suggest the TVET professionals to take some initiatives to overcome the problems of TVET for HRD of the country.

Keywords: Problems of technical and vocational education and training (TVET), Quality education.

Introduction

Education is a basic human right and considered by many as a key tool for national development. The World Bank (2002), United Nations Development Programme (UNDP) [13], United Nations Educational, Scientific and Cultural Organization (UNESCO) [15] all suggest that Bangladesh urgently needs to utilize its overcrowded population and large labour market. To improve the quality of employees, Bangladesh's people need to be trained in modern professional based and job oriented technical, technological and vocational programs. The World Bank [17] described Bangladesh as lagging behind the economic growth of technical and technological modernization, but went on to note that "Bangladesh's greatest strength is its people. Ethnically homogeneous and firmly wedded after much turmoil to the intuitions, they are well known for hard work and resilience under stress" World Bank [17]. One of the key challenges to the development of Bangladesh is creating employment for new entrants into the labour force. Nearly 51% of Bangladesh's workers have no education and only a small fraction (0.4%) has received vocational, technical, or skills development training (Bangladesh Labour Force Survey 2008). Without a proper education and skills, the best jobs these children and youth are able to secure are low paid jobs in the informal economy. With effective and appropriate education and training i.e. TVET, these young people have the potential to be skilled and productive.

Technical, Vocational Education and Training (TVET) sometimes also known as Vocational Education and Training (VET) or Career and Technical Education (CTE) - can be regarded as a means of preparing for occupational fields and effective participation in the world of work. It also implies lifelong learning and preparation for responsible citizenship. TVET includes technical education, vocational education, vocational training, on-the-job training, or apprenticeship training,

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delivered in a formal and non-formal way. TVET relates to a specific trade in which the learner participates, hence the term vocational, while technical means that learner directly develops expertise in a particular group of techniques. TVET is meant to prepare learners for careers based on manual and practical activities. Strengthening and upgrading TVET is also regarded as important for achieving the Millennium Development Goals (MDGs). The definition of TVET adopted at the Korean Congress is: "Those aspects of the educational process involving, in addition to general education, the study of technologies and related sciences, and the acquisition of practical skills, attitudes, understanding and knowledge relating to occupants in various sectors of economic and social life [15]".

Technical education mainly refers to theoretical vocational preparation of students for jobs involving applied science and modern technology. It emphasizes the understanding of basic principles of science and mathematics and their practical applications, rather than the actual attainment of proficiency in manual skills as is the case with vocational education. The goal of technical education is to prepare graduates for occupations that are classified above the skilled crafts but below the scientific or engineering professions [2]. Vocational education and training prepares learners for jobs that are based in manual or practical activities, traditionally non-theoretical and totally related to a specific trade, occupation or vocation, hence the term, in which the learner participates. *Vocational education* is usually considered part of the formal education system, and usually falls under the responsibility of the Ministry of Education. On the other hand, *Vocational training* is better linked to the labour market and employment development system, and usually falls under the responsibility of the Ministry of Labour and Social Affairs. TVET is often offered at secondary and post-secondary levels [3].

Brief History of TVEST of Bangladesh

Bangladesh has historical links with Britain and it has inherited an education system based on the UK model. After Second World War when the maximum countries of the world was developing very fast in science and technology at that time East Pakistan (Now Bangladesh) Government realized to develop technical education and to make technical persons for industries, agriculture, medical and other sides. So in 1960 the Directorate of Technical Education (DTE) was established for development of technical and vocational education. The Directorate of Technical Education (DTE) initiated rapid development and expansion works of degree, diploma and trade level technical education in the country. Bangladesh Technical Education Board (BTEB) takes the responsibility for curricula and associated matters. It arranges for development of learning materials, grants the affiliation to the concerned institutions, conducts examinations of the students completing different courses in different areas of vocational and technical education, and awards certificates to the successful candidates, among others [7].

The aims of the article were to explain the essential roles of TVET for national development and to explore the inherent problems associated in TVET programs in Bangladesh.

Essential Roles of Tvet for HRG

TVET is extremely well-positioned to contribute to global development, participation and interaction. It is especially flexible in nature and is greatly oriented to the labour market which allows appropriate adaptation to changing trends in the local, national and global labour market and economic sectors. In the following text, some important global societal trends are highlighted in which TVET is particularly suited to facilitate adaptation and which are important for HRD progression:

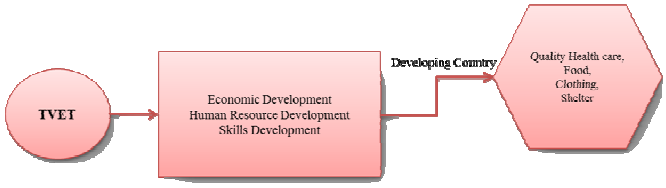

Figure 1. Socio-economic development

Socio-economic development: TVET is extremely suitable for contributing to national socio-economic development and human resource development. The skills development provides individuals with a better chance to obtain productive and profitable employment thereby sustainably increasing their earning power and access to a quality life through being able to afford quality health care, food, clothing and shelter. This is particularly crucial in developing countries as like Bangladesh where the majority of people currently live in poverty. When TVET provision is gender-balanced and focused on strengthening the sustainability and profitability of private enterprises, it can foster additional economic development since in developing countries females form approximately half of the labour active population and are usually self-employed [1] [8].

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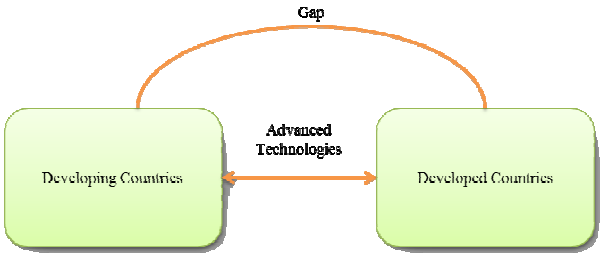

Figure 2. Global Competitiveness

Global Competitiveness: Not only can TVET support the socio-economic welfare of individuals, but it can also increase international competitiveness. Currently, technological changes are taking place at an extremely fast pace in a fast globalizing world [3] [4]. The gap in knowledge and ownership of advanced technologies between developing and developed countries has always been large, with developing countries often adopting technologies and solutions innovated elsewhere and lacking the capacity and resources to adapt most of the technologies to the local context. Transfer of technical knowledge through TVET, coupled with creative skills and career guidance, can raise the innovative capacity of developing countries, allowing them to innovate quality technological solutions for their own context and for export and to keep up with the developed world [9]. Without such interventions, the development gap will widen even more and reduce the competitiveness of developing countries in the global economy.

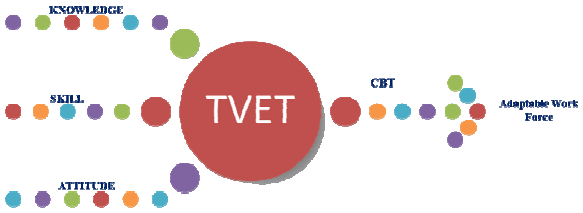

Figure 3. Career mobility

Career mobility in an increasingly dynamic employment market: Along with changes in economies and world markets, new concepts have emerged in the field of TVET, such as that of "employability" and "competence-based training (CBT)". Employability refers to an individual's capability to move self-sufficiently within the labor market through the knowledge, skills and attitudes. Competency is the application of knowledge and skills relative to an industry standard of performance and focuses on what is expected of an employee in the workplace, rather than on the just knowledge acquisition [10]. It represents the ability to transfer and apply skills and knowledge to new situations, disciplines and environments. The CBT approach which is increasingly being adopted by TVET institutions, therefore, facilitates the creation of an adaptable workforce.

Figure 4. Flexibility in qualifications recognition

Flexibility in qualifications recognition: There is a growing recognition that the methods of developing a competence are varied and that knowledge and know-how can also be acquired through means other than simply following a training course, and in different settings other than the formal classroom [11] [12]. The places and role of the various actors of the training process have become fuzzy and new articulations between learning and working are developing. This is particularly true for TVET which has a strong orientation to the labour market.

Problem Associated in TVEST Programs in Bangladesh

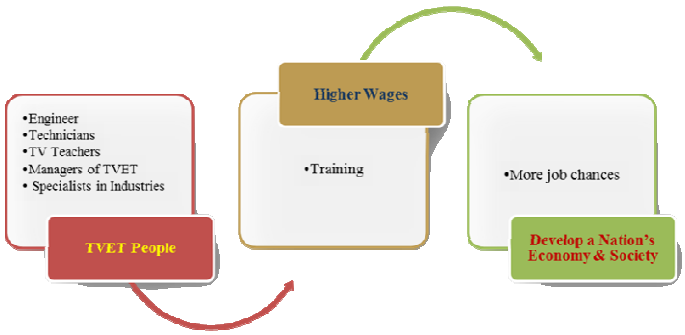

Figure 5. Engaging community and industry in TVET

Engaging community and industry in TVET: In order to develop a nation's economy and society in Bangladesh, it is important to note, that two thirds of the population generally work in jobs that require a skill level which is usually associated with vocational education and training. It has been always a challenge to

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change the mindset of parents, the community and stakeholders about vocational education being second choice to academic education. Most parents (even the ones with TVET background) want to see their children becoming engineers, doctors, lawyers, etc. just because they believe this will give them better job opportunities. This challenge is vital to development of TVET and it is apparently one of the major obstacles to improve the social status of TVET. If students who received a vocational education routinely earned better incomes than those who choose the academic route, then parents would factor this in their decision making [13] [14]. The challenge is to create vocational programmes that deliver professionally successful graduates. When we rise to this challenge, the brightest students will be fighting for a place on TVET schemes. In some developed countries, employers are queuing up to hire graduates of TVET programs and there are more requests from employers each year than there are graduates. This means graduates of TVET institutions earn income better than graduates from other high institutions.

Another negative image of TVET is about social class. A plumber can be making as much money as an engineer but at the end of the day, he is still a plumber with a lower social status. Money does not always equal higher social status. Apparently in some circles, a university degree is still the ticket to social mobility even if it does not lead to employment or more money. How do we change that perception? This is interesting question and part of the answer to the question is that better quality of TVET will lead to higher performance and productivity of TVET trained graduates and hence higher wages and more job chances [15].

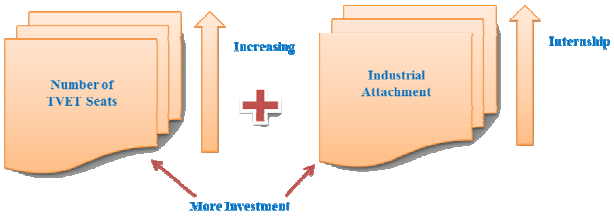

Figure 6. Financial difficulties

The financial difficulties: Providing good TVE needs more money for practical workshop facilities, and also demands industrial attachments for internships [16]. Lauglo and Lillis (1988) say that vocational and practical subjects 'pedagogic systems have unusually multifarious expensive requirements (such as equipment materials, resources, curriculum, support system, personnel, managements requirements, etc.), which are not easily met. As a poor country, achieving a high budget for education is a real challenge for Bangladesh. It is also added that budget for TVE is very low in comparison with other sectors of education (BANBEIS, 2007). The present distribution of government revenue budget on TVE is a lowly 1.4% and development budget is only 4.3% . The teachers have low salary and are not getting enough supports from financial institutions [16] [3]. This may be a source of difficulties also. Increasing number of TVET seats available which implies more investment.

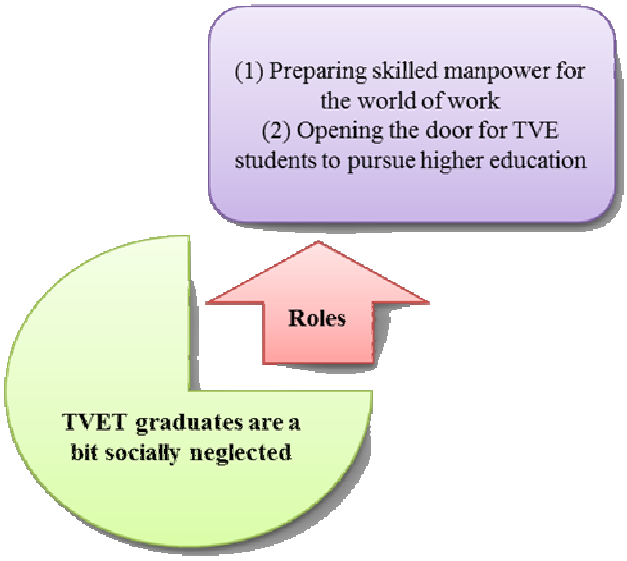

Figure 7. TVET students to pursue higher education

TVE students to pursue higher education: The students of TVE suffer anxiety about the purpose of TVE, being only preparing labourers to get more profit from them, saying it is a moral obligation to eradicate such anxiousness and help them understand that TVE has two roles - preparing skilled manpower for the world of work, and opening the door for TVE students to pursue higher education with a solid foundation. Unfortunately, higher education is very limited for TVE school graduates in Bangladesh. In addition, once a student has a gap of two years academic study, he/she cannot enrol in further higher education. In these circumstances if a TVE graduate joins his/her job after completion of secondary and higher secondary education, he/she cannot come back into further education; Higher educated people in general discipline areas can work at any place but higher educated people from TVE can only work in TV related placements, which is low in terms of social prestige. All boards, educational enterprises, and other organizations are under the control of their mother organization named ministry. The head of the ministries is the honourable minister who is appointed politically so

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he/she does not need prerequisite qualifications [2]. The second head of the ministries is the secretary, who must have the general educational background and mainly secretary controls the ministries even if it is Ministry of Science and Technology. Therefore the top authorities enjoy the respect and favour of general graduates rather than TVE graduates. In these circumstances TVE graduates are socially neglected so bright students do not have much interest in studying TVE.

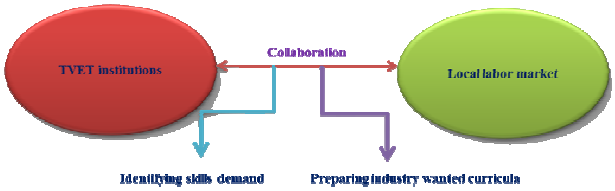

Figure 8. Relevance to the labor market and traineeships

Relevance to the labour market and traineeships: Close collaboration between TVET institutions and the local labour market is important in order to align the curricula with skills needs of the labour market. However, most TVET curricula in developing countries are supply-driven, and have little input from the labour market. When there is collaboration due to improvements in the TVET system, the labour market does not have enough places to accommodate student trainees, which causes overcrowding during traineeships (e.g. Mining and mine survey and Environmental Engineering). Identifying skills demand and matching with supply is also most important task of the curriculum developer. Establishing and strengthening the links between industry and TVET institutions is very essential and develop a coordinated and flexible recruitment and training strategy to service that demand by the labour market. Capacity of TVET institutions should be enhanced the offer courses as industry wanted.

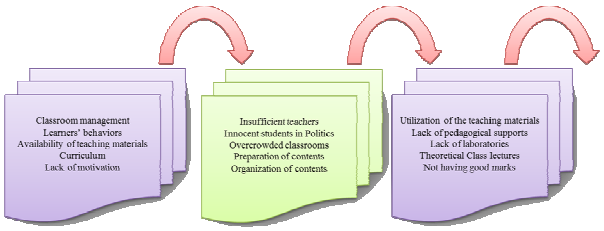

Figure 9. Difficulties faced by TVET teachers

Difficulties faced by TVET teachers: According to earlier findings in similar studies it has seen that the classroom difficulties may be related to: classroom management, learners' behaviors (attendance, discipline, performance based ...), availability and effective use of teaching materials, the curriculum, lack of proper motivation (incentives). The difficulties may arise from the Special teaching and assessment strategies, human supports, and/or individualized equipment required enabling a student to learn and to demonstrate learning. The Major Problem is in Polytechnic Institutes that a lot of posts of teachers have vacancy. So, insufficient teachers cannot manage the classes properly. Teachers faced many difficulties in their classroom [3] [5]. These difficulties may be related to the management of the class and the behaviors of the students. Overcrowded classrooms, made up of diverse groups of students of varying ethnicity and socioeconomic characteristics, showed extreme levels of disruptions. The politicians of Bangladesh have been playing a nasty role in education institutions to use the innocent students in Politics the last forty years. So, many students who are involved with politics are disturbing the teachers and authority.

The disruptive student might challenge teacher authority, interrupt, talk out of turn, respond loudly, argue, react emotionally, or socialize in class. Sometimes the difficulties arise from the lack of mutual understand between the teachers and the students. In this case it is necessary to create a student-teacher conference; teacher's planned dialogue with an individual student about the student's learning. To overcome some difficulties of this type the teachers must be in proper observation; the ongoing process of watching, listening, and being attuned to students' behavior, emotional state, interests and abilities, patterns of development, and progress in learning in order to meet the needs of students and assess and evaluate their development and learning. The difficulties of classroom instruction may be related to the teaching-learning process like the preparation and organization of the contents, the proper utilization of the teaching materials, it may related also to the lack of proper pedagogical supports like books and equipment. The lack of laboratories and adequate materials that reflect the real environment of the industries is also a problem in the technical education and this problem may lead the class lectures to be more theoretical than practical. Sometimes the students are not motivated in learning the subjects because of not understanding or not having good mark [6].

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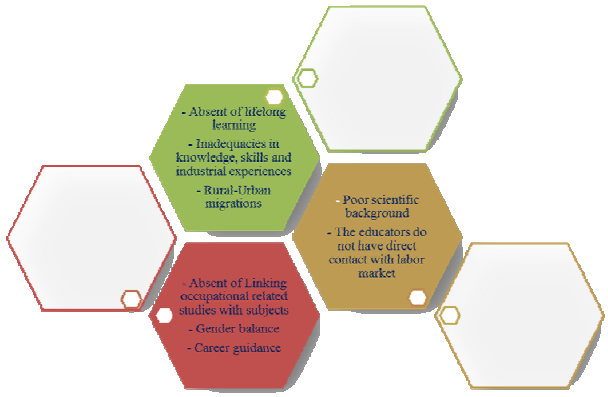

Figure 10. Some emerging problems of TVET

Some difficulties there are: the lack of pre-service training for some category of teachers and lack of in-service training for almost all, the lack of proper infrastructures for conducting the technical education programmes. One of the major problems faced by the teachers is the lack of proper consideration of technical and vocational education in the policy of education of the government this leads to the lack of allocation of enough share of the resources to the technical education and the vocational training [1] [8]. There is a challenge for putting in place a truly coherent and comprehensive continuing TVET and lifelong learning strategies. Such strategies should be actively encouraged and actions at all levels of continuing TVET and lifelong learning should be developed.

While national systems of testing and certification remain necessary and continue to require improvement, one salient impact of globalization has been the international recognition of qualifications. The establishment of national training frameworks in a large number of nations has begun the broader recognition of competencies and qualifications. The Philippine Technical Education and Skills Development Authority (TESDA) highlighted inadequacies in knowledge, skills and industrial experience of TVET teachers and noted that they must be able to transmit to the trainee's actual occupational and practical skills which are relevant to present practices in the workplace. The changing role of TVET instructors involves linking occupational related (academic) studies with technical subjects. The increasing use of ICT and other media also contributes to this shift in teaching and learning methodologies. Since many nations have developed dedicated institutions for training TVET and polytechnic personnel, change should also take place in these institutions in order to foster the desired teaching and learning methodologies.

Career guidance at entry points into secondary and tertiary education levels could remove stereotypes about TVET and provide students with objective knowledge on the advantages of TVET. The labor force in the country amounts to 60.3 million of which 62% are male and 38 % are female. About 58.1 million (96.3%) of the labor force i.e. are engaged in income generating activities; while 2.2 million (3.7%) are unemployed. Sometimes poor scientific background of students enters in polytechnic institutes [9] [17]. They face more difficult to learn parallel with other students who have scientific background in SSC level. The labor market misses out of valuable manpower with practical technical skills. For example, maximum students of diploma in engineering after graduation have no sufficient computer operating knowledge such as AutoCAD, Microsoft Office etc. Furthermore, upgrading of teachers, training facilities and curricula improvements would improve the image and quality of TVET, draw more students and provide a solid technical manpower base for the nation. In most developing countries, there are not enough specialized TVET teachers at both secondary and post-secondary levels. This has repercussions on the quality of students that are produced. Furthermore, most of the educators do not have direct contact with the labor market (through short-term) periodic second mints which would modernize and upgrade their practical knowledge on the actual technologies being employed in the workplace, as well as offer them insight into the actual practical needs of the labor market. This knowledge could then be incorporated into lessons or be passed on to colleagues through peer-mentoring.

The education system adopted in Bangladesh emphasizes exclusively on literacy, and numeracy. This method of instruction places emphasis on recitation, repetition and memorization. The current system of education is highly theoretical and lacks practical bases from which students cannot develop proper technical skills and capacity to meet the challenges of the economies today. In most cases, the concepts and theories learnt are not applicable. In Bangladesh, vocational and technical subjects are not offered especially at the primary school, at the secondary school level, vocational subjects are offered as elective subjects and a student may choose only one of each. And even where these subjects are offered, little emphasis is placed on them. The appropriate equipment may be lacking and students only sit for examinations in these courses to fill the necessary units, but not to be furthered or pursued in career development. As such, the education system favors general academics, with the curricula being biased towards the achievement of white collar jobs [13] [16]. The former model argues that underdeveloped economies consist of two sectors (1) a traditional agricultural

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subsistence sector characterized by zero or very low productive 'surplus labor' (2) a high productive modern urban industrial sector into which labor from the subsistence sector is gradually transferred. This model basically argues that the structural and economic differences between the rural and urban sectors are the fundamental cause of rural- urban migration.

Recommendations

In the foregoing discussion, it is evident that the significance of TVET is not being felt in Bangladesh because of the limitations facing this sector. Thus, this article suggests the following:

(i) There is need for increased funding towards TVET in Bangladesh. This should be directed towards research and development, acquisition of appropriate and up-to-date equipment and tools and general maintenance and management of TVET institution.

(ii) More attention or equal attention should be offered to the TVET sector as that offered to the general academic education.

(iii) There is a need to emphasis on rural development in order to reduce income differences between the urban and rural areas. Thus, those with technical and vocational skills will not have the urge to transfer their skills to already overpopulated urban areas where their skills become unutilized. In addition, more TVET institutions should be established in the rural areas and they should emphasis at providing technical and vocational skills to meet the needs of the community.

(iv) There is also need to look into the economic policies upheld by our country. Ways and means in which capital can easily be obtained by those with entrepreneurship skills but are unable to start income generating activities due to lack of capital should be established. Governments should encourage the development of micro finances and also through their national commercial banks offer friendly loans to even the poor and young entrepreneurs willing but unable to establish money making activities.

(v) Although the effects of globalization are inevitable, governments need to develop policies that protect their economies against harmful importation of products and services that discriminate against those goods produced internally. This can be achieved by looking inwards and encouraging domestic production to substitute for imports.

(vi) To ensure that TVET is more market driven, it is necessary for the governments to involve organizations in the formulation of the curricula and in the certification of skills offered. In addition the governments should encourage organizations to participate in providing on the job training by creating incentives for companies by reimbursing training costs, by subsidizing apprenticeship wages and for those companies who earn huge profits, by allowing for tax concessions, and so forth.

Conclusion

Lack of responsiveness of the curriculum to the changing labor market, decline in teaching standards, lack of maintenance facilities and equipment, lack of research and development, and lack of dialog with the employer are most important barriers in TVET for HRD. A well-established TVET system should lead to the development of technologies that are tailored towards meeting the needs of the community. However, it must be accentuated that acquisition of skills is not sufficient to eliminate all the problems facing Bangladesh's economies. It is a prerequisite, but a lot more needs to be executed. Political instability, poor governance, poor economic policies and unequal distribution of income among other ills must be abolished if the significance of TVET is to be felt.

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