

VOCATIONAL EDUCATION AND TRAINING (VET) IN HUMAN RESOURCE DEVELOPMENT: A CASE STUDY OF BANGLADESH

Md. Aktaruzzaman

Assistant Professor, Dept. of ITS
Islamic University of Technology (IUT), Dhaka
BANGLADESH
Email: akhtar.iut@gmail.com

Dr. Che Kum Clement

Associate Professor and Head, Dept. of ITS
Islamic University of Technology (IUT), Dhaka
BANGLADESH
Email: chekum@iut-dhaka.edu

ABSTRACT

Due to increasing globalization and liberalization in most of the countries across the world, realization of the challenges faced to make Vocational Education and Training (VET) system to be more need-based and effective, more dynamic and responsive to the changes taking place in the industrial scenario. The graduates coming out from VET institutions need to be more capable of excellent performance. Therefore, VET system must respond to the rapidly changing technological needs of the world of work by continuously evaluating and modifying curricula, introducing new courses, vocational teacher education, modernizing laboratories and workshops through close partnership between VET institution and the world of work. Therefore significant reform need to be made in the domain of better adapting vocational teacher education and well structured VET system and it has the direct impact to enhance competitiveness of skill workforce for the labor market, productivity and to promote entrepreneurial activity. This paper is an attempt to understand the VET system of Bangladesh in the context of labor market and to propose policy options that improve labor market outcomes and drive future economic growth.

INTRODUCTION

Despite the calamities that hit the country almost every year, Bangladesh's economic growth averaged 5.7% per annum from 2000 to 2006. Nevertheless, about half of the population lives below the national poverty line. Achieving accelerated poverty reduction and related Millennium Development Goal targets would require Bangladesh's economy to grow by 7% - 8% per annum. Significant investment is required to achieve this figure. Attracting investments will require upgrading the skills and competencies of human resources. The national poverty reduction strategy (NPRS) recognizes the potential contribution of VET in reducing poverty while supporting economic growth (GOB, 2006).

Bangladesh will need to create at least two and one-quarter million jobs per year to accommodate a near doubling of the labor force from its present size of 55 million to 100 million in 2020. Given a saturated agriculture sector, industry must create 16 million jobs by 2020 - a 5.5 percent annual increase. The largest portion of the new jobs needed over the next two decades will have to come from the service sectors including trade, construction, transportation and communication. This paper is intended to help policymakers by first providing a structural framework of VET in Bangladesh and the ways by which different VET courses have been used in education thus far. Second, it addresses financing of VET both by the government and private sectors along with their outcomes. The paper concludes with a discussion of six key issues and recommendations that policymakers in Bangladesh must reckon with when making decisions about the establishment of technology-based VETs throughout the country (Mahajan, 2006).

Structural Framework of VET in Bangladesh

Formal vocational education and training begins after Class VIII. The VET system is comprised of three levels of skills development below that of higher education degree, namely basic skills, certificate and diploma levels. The first level, basic skills, is a two year course focusing on manual

skills, which is offered both inside and outside of schools. Prospective students must have completed grade VIII.

Table 1. Training Capacities in Public and Accredited Private Institutions, 1998 and 2005

Level/Course	Number of Institution		Intake Capacity		Private Share	
	Public	Private	Public	Private	Institutions	Students
<i>Vocational Education, 1998</i>						
Basic Skill Level	64	3	23,500	1,500	4%	6%
Certificate Level...						
- SSC (Voc)	62	510	5,380	25,800	89%	83%
- HSC (BM)	-	220	-	8,800	100%	100%
- HSC (Voc)	51	-	1,520	-	0%	0%
<i>Vocational Training, 1998</i>						
Diploma Level	36	7	13,155	1,160	16%	8%
Total	213	520	43,555	28,460	71%	40%
<i>Vocational Education, 2005</i>						
Basic Skill Level	76	414	12,370	13,300	84%	52%
Certificate Level...						
- SSC (Voc)	110	1,303	23,570	63,450	92%	73%
- HSC (BM)	-	955	-	50,000	100%	100%
- HSC (Voc)	64	-	5,560	-	0%	0%
<i>Vocational Training, 2005</i>						
Diploma Level	54	143	15,020	13,230	73%	47%
Total	304	1,860	56,520	89,980	86%	61%

Source: (DTE, 2005)

At the certificate level, the two-year Secondary School Certificate, SSC (Voc), covers a similar set of skills and also requires grade VIII completion. Students may proceed beyond the SSC (Voc) to the Higher Secondary Certificate, HSC (Voc), requiring an additional two years of secondary schooling after grade 10. Business Management courses are also offered as a two-year Higher Secondary Certificate, HSC (BM), but as a distinct stream. At the post-secondary level, there are four-year diploma-level courses, which are offered through polytechnic institutions (such as the Textile Institutes). The basic skills and certificate level courses can be classified as vocational education, while the diploma level courses can be classified as vocational (post-secondary) training (Table 1).

In an attempt to increase the capacity of the system over recent years, the Government has facilitated a significant expansion of private sector places. Until 1990, private sector participation had been negligible. However, by the late 1990s, the private sector was supplying about 40 percent of total capacity, and by 2002, this proportion had gone up to over 60 percent (Abrahart and Alam, 2002).

This private sector growth has been driven by public financing, especially of vocational education. The Government has facilitated this increase by providing salary subventions, which meet 90 percent of salary costs for staff who teach SSC (Voc) and HSC (Voc) and HSC (BM) courses in private institutions. Private colleges offering diploma courses have also expanded but these colleges receive no subventions and must fully recover their costs to remain in business.

Although the VET sector provides numerous types of courses (Table 2), private providers tend to focus on less expensive ones. Typically, this means computer courses and language courses, which

require fewer fixed costs to begin operations at both the vocational education and vocational training level. This preference has also resulted in a focus by many private providers on HSC (BM) courses, which have ballooned from 200 selected institutions with less than a 9,000 student intake capacity (1998) to 955 institutions with an intake capacity of more than 50,000 students (2005). HSC (BM) courses do not provide management training, but emphasize straightforward commerce-related skills such as accounting, banking, basic computing and entrepreneurship (BBS, 2005).

Table 2. Courses of VET in Bangladesh, 2010

<p>Diploma In Engineering: Vocational Training</p> <ul style="list-style-type: none"> - Architecture Technology - Civil Technology - Power Technology - Mechanical Technology - Electrical Technology - Electronics Technology - Chemical Technology - Computer Technology - Industrial wood Technology - Refrigerator and Air-conditioning Technology - Automobile Technology - Food Technology - Glass and ceramic Technology - Graphic arts Technology - Surveying Technology 	<p>SSC (Vocational): Vocational Education</p> <ul style="list-style-type: none"> - Dress making and tailoring - Audio-video system - General electrical works - Computer application - Automotive and machinist - Refrigeration and air-conditioning - Machine tools operation - Building maintenance - Civil construction - Plumbing and pipe fitting - Poultry rearing and farming - Farm machinery - General mechanics - Welding & Drafting - Wood working and cabinet design - Fish culture and breeding
<p>HSC (Business Management): Vocational Education</p> <ol style="list-style-type: none"> 01. Accounting 02. Banking 03. Computer Operation 04. Secretarial Sciences 05. Entrepreneurship 	<p>HSC (Vocational): Vocational Education</p> <ul style="list-style-type: none"> - Welding and fabrication - Refrigeration and air-conditioning - Electrical works and maintenance - Fish culture and breeding - Computer operations and maintenance - Automobiles - Electronic control and communication - Agro-machinery - Machine tools operation - Clothing and garments finishing - Building construction and maintenance - Poultry rearing and farming - Wood working and cabinet design
<p>IT/ICT Training</p> <ol style="list-style-type: none"> a. Introduction To Computer And Word Processing b. Q-Basic Programming c. C Programming d. Computer Operation And Spread Sheet Analysis e. Computer Operation And Data Base Using f. Database Programming 	

Source: (BTEB, 2010)

In spite of this growth, enrollments remain well below the Government's stated policy goal of 20 percent of the share of all secondary students. VET, at all levels, is chosen by few students. Out of about eight million students enrolled in secondary schools, less than 250,000 are enrolled in vocational education - equivalent to three percent of total secondary school enrolment. For example, there are 28,000 places in diploma courses as compared to about 1.5 million enrolments in higher secondary schools and about 150,000 in tertiary degree level courses.

Non-government agencies also provide non-accredited training, though there are no estimates of the size and scope of their operations nationwide. Several NGOs and private providers provide basic skills and training to target groups such as youth, the underprivileged, and the rural population. However, while there are a few prominent organizations of this type providing training, most are very small in terms of enrolment and facilities and usually provide short-term training (ranging from 4 to 6 months duration) in income generating activities such as tailoring/sewing, embroidery for women and

electrical, welding, radio/TV, and carpentry for men. Many private trade schools and institutions are said to offer non-formal, non-standard short courses. Many are computer-related courses intended for technical and vocational students and university graduates; others provide short-term training in activities that are linked to the demand for skilled and semi-skilled workers in the Middle East (such as tailoring, welding, drafting, small machine repairing and driving) (Rafiq, 2003).

The Underprivileged Children's Education Program (UCEP), is considered to be extremely effective, and provides three types of training to some 25,000 students in 44 schools and centers across the country: general schooling with vocational training in 32 schools, technical training in 3 technical schools, and para-trade trainings in 9 para-trade training centers. UCEP's primary emphasis is on the provision of general education with vocational content for urban working and distressed children (ages: girls 10+, boys 11+) who have little to no opportunity for normal schooling, are engaged in hazardous jobs, are laboring an average 48 hours per week, and are earning less than US\$ 5 per month. UCEP has successfully targeted dropouts from formal education. The main characteristics of UCEP's operations that lead to the success of its model include: flexible schooling hours, learning while working, emphasis on practical training (80%), on-the-job training, curriculum review in consultation with employers, trades as per market needs, and linkages with other technical schools, employers and the community. With an enrollment of about 20,000 in its education and training programs, UCEP is among the largest NGOs of its kind in Bangladesh (UCEP, 2000). MAWTS is an agency that provides training to economically disadvantaged parts of the population. It provides short-term, modular vocational training using mobile centers – often in basic skills. About 2,000 students are trained annually.

The primary responsibility for overseeing the VET system rests with two agencies: the Directorate of Technical Education (DTE) and the Bangladesh Technical Education Board (BTEB). DTE is responsible for setting the overall policy framework of the entire vocational education and training system. BTEB, a statutory agency, is responsible for maintaining the qualifications framework for VET: setting training standards (and relevance to the labor market), student assessment, certification of results, and accreditation of institutions. BTEB covers all accredited institutions, both government and non-government institutions.

However, the VET institutions are managed by a number of ministries. These include: (a) technical schools and colleges run by the Ministry of Education (MoE) – these form the vast majority of the entire system; (b) Technical Training Centers financed and managed by the Ministry of Labor and Manpower (MoLM); (c) the Ministry of Local Government; (d) the Ministry of Agriculture (MoA); (e) the Ministry of Forestry; (f) the Ministry of Textiles; and (g) the Ministry of Defence. A total of 11 ministries administer accredited VET programs. Additionally, a number of ministries offer training through non-accredited courses, such as the basic training in livestock, pisciculture, and poultry farming provided by the Ministry of Youth and Sports to youth under 30 years of age.

Financing VET

The Government is the major financier through its annual budget, which is allocated to a number of ministries. Government funds are used to finance public sector institutions and to provide subventions to private providers at the vocational education level. Students also contribute to VET financing by paying tuition and examination fees. However, student fees in public institutions are usually not substantial sources of institutional funding and are largely offset by the fact that students receive stipends and scholarships [Ali, 2005]. Though all private vocational training institutions are completely self-funded through fees, most private vocational education institutions rely heavily on the government subventions that finance 90 percent of teacher salaries, as happens in the general secondary school system. Industry also pays for training either by buying training for their employees from public or private providers or through financing on-the-job training (Ahmed, 2005).

Government Financing

Although budgets are allocated to numerous ministries for VET, the largest recipient is the Ministry of Education (MoE). MoE receives a budget to operate public sector VET institutions managed by

DTE, as well as a budget for subventions to meet salary costs of private vocational education schools. MoE accrues roughly 70 percent of the total government budget allocated on VET. Other major recipients include the Bureau of Manpower, Employment and Training, and the Ministry of Agriculture (MoA). BMET is administered by the Ministry of Expatriate Welfare and Overseas Employment (MoEWOE). Ministry of Agriculture is responsible for colleges running diploma courses in agriculture (BMET, 2004).

A majority of public spending on VET (approximately 55 percent) is given to vocational training institutions, while vocational education institutions comprise the second largest spending category (28 percent). A significantly smaller proportion of funding is allocated to the Department of Technical Education and to the line item 'other technical institutes'. Technical Teachers Training Colleges, meanwhile, receive the smallest share of funds at about 3 percent of the total. This breakdown of spending by type of institution is depicted in Figure 1.

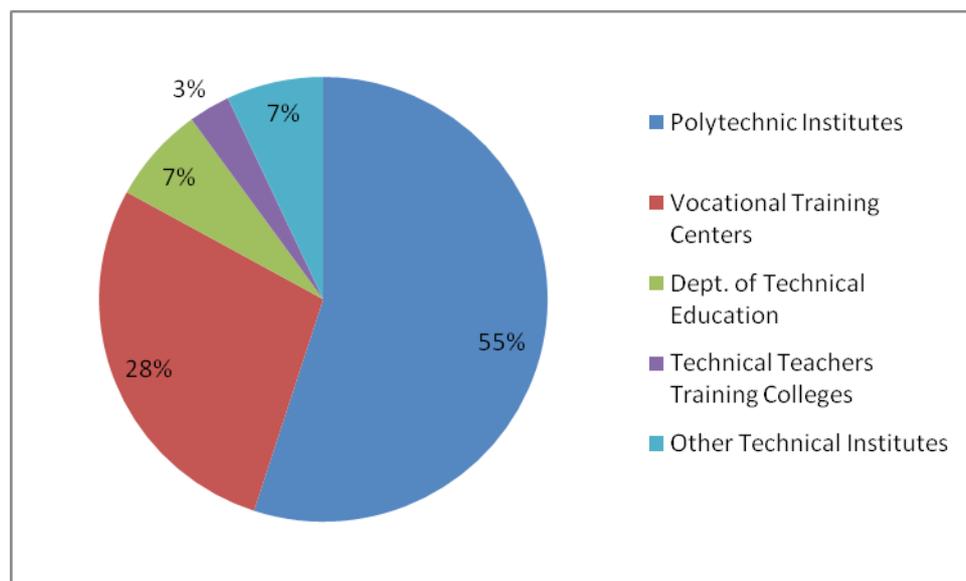


Figure 1. Proportions of budget allocated to institutions, by type
Source: Ministry of Finance, Demands for Grants and Applications, 1998-2005 (GOB, 2005)

Private Finance

Private institutions are able to raise revenue through tuition fees, the production and sale of goods, and by providing training services. The revenue is earned in addition to government support for salaries and officer pay. Private vocational education institutions, as with all accredited non-governmental schools, receive government subventions, which cover 90 percent of staff salaries.

A recently conducted institutional survey highlights the difference in source of funding between different types of institutions. The survey covered 357 accredited vocational education and vocational training institutions. Close to 70 percent of revenues for government institutions are from government grants. Public vocational training institutions raise about 20 percent of their resources through fees (Table 3).

Government subventions constitute the majority of income for private vocational education institutions. Close to 55 percent of income is through government grants while tuition fees constitute less than 17 percent of total income.

On the other hand, private vocational training institutions raise most of their revenues from fees. There are large differences between the fees charged in private and public vocational training institutions, primarily because private training institutions do not receive government subsidies.

Hence close to 80 percent of revenue of private institutions are generated through fees, as compared to 20 percent in the case of public institutions. For example, the highest charging institution, Bangladesh Institute of Fashion Technology (BIFT), is completely self-funding through fees. BIFT charges at least Tk 85,000 for a one-year training course. Shorter courses seem to average about Tk 5,000 a week (BIFT, 2000).

Table 3. Composition of sources of funding by public vs. private and type of course

Source of Financing		Government			Private		
		Vocational Education	Vocational Training	Total	Vocational Education	Vocational Training	Total
Government grants	Amount	805.1	953.3	824.9	755.8	-	743.2
	Share (%)	75.2	69.0	75.0	54.6	0.0	51.0
Tuition and other fees	Amount	52.8	277.7	80.6	200.2	1,428.1	278.3
	Share (%)	4.9	20.1	7.3	14.5	76.8	19.1
Sale of products	Amount	33.7	82.9	39.5	101.4	14.5	99.2
	Share (%)	3.2	6.0	3.6	7.3	0.8	6.8
Income from training	Amount	52.3	-	52.3	127.0	120.8	133.7
	Share (%)	4.9	-	4.8	9.2	6.5	9.2
Others	Amount	126.5	68.1	103.2	198.9	295.8	202.0
	Share (%)	11.8	4.9	9.4	14.4	15.9	13.9
Total	Amount	1,070.5	1,382.0	1,100	1,383.3	1,859.2	1,456

Source: (World Bank assessment report, 2006)

Neither private nor public institutions raise a significant share of resources from the sale of goods and services, such as the provision of training to the private sector. This is a discouraging sign – particularly for the private sector institutions, which might be expected to be more attuned to the needs of the market.

Outcomes of the VET System

The outcome of the VET system is its graduates. While the number of students who have appeared in examinations for the SSC (Voc) has increased at a dramatic rate, the pass rates have declined sharply.

Table 4. SSC (Voc) Examination Results

Year	No. Appeared in the Board Exam			No. Passed		
	Boys	Girls	All	Boys	Girls	All
1997	NA	NA	1,586	NA	NA	998
1998	NA	NA	5,276	NA	NA	1,954
1999	6,438	2,165	8,603	NA	NA	5,860
2000	10,683	3,877	14,560	6,585	2,420	9,005
2001	14,241	5,814	20,055	7,449	4,014	11,463
2002	17,189	8,401	25,590	7,670	3,450	11,120
2003	21,460	10,168	31,628	8,703	3,606	12,309
2004	21,613	9,893	31,506	11,345	4,754	16,099

Source: (Guardian, 2005)

In the five years from 1999 to 2004, while the number of examinees increased almost four-fold; pass rates in standardized examinations has declined. The downward trend in the pass rate for SSC (Voc) may be due to tighter examination controls designed to address cheating but a significant factor may also be the poor quality of instruction especially those have sprung up recently in large numbers (Table 4).

The number of students who have appeared in examinations for the HSC (BM) certificate have increased in recent years, although pass rates have also climbed (Table 5). The increasing pass rate should, however, be interpreted with caution. HSC (BM) institutions have financial incentives to increase their pass rates artificially because the final assessment of those institutions depends heavily upon internal assessments undertaken by the institutes. For this reason, the dramatic increase in the pass rate in the past two years does not necessarily represent enhanced quality of education.

Table 5. HSC (BM) Examination Results

	Appeared in the Board Exam			Number of Students Passed			Pass Rate		
	Boys	Girls	All	Boys	Girls	All	Boys	Girls	All
2002	9,873	3,786	13,659	4,373	1,653	6,026	44.3	43.7	44.1
2003	13,141	5,083	18,224	8,373	3,192	11,565	63.7	62.8	63.5
2004	15,046	5,297	20,343	10,209	3,683	13,892	67.9	69.5	68.3

Source: (Guardian, 2005)

ISSUES AND RECOMMENDATIONS

- The lack of linkage between the VET institutions and industry is a big issue and the main reason of low employment rate of VET graduates which is the biggest concern for its existence (Figure 2). From the labor demand perspective, employers expressed concern about the quality of graduates. They perceived that the system is continuing to produce graduates for old and marginal trades, which have no market demand, while newer trades with substantial skilled labor needs are left unmet. Employers were also not content with available VET training facilities including machinery, equipment and trainers. They suggested that the government be more proactive in involving them in the management of the system to ensure that VET was responsive to their needs. They also felt that students lacked general business and management skills as a result of which most graduates fail to get promoted. This has a ripple effect in terms of discouraging better students from entering the VET system. So lack of linkage with the labor market is the key reason for these poor outcomes. These gaps between VET institutions and the industry should be bridged as soon as possible to overcome the situation.

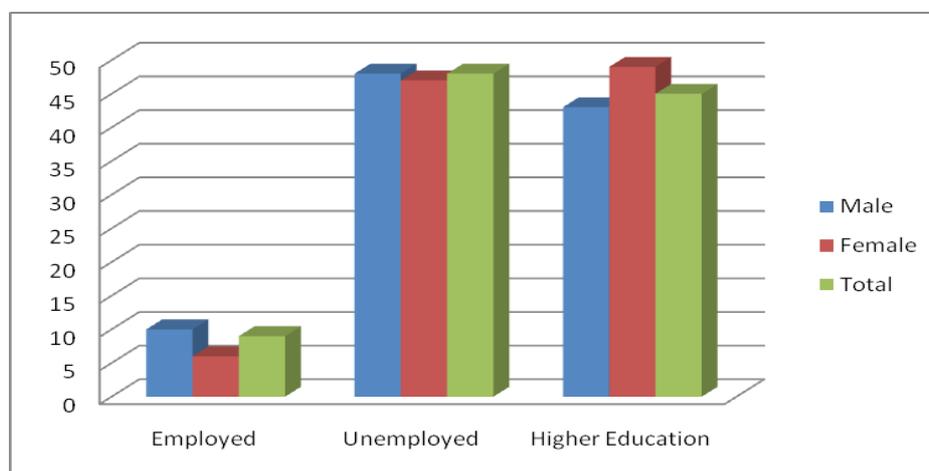


Figure 2: Outcomes for graduates for VET institutions

Source: (World Bank assessment report, 2006)

- The bureaucratic complexities and inadequate coordination of different ministries and BTEB and DTE are affecting the VET system w.r.t management aspects. In the medium term, an autonomous Board of Vocational Education and Training (BVET) should be established, constituted by public and private sector interests and by industry interests. To respond effectively to skill needs of the economy, these authorities should be set up as an autonomous agency, independent of line ministries. It should play a key role in the coordination of the overall training

system, in financing training, curriculum development, supervising skills testing, certification and accreditation, and provision of information on the quality and effectiveness of institutions. Critical to the success of this body will be the role of employers – unless employers are given a sufficient role in the decision making process, training may not be adjusted sufficiently to meet the needs of employers. Hence, most functions of the DTE and BTEB would be subsumed by the autonomous Board, while the Ministry of Education (MoE) should retain a unit to oversight the activities of the Board.

- The lack of international recognition of the VET institutions may be a problematic issue. Allowing institutions to seek accreditation from internationally recognized accreditation agencies will allow their qualifications to be recognized internationally. An option that has been introduced successfully in many developing countries is to allow training institutions to pay fees and seek certification and accreditation from internationally recognized agencies – e.g. City and Guilds of the U.K., Singapore’s Workforce Development Agency, and Australia’s National Training Authority. Reducing the workload will allow BTEB to perform its functions more effectively, while allowing institutions flexibility in the choice of certification providers. Institutions who aim to get accredited by these international agencies will also need to ensure that the quality of training they are providing meets international standards. The ultimate beneficiaries will be students and employers – as the quality of institutions (and graduating students) will improve and they will have better information about the quality of training provided by institutions. This will also be extremely beneficial to migrating workers. Skilled Bangladeshi workers will find it much easier to find employment in other countries if their degrees are accredited by internationally recognized institutions. This will likely reverse the trend of workers migrating abroad being unable to find high-quality jobs because of low skill levels.
- Low capacity utilization of the existing VET system is a problem also. A recently conducted survey of over 300 public and private VET institutions shows that in both vocational education as well as vocational training, close to half the student capacity is unutilized. These numbers do not vary significantly between public or private institutions for vocational education, though in the case of vocational training, public institutions have a higher proportion of capacity utilized (Table 6).

Table 6. Capacity Utilization in the VET System

	Vocational Education			Vocational Training		
	Public	Private	Total	Public	Private	Total
No. of Institutes	48	252	300	9	17	26
Total Student Capacity	20,416	38,146	58,562	7,020	3,800	10,820
Total Registered Students	9,617	17,990	27,607	4,451	1,991	6,442
% Unutilized	52.9	52.8	52.9	36.6	47.6	40.5

Source: World Bank assessment report, 2006 [14]

- Raising fund both from the government and private sector is the key in order to maintain sustainable development and growth of VET system. In the medium-term, it may be possible to consider one specific administrative means of managing finances—the creation of a National Training Fund. In the Bangladesh context, such a fund would be managed by BVET, which would administer the budgets for public institutions and subventions to non-public institutions. However, setting up such a fund would require a significant capacity building within BVET to administer the fund. However, such a fund will not be feasible if employers are not willing to contribute and if resources are not earmarked for training demanded by employers.

It will be important to ensure that the fund supports private sector initiatives, such as the Chittagong Skills Development Center (CSDC). If the fund is well-designed, initiatives such as the CSDC could benefit – as one of the windows of the fund could be used to support these initiatives. However, such a fund will not be viable if employers perceive that the fund is not

being used to finance demand-driven training initiatives (CSDC, 2005). Finally, no matter how resources are allocated, a key element should be competition for funds. Competition for funds, between public and private providers, is key to ensure improved institutional performance. Funding needs to be linked to some measures of input or output criteria, and recognized public and private providers should be allowed to compete for these resources. International evidence is by and large positive in this regard – competition for resources leads to lower costs for training while also leading to positive outcomes.

- Negligence in encouraging the NGO's to play a major role in VET system. Expanding the role of non-government training providers is likely to be more effective in providing the training needed in the informal sector. Bangladeshi NGO's, many of them already active in training in the informal sector (e.g. UCEP), should be encouraged to expand this role. They should also expand the range of services they provide to the informal sector to include not only training, but a package of services, including information on how to run a business, technology, new production processes, quality control techniques, and marketing. NGOs can provide more effective services if the government plays a facilitating role and create an enabling environment to support such providers through: establishing a policy framework and stimulating investment through tax incentives or financial support to training providers to increase training capacity and quality.

CONCLUSION

The dynamics of a modernizing economy warrant that particular attention should be paid to skill development to ensure that Bangladesh can continue to tap into sources of growth in a global economy. The main source of its income is the remittance which is sent by the Bangladeshi nationals working abroad. As the global labor market is becoming competitive day by day, there is no other alternative for us to sustain and strengthen the largest sector of our income other than modernizing the VET system. It may prove useful in converting the large unskilled population into human power capable of working both at home and abroad. However, the main challenge for the skill development system is to overcome its inadequate orientation to the labor market. Formal providers of technical and vocational education and training do not have strong linkages with the private sector employers that drive the changing patterns of labor demand, nor do they have proper incentives to build those connections, which would ensure that skill development courses are relevant and useful to both graduates and employers. Appropriate policies and programs for the labor market are important drivers of economic growth and a more equitable income distribution. Establishing a separate directorate for VET may play a catalytic role in this regard.

REFERENCES

- Abrahart, Alan and Alam, Mahboob (2002) *Final Report, Technical and Vocational Education, Bangladesh*, December 2002.
- Ahmed, Shaikh S. (2005) “*Delivery Mechanism of Cash Transfer Programs to the Poor in Bangladesh.*” Social Protection Discussion Paper Series, No. 0520, World Bank, 2005.
- Ali, Md. Idris (2005). *Review Study Guide: Review on the Evaluation of Vocational Education Program*, Directorate of Technical Education (DTE), Ministry of Education, March 2005.
- Bangladesh Bureau of Statistics (BBS) (2005). *Annual Establishments and Institution Survey*, Government of Bangladesh, Dhaka.
- Bangladesh Institute of Fashion Technology (BIFT) (2000). *Prospectus*.
- Bangladesh Technical Education Board (BTEB). (2010) Ministry of Education, GOB, Dhaka.

Bureau of Manpower, Employment and Training (BMET) (2004). Government of Bangladesh, *Skill Training Activities of BMET*, October 2004.

Chittagong Skills Development Center (CSDC) (2005). *Final Report, Establishment of the Chittagong Development Centre*, May 2005.

Directorate of Technical Education (DTE) (2005). Ministry of Education, Government of Bangladesh, *Annual Report 2004*.

Government of Bangladesh (2005). *Demands for Grants and Appropriations*, Ministry of Finance, Dhaka.

Government of Bangladesh (2006). *Unlocking the Potential. National Strategy for Accelerated Poverty Reduction. (NRSP Document)*.

Mahajan, S. (2006). *Bangladesh: Strategy for Growth and Employment*. A World Bank Report.

Rafiq, Abdur (2003). Bangladesh Technical Education Board (BTEB), *The Evaluation of Polytechnic Education Program For Working Out Technical Education Development Priorities, 2002-03*

The Guardian, August 2005, Dhaka.

Under-Privileged Children Education Program (UCEP) (2000). *Creating Miracles for the Working Children*, Mirpur, Dhaka, Bangladesh.

World Bank (WB) (2006). *The Bangladesh Vocational Education and Training System: An Assessment*, Human Development Unit South Asia Region, Document of the World Bank, June 2006.