

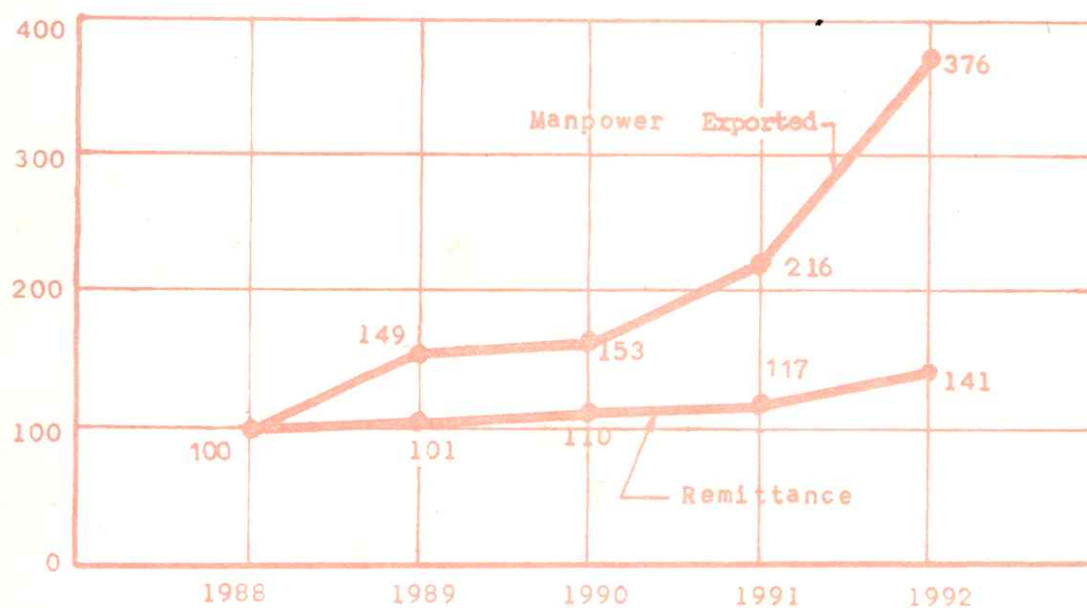


STUDY-1

BANGLADESH TECHNICAL EDUCATION BOARD

EXPORTABILITY OF SKILLED MANPOWER FROM BANGLADESH

JULY 10 - SEPTEMBER 9, 1993



Study Director

A RAFIQUE

Chairman

Bangladesh Technical Education Board

Dhaka-1207

**A Case Study on Innovate Strategies
of the Bangladesh TVET System to
Cope with the Changing National
Labour Market Demand**

January - February 1994

CONTENT

Executive Summary	1
1. Short description of the country	4
The cities and the people	
Economy	
Communication system	
2. Human Resource Development	7
Constitutional Obligation	
Education	
Primary	
Secondary	
University	
Agriculture	
Engineering	
Health	
Teacher Training	
Mass Education	
3. TVET System	13
NCSDT and BTEB	
Structure of TVET	
VTI and TTC	
TVET as a Part of General Education	
UCEP	
MAWTS	
BRAC and Similar NGOs	
Private Trade Schools	
Enterprise-Based Training	
4. Demand for and Supply of Skilled Manpower	22
GDP and Employment in Major Economic Sectors	
Additional Demand for Skilled Manpower	
Job Description in Garment Industries	
Exportability of Skilled Manpower from Bangladesh	
Training Need Survey of PDB Power Plant Skilled Workers	
VTI Graduate Job Market Survey 1993-94	
Skilled Manpower Training Facilities as per NSS	
Articulation of TVET with Secondary Education System	
Training Capacity and Related Issues	
5. Findings and Conclusions	34
Issues	
Recommendations	
Attachment 1 An outline of UCEP Model	37
Annexure 1 NSS Classification	44
Annexure 2 GDP and Employment in Major Economic Sectors	45
Annexure 3 Demand for Skilled Manpower for 5 Years 1986-90	46
References	47

ABBREVIATION

APNTS	Association of Private Non-Profit Trade School
BRAC	Bangladesh Rural Advancement Committee
BTEB	Bangladesh Technical Education Board
BSCIC	Bangladesh Small and Cottage Industries Corporation
BMET	Bureau of Manpower Employment and Training
BITAC	Bangladesh Industrial Technical Assistance Centre
DTE	Directorate of Technical Education
GDP	Gross Domestic Product
GNP	Gross National Product
GOB	Government of Bangladesh
GTZ	German Agency for Technical Cooperation
ILO	International Labour Organisation
LFS	Labour Force Survey
MAWTS	Mirpur Agricultural Workshop and Training School
MOLM	Ministry of Labour and Manpower
MOYS	Ministry of Youth and Sports
MOA	Ministry of Agriculture
MOE	Ministry of Education
NGO	Non-Government Organisation
NCSDT	National Council for Skill Development and Training
NSS	National Skill Standard
NSST	National Skill Standard Test
NCTB	National Curriculum and Textbook Board
ODA	Official Development Assistance
PDB	Power Development Board
RMIT	Royal Melbourne Institute of Technology
SSC	Secondary School Certificate
TVET	Technical Vocational Education and Training
TTC	Technical Training Centre
UCEP	Underprivileged Children Education Programme
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organisation
VTI	Vocational Training Institute
YMCA	Young Men's Christian Association

Executive Summary:

The case study, like other research strategies, is a way of investigating an empirical topic by following a set of pre-specified procedures. The case study on the Bangladesh TVET system has been prepared following the guideline provided in the table of contents of the RMIT letter of intent for UNESCO UNEVOC case Studies Projcet. The preparation of the case study on the Bangladesh TVET system involves sequential steps of socio-economic background of the country, human resource development strategies, brief description of the TVET system, analysis of demand for and supply of skilled manpower and synthesis and interpretation of findings.

Bangladesh appeared on the world map as an independent sovereign state on December 16, 1971. The area of the country is 143,999 sq km. Bangladesh lies in the north eastern part of south Asia. Dhaka is the capital city of the country. The population of the country is 110 million. Agriculture is the main occupation of the people. The other main economic activities include industries, communication, skilled manpower export, tourism, etc.

The constitution of Bangladesh obligates the Government to ensure free and compulsory education for all children. The constitution provides for right to guaranteed employment at a reasonable wage. Education is considered as the key for human resource development. The structure of the formal education system mainly consists of primary, secondary, higher secondary and college/ university education. The enrolment capacity in the primary schools is 13 million children and that in the secondary schools 3.66 millions. The primary enrolment ratio is 63 and that of secondary and tertiary are 17 and 4 respectively.

The technical vocational education and training (TVET) policy guidelines and implementation strategies are decided by the National Council for Skill Development and Training (NCSDT) and the Bangladesh Technical Education Board (BTEB). The TVET is provided at the secondary level. For the largest number of non-formal trade courses the TVET starts after eight years of schooling and for few selected trades after secondary level. The TVET programmes run by the Government agencies, NGOs, and private institutions are non-standard and non-formal except the Vocational Training Institutes of the MOE and Technical Training Centres of the MOLM. There was no articulation of TVET with the secondary education upto 1993. From 1994 basic trade course has been introduced as an optional subject for the students of the secondary schools. A compulsory subject on agriculture has been introduced in the secondary schools from 1994.

The chapter on demand for and supply of skilled manpower describes some of the indicators about the size and nature of the civilian labour force of the country both for the internal job market and for the overseas employment. The TVET system is quite inadequate to meet both the internal job market and overseas employment demand for skilled manpower. There is no adequate data to prepare a consolidated demand of skilled manpower occupationwise. The NSS classification is not in operation in the job market. As per survey conducted by the BTEB both the employers and skilled workers are willing to accept the NSS classification in the job market. The VTI, TTC and UCEP training institutions are running non-formal NSS training programmes that are tested by the BTEB. A large number of Government, NGO and private training institutions are running non-formal and non-standard training courses. The BTEB has taken up as an official responsibility to prepare NSS out of the data generated through a number job market studies. The MOE has initiated two programmes for articulation of vocational education with the secondary general education system.

The main thrust the BTEB and NCSDT jointly creating is the introduction of NSS both in the job market and in the training institutions. In this context the main issues raised and recommendations that have been put forward for resolving these issues appear in the chapter 5 Findings and Conclusions. The significant issues are:

- a large scale unmet demand of skilled manpower both for the internal job market and for the overseas employment warrants strengthening of TVET facilities.
- NSS classification should be established and put into operation both in the internal job market and for the overseas employment and all the Government, NGO, private and enterprise-based training programmes should be designed and implemented in line with the VTI and TTC NSS basic, III and II training programmes.
- articulation of TVET system with the general stream of education.

1. Short Description of the Country:

- 1.1 Bangladesh lies in the north eastern part of South Asia between $20^{\circ} 34'$ and $26^{\circ} 38'$ north latitude and $88^{\circ} 01'$ and $92^{\circ} 41'$ east longitude. The country is bounded by India on the west, the north and the north east and Burma on the south east and the Bay of Bengal on the south. The area of the country is 143,999 sq. km.

Bangladesh enjoys generally a sub-tropical monsoon climate. While there are six seasons in a year, three namely, Winter, Summer and Monsoon are prominent. Winter which is quite pleasant begins in November and ends in February. Temperature ranges from minimum of 45°F - 55°F in the Winter to 75°F - 85°F in the summer with maximum upto 105°F .

The Cities and the People:

- 1.2 Dhaka is the capital and the largest metropolis (414 sq.km) of the country. Chittagong the port city, is the second largest metropolis. Metropolitan Dhaka has a population of about 6 million. The other metropolitan cities are Rajshahi and Khulna.

The population of the country is 110 million. The percentage of urban population is 15.2 while that of rural 84.8. The percentage of Muslim population is 86.6 while that of Hindu, Buddhist and Christian 12.1, 0.6 and 0.3 respectively.

Economy:

- 1.3 Agriculture is the main occupation of the people employing 65% of the labour force. This sector directly contributes around 37.6% to the gross domestic products.

Rice, wheat, jute, sugarcane, tobacco, oilseeds, pulses and potatoes are the principal crops. Various kind of vegetables and spices are produced. The country produces about 81 million lbs of tea per year.

Among the fruits grown in Bangladesh bananas, papayas, pineapples, mangoes, jackfruits, guavas, plums and coconuts are important.

Bangladesh is rich in fish wealth. Rice and fish constitute an average Bangladeshi's principal diet. Hilsa, lobsters and shrimps are some of the fishes which are exported to foreign countries.

Bangladesh is predominantly an agricultural country but a large number of largescale industries based on both indigenous and imported raw materials have been set up. Among them jute and cotton textile, paper and newsprint, sugar, cement, chemicals, fertilizers and tanneries are important. Among the cottage industries handlooms, carpet-making, shoe-making, coir, bamboo and cane products, earthenware, brass and bell metal products, ornaments, etc are important.

The industrial sector contributing around 12% to the GDP, is dominated by jute processing followed by cotton textiles and cigarettes.

The manpower export from Bangladesh increased 31 times in just 17 years during the period from 1976 to 1992. The pattern of the average percentage of distribution of skilled manpower exported during this period are unskilled 46.6, Semi-skilled 14, skilled 34 and professional 5.4.

Bangladesh received official remittances from the export of manpower in 1989 US\$ 0.8 billion which was 4 percent of GNP, 59 percent of exports, 22 percent of imports and 43 percent of ODA.

In 1991 & 1992, a total of 43,563 skilled manpower were exported to Saudi Arabia alone which was 41 percent of the combined export to eight selected countries with Kuwait 17 percent, UAE 11 percent, Bahrain 5 percent, Oman 22 percent and the rest in Malaysia, Qatar and Libya.

Bangladesh offers ample tourist attractions. For the management of tourism there is an autonomous body known as "Bangladesh Parjatan Corporation."

Currency used is Taka and one US\$ is equivalent to 40 Taka.

Communication System:

- 1.4 The country has about 2746 kilometres of paved road and roughly 8433 kilometres of perennial and seasonal waterways. Side by side with the development of road transport efforts are under way to develop the water transport system. In fact, rivers are the life-line of the nation which provide the cheapest means of transport, water for agricultural operation and ensure supply of fish for her people.

Regarding air transport facilities, Dhaka is connected by air with London, Athens, Bangkok, Kualalumpur, Singapore, Newyork, Karachi, Bombay, Calcutta, Dubai, Jeddah, Katmandu, Rangoon, Amsterdam and Bahrain by her national airline(Biman). A number of foreign airlines operate their international services with a link to Dhaka. Regular air services are operated by the Biman between Dhaka and other major towns in the country. The two seaports of Bangladesh are Chittagong and Mongla.

The country has a network of Radio and Television broadcasting. The Television system was introduced in 1964 and since then sub-stations have been set up in Chittagong, Sylhet, Khulna, Rangpur, Mymensingh, Natore, Noakhali, etc. An extensive telecommunication system has connected the capital city with other places within the country and with major cities of the world through the earth satellite ground stations.

2. Human Resource Development:

- 2.1** Human resource development has been recognised to be the promotion and raison d'être of all development effort. Human resource development is primarily related to formation of human capabilities. In reality the human resource development is directly related to both the supply and demand of skilled and trained manpower. Economic growth is not the end of human development. It is one important means. Human development and economic growth are closely connected. People contribute to growth and in turn growth contributes to human well being.

Human development stresses the need to develop human capabilities. It is equally concerned with how those capabilities are used by people who can participate freely in social, political and economic decision making and who can work productively and creatively for development.

Constitutional Obligation:

- 2.2** The constitution of Bangladesh obligates the government to adopt effective measures to introduce uniform, non-discriminatory, mass-oriented and universal system of education including free and compulsory education for all children. It further requires of the government to relate education to the "needs of the society" so as to make it available to citizens. The constitution further recognises the need for a radical transformation in the interest of improvement of quality of education and increasing access to meaningful education particularly in rural areas for emancipation of the toiling mass and for the disadvantaged. Thus equity and access, relevance and excellence as well as public purpose are to be the basis of the educational system so as to create a vibrant and creative society and economy.

The constitution recognised provision of medical care as part of the basic necessities of life like education, shelter, clothing and food. Improvement of public health has particularly been regarded as fundamental to the state policy. This provision extends to improvement of level of nutrition.

As to employment, the constitution provides for right to guaranteed employment at a reasonable wage. In respect of employment, non-discrimination was accepted as a principle and forced labour was prohibited.

Education:

- 2.3 The common view is that the major challenge to education is providing schooling to an increasing number of children. It is not merely the question of literacy and numeracy. It is the transformation of the present generation into productive human resources. For education to play its due role in the development of human resources for national development, the issues of equity, access, relevance, excellence, efficiency and accountability are of great importance. The structure of the formal education system mainly consists of primary, secondary, higher secondary and college/university education.

Primary

- 2.4 The primary education is preceded by pre-primary phase for urban areas. There are over 2500 institutions at the pre-primary level known as nurseries or kindergarten in the urban areas. The primary school age is from 6-10 years. There are 48,146 primary schools of which 85 percent are in the Government sector. The primary enrolment ratio is 63. The total enrolment in the primary schools is 13 million children of which 7 million are boys and the rest are girls. There are a total of 0.2 million teachers in the primary schools. The government has set a target of attaining compulsory primary education for all by the year 2000.

Secondary and Higher Secondary

- 2.5 The secondary school age is 11-15 years. At the end of secondary level there is public examination which serves as a filtration process for next higher stage of education.

There are 9,731 secondary schools of which only 239 are in the Government sector. The non-government schools receive Government subventions for teachers salary. Most of the schools have co-education and about 16 percent of them are exclusive girl schools. The secondary school enrolment was 3.66 million in 1991 with about 372 students per school. The teacher student ratio was 1:33. The participation rate is 27.6. There are 4,333 madrashas at the secondary level with a total enrolment of about 1.1 million students.

A total of 718,166 students appeared in the Secondary School Certificate(SSC) examination in the year 1993 under the 4 Board of Intermediate and Secondary Education and Madrasha Education Board. The pass rate was 60.8% .In Bangladesh, in the year 1988-89 the primary enrolment ratio was 63 and that of secondary and tertiary 17 and 4 respectively. Evidently SSC pass rate shows success of the students out of the 17 percent of the age group.

- 2.6 Higher secondary level covers 11th and 12th year of schooling. There is proposal to merge this level with secondary raising this upto 12th year of schooling instead of 10th year of present practice. Acceptance of this proposal will change the status of 400 Intermediate Colleges to schools and another 450 Colleges will require to drop or separate out their 11th and 12th classes.

University Education

- 2.7 Under the existing system the college and university education starts after higher secondary level. Some colleges known as university colleges offer courses in different disciplines leading to master degrees. The large majority of the colleges offer undergraduate courses. About 450 colleges have attached with them higher secondary courses. All the colleges are affiliated with the different universities. A national affiliating university has been set up that will affiliate the colleges leaving other universities to concentrate to undergraduate and post graduate courses and research. There are nine universities being financed by the Government through the University Grants Commission. The total enrolment in the nine universities is 52,620. The teacher student ratio in the university is 1:17. There are number of private universities. There are altogether 997 colleges with total enrolment of 0.77 million. The teacher student ratio in the colleges is 1:33.

Agriculture Education

- 2.8 Formal agriculture education at the post secondary level three-year diploma is provided in the eleven Agriculture Training Institutes under the Department of Agricultural Extension. Three Agriculture Colleges offer undergraduate courses in different disciplines in the field of agriculture. One Agriculture University offers both under graduate and post-graduate courses under six different faculties. The enrolment capacity of the Agriculture University is 3,947.

Engineering Education:

- 2.9 The engineering education is provided at two levels: diploma and B.Sc Engineering under the MOE. Diploma level engineering education is post-secondary and 3 years duration after 10 years of successful schooling. The technological areas in which diploma engineering education is offered in 20 Polytechnic Institutes under the Directorate of Technical Education of the MOE are: Automobile, Chemical, Chemical Food, Civil, Electrical, Electronics, Industrial Wood, Mechanical and Power. The other areas in which diploma education is provided are: Architecture, Ceramics, Forestry, Marine, Survey, Commerce, Business and Office Management. All the diploma courses are affiliated with the BTEB.

Three Bangladesh Institute of Technology (BIT, formerly engineering college) offer 4- year B.Sc Engineering degree courses to the students after 12 year of schooling and one BIT offers B.Sc Engineering degree course to the diploma engineering graduates. The Bangladesh University of Engineering and Technology offers both undergraduate and post graduate courses in different disciplines.

Health and Medical Education

- 2.10 Medical education at the undergraduate level is provided in nine government medical colleges. Postgraduate medical education courses are offered by the Institute of Post-Graduate Medicine and Research at Dhaka. The combined undergraduate and postgraduate medical enrolment capacity is 8,247. There are a number of private medical colleges offering undergraduate courses. There are twenty two homeopathic colleges, 5 ayurvedic colleges and 10 unani colleges offering diploma and undergraduate courses. The post secondary diploma level nursing training is provided in 21 nursing institutes.

Teacher Training

- 2.11 There are 54 teacher training institutions for the training of primary school teachers. These institutions have enrolment capacity of 5,010 primary teachers. For the training of secondary school teachers there ten teachers training colleges with enrolment capacity of 3,786 teachers trainees. Bangladesh Institute of Distance Education (now taken up by the Open University) provides training to secondary school teachers. This programme has capacity to train 5,000 teachers at a time. Institute of Education and Research of the Dhaka University offers both undergraduate and postgraduate courses to the secondary school teachers. The Technical Teachers Training College is responsible for the training of the teachers of the Polytechnic and similar institutions. This college offers courses both at the diploma and undergraduate levels. The Vocational Teachers Training Institute provides training for the teachers of the vocational training system at certificate and diploma in vocational education level.

Mass Education

- 2.12 In Bangladesh the need for literacy has been accepted as an organic and interactive relationship with development. As a result the government has created a separate division for primary and mass education directly under the administrative control of the Prime Minister. Adult and functional literacy has been given very high priority. Several experiments in this regard has been carried out by the government agencies and NGOs like BRAC, Grameen Bank etc. For example, BRAC training programmes can be divided into two major types: human development training and occupational skill development training.

3. Technical Vocational Education and Training System:

The technical vocational education and training (TVET) policy guidelines and implementation strategies are decided by National Council for Skill Development and Training (NCSDT) and the Bangladesh Technical Education Board (BTEB).

National Council for Skill Development and Training:

- 3.1 The National Council for Skill Development and Training (NCSDT) was founded in 1979 through a Government Resolution authorised by the President. The NCSDT is comprised of high-level representatives from 22 different organisations including 2 Members of Parliament, concerned ministries, labour union and Chambers of Commerce and Industries.

The Minister of Labour and Manpower is the Chairman of the Council. Although it has high-level representation and formulates policies through established committees, it is not a statutory body. Under the provisions of the government resolution NCSDT is primarily responsible for:

- establishment of trade standards;
- formulation of national level policies relating to vocational education;
- review of national skill development needs; and
- coordination of all formal and non-formal skill development programmes.

Bangladesh Technical Education Board

3.2 The Bangladesh Technical Education Board (BTEB) is a statutory organisation established through the Technical Education Act of 1967. As per provision of the Act the BTEB is responsible to organise, regulate, supervise, control and develop technical and vocational education in the country. The main functions of the Board are to:

- develop and prescribe courses of instruction ;
- grant recognition or withdraw recognition from education institutions offering its courses;
- prescribe conditions governing admission of students;
- prescribe mode of inspection of the affiliated institutions;
- hold, conduct and regulate examination of affiliated institutions;
- award diplomas and certificates to the successful candidates;
- enter into and carry out contracts in exercise of powers assigned to it by the Act and regulations ; and
- do such other acts as it may consider necessary to organise, regulate, supervise, control and develop technical and vocational education.

The BTEB formulates policies and implementation strategies through a series of established statutory and non-statutory committees in carrying out academic and other activities. The activities of the Board are conducted through 3 divisions; administration, examination and curriculum; headed by the divisional heads under the overall direction and supervision of the Chairman.

Structure of TVET

- 3.3 The technical vocational education and training is provided at the secondary level. For the largest number of non-formal trade courses the TVET starts after eight years of schooling and for few selected trades after secondary level. The duration of the training for the national skill standard(NSS)III and II one year each at successive stages. Out of one year in each stage 9-month is devoted to institutional training and 3-month industrial attachment. From 1994 agriculture has been introduced as a compulsory subject at the secondary level as an integral part of general education. A sizeable number of secondary schools (left over of the community school programme) offer engineering trade courses for the boys and sewing and other related trade courses for the girls as optional subjects. There are TVET courses offered as non-formal training programme either by Government agencies, NGOs, private and enterprise-based institutions have different duration and not conforming to the national skill standard requirement.

A brief outline of the TVET institutions run by the Government, NGOs and private individual describe TVET facilities follows.

VTI/TTC

- 3.4 The Vocational Training Institutes (VTI) and the Technical Training Centres (TTC) offer TVET courses at two levels of NSS. (NSS classification has five hierarchical levels: basic, III, II, I and master, given in Annexure-1). The standard III is for semi-skilled and standard II for skilled workers. There are 51 VTIs administered by the Directorate of Technical Education under the Ministry of Education (MOE). A total of 11 TTCs are administered by the Bureau of Manpower Employment and Training under the Ministry of Labour and Manpower (MOLM). There are few NGO institutions offering the NSS III and II training programmes.

- 5.2 A Directory of classified jobs for different occupations should be prepared, printed and made available to the employers and training agencies.

(BTEB, NCSDT, MOE, MOLM)

- 5.3 A National Directory of classified skilled manpower should be prepared, printed and made available to planners, employers and training agencies.

(BTEB, NCSDT, MOE, MOLM)

- 5.4 The curriculum of the TVET programmes should be prepared as per the NSS e.g NSS basic, III, II, I and master and strategies should be framed to ensure implementation of such curriculum in Government, NGO, private and enterprise-based training institutions.

(BTEB, MOE, MOLM)

- 5.5 The agriculture subject introduced in the secondary level from 1994 should aim achievement of saleable skills and on the basis of findings of implementation of the subject basic trade gradually it should be made compulsory in the secondary level.

(BTEB, NCTB, MOE, MOA, MOLM)

- 5.6 There should be provision for lateral transfer of students from the TVET stream to the general educational stream and from the general education stream to the TVET stream at an appropriate stage by restructuring both the TVET and secondary general education structure.

(BTEB, NCTB, MOE)

3.6 As per the decision of the Government the MOE has introduced a compulsory subject on agricultural education in all secondary schools. The students of the secondary schools from class VI are to take this subject from January 1994. The main areas the student are to study at the secondary level as an orientation to agriculture, horticulture, fishery and livestock. The subject will be taught initially by the field level experts of the departments of agricultural extension, horticulture, fisheries and livestock. The field level facilities of these departments and from the farmers with their expertise will be used for practical training.

3.7 Basic trade training has been introduced on experimental basis as an optional subject for the students of class IX in the secondary schools and madrasahs from January 1994. The objective of the basic trade training is to train skilled workers at the NSS basic level who will be able to work on repetitive job under constant supervision.

The interested and willing 5,000 students from the secondary schools and madrasahs will take the basic trade training course in the near by VTIs and TTCs affiliated with the BTEB. The students will attend the training one day in the afternoon in the week covering a total of 360 hours, the requirement for basic skill standard. The responsibility for syllabus, training resources, testing and certification for the student undergoing basic trade training has been entrusted with the BTEB.

But for the general education subject the responsibility for syllabus and learning resources lies with the National Curriculum and Textbook Board (NCTB) and for testing and certification with that of Board of Intermediate and Secondary Education. Such provision for double certification at the secondary level is also in practice in countries like Korea, Malaysia and former Soviet Union.

UCEP :

- 3.8 The Underprivileged Children Education Programme (UCEP) is a different model that has been put into operation in the area of TVET. The UCEP programme is financed by a number of international agencies. The model is in the experimental stage. Under this programme illiterate working children mainly from urban slum areas are given three-year intensive course of basic education followed by one year bridging course to vocational training programme. The UCEP trade training programme now offered in 3 trade schools. From 1994, the most of the UCEP trade training programmes have been affiliated by the BTEB at NSS III level. The three trade schools have their trade training programmes designed and operated according to the requirement of the community. An outline of UCEP Model is given in Attachment-1.

MAWTS :

- 3.9 Mirpur Agricultural Workshop and Training School (MAWTS) is a project of Caritas - Switzerland. MAWTS conducts production oriented training programmes of 3-year duration mainly for rural boys in the operation, repair and maintenance of agricultural machineries at the field level. Short training upto one year duration is also conducted by the MAWTS for certain other related trades. The MAWTS follows the practice of accepting outside jobs done by the trainees during the process of training. The earning through such jobs cover about 50% of the training cost. The trainees of the three-year training programme take the NSST III after 2 years of training and NSST II conducted by the BTEB after three years of the training respectively. There are 4 other NGO institutions with this pattern of training and their trainees also take NSST III and II in the similar way. The other NGO institutions run by Rebita-Al-Alam-Al-Islami and Swedish Free Mission are affiliated with the BTEB. They are offering trade courses of NSS III and II. There are as many as 56 NGO trade schools and they are members of Association of Private Non-Profit Trade School (APNTS). The most of the other NGO member trade schools of this group offer trade courses of non-standard shorter duration type.

BRAC and Similar NGOs :

- 3.10 Bangladesh Rural Advancement Committee (BRAC) training programmes have two distinct approaches: human development and occupational skill development. The BRAC has seven Training and Resource centres. The bulk of the training programmes are conducted outside these facilities at the field level to the village BRAC group members. Skill training includes cow rearing, silk worm rearing, driving, fish nursery, horticulture, mechanic and host of other areas whereas human development training includes social awareness, rural planning and arrangement, basic accounts, teacher training and the like. These are non-standard training certified by BRAC. Besides, a large number of NGOs, both local and foreign as well as private individuals and trusts are also engaged in the process of skill development, usually targeted for the rural poor and women. Traditionally in this part of the world as practice skill transfer takes place from the experienced person and craftsman to the attached helper. Examples of such skill transfer appear to be prominent in areas such as agriculture, construction, distributive and other services.

Private Trade Schools

- 3.11 There are large number of private trade training schools run by individual and trust initiative. The main objective of the private trade schools, though expressed as social service, but in reality it stands for commercial and profit motive. The trade schools run by the limited private individual to provide social service in line with trade schools run by the trusts. The growth of private trade schools in the country is primarily hinged to the large scale export of skilled and unskilled manpower to the middle east and other countries. These types of private trade schools offer non-formal and non-standard training of short duration. They do not have in most cases proper qualified teachers and training facilities. It is very difficult to get the exact number of private trade schools and the type

and quality of training they offer. They are not registered or affiliated with any training agencies. They prepare their own syllabus and arrange for testing and certification. For assessing the magnitude of the private effort in the trade training and their type as well as quality a nationwide survey is now being conducted by the BTEB. On the basis of the findings of the survey steps will be taken to help them to conform gradually to the NSS requirement.

Enterprise-Based Training

- 3.12 Description so far under TVET system takes care of pre-employment training delivery system. Enterprise-based training is the training conducted in the enterprise or in the workplace. Enterprise-based training is not very much in practice due to the low level of economic development in Bangladesh. Vocational training institutions are not capable of performing two functions of pre-employment training and specialised advanced skill training as per need of specific employers. However small in size the enterprise-based training is in operation with sector corporations and large private establishments.

Organisations like Bangladesh Small and Cottage Industries Corporation (BSCIC) has provisions for the enterprise-based as well as inservice training facilities. Power Development Board (PDB) has training centres for the power plant skilled workers and also for the skilled workers employed in the maintenance of the transmission and distribution lines. Training in the work places connected with credit facilities and income generation activities are also conducted by the NGOs like Grameen Bank, BRAC, YMCA.

Enterprise-based training fits very much the needs of the employers and it is efficient as well as cost effective but such training reduces the mobility and retrainability of the workers. Almost all the enterprise-based training programmes are non-formal and non-standard. There is no directory on the type and number of enterprise-based training institutions. Preparation of syllabus, implementation of training programmes, testing and certification are done by the respective enterprises. A survey is now being conducted by the BTEB to assess the extent, type and level of enterprise-based or workplace training to prepare directory of such training institutions and to help them to conform to the NSS wherever possible.

4. Demand for and Supply of Skilled Manpower:

Gross Domestic Product and Employment in Major Economic Sectors.

- 4.1 As per the Labour Force Survey (LFS) out of the total population 70.8 million are above the age 10. The size of the civilian labour force is 50.7 million i.e 71.6 percent. Bangladesh economy is rural based and nearly 85 percent of the 110 million population live in the rural areas. Agriculture contributes 37.60 percent to the GDP, Annexure-2 with direct employment of 65 percent of the labour forces. The manufacturing industries contribute 9.8 percent to the GDP with 13.9 percent labour force employment. The construction industry contributes 6.04 percent to the GDP with employment of 1.3 percent of the labour forces.

Additional Demand for Skilled Manpower:

- 4.2 A study was conducted in 1985 by the Bureau of Manpower Employment and Training under GOB/UNDP/ILO Project-BGD 80/030 for the assessment of training needs for the TTC and VTI. The report of the study put forward number of significant findings. One of the such findings is projection of additional demand for skilled manpower in 18 different occupational areas, Annexure-3. This study by and large is an extensive survey of the districtwise demand of jobs covering the entire country. The highest number of job requirement during this period from 1985-90 is in the electrical trade which is about 17 percent in the 18 trade area. The total number of job requirement in 18 trade areas has been estimated for this period to be 124,696 without any classification of the level of skill in the NSS grade. The study report also reflected that in 15 trade areas out of the 18 mentioned only 1.78 percent of the employed skilled workers were trained in the VTI and TTC and another 8.79 percent received non-standard training in institutions and places other than VTI and TTC. The remaining 89.43 percent of the employed skilled workers did not receive any sorts of training at all.

Job Description in Garment Industries:

- 4.3 An ILO BMET/UNDP Project BGD/85/153 study conducted in 1993 on Job Description in Garment Industries of Bangladesh with an aim to facilitate formulation of appropriate skill and other standards in the garment industries. The study very rightly raises the issue that standard job description is the basis to take necessary steps for improved productivity. The NSS classification is the prerequisite for making job description, job specification and personnel specification. The NSS job classification is not followed in the garment industries. The study selected 15 jobs of garment industries in 5 occupational areas. An estimated number of 0.82 million workers of different categories are employed in the garment industries of which nearly 80 percent will be covered by the 15 selected job titles.

Surprisingly enough the study reveals that almost hundred percent of the skilled workers do not have any formal training. By and large the formal education level of these skilled workers ranges from 5-12 years of schooling. In order to ensure quality and productivity of the garment industries and to provide mobility to the skilled workers as per the NSS it is essential to arrange for the appropriate type of training for them as per NSS classification.

Exportability of Skilled Manpower from Bangladesh:

- 4.4 A study conducted by the BTEB in 1993 on the Exportability of Skilled Manpower from Bangladesh provides some very interesting information about the skilled manpower training requirement. In 1992 Bangladesh exported 188,124 workers to the overseas countries. Among them there were 11,375 professionals, 50,689 skilled, 30,977 semi-skilled and 93,083 unskilled workers.

The manpower export from Bangladesh increased 31 times in just 17 years during the period from 1976 to 1992. The pattern of the average percentage of distribution of skilled manpower exported during this period are unskilled-46.6, Semi-skilled-14, skilled-34 and professional-5.6. The UNDP Human Development Report 1992 shows that Bangladesh received official remittances from the export of manpower in 1989 US \$ 0.8 billion which was 4 percent of GNP, 59 percent of exports, 22 percent of imports and 43 percent of ODA.

The rise of manpower export from 1988 to 1992 during the 5 years was 376 percent whereas the increase in official remittances was 141 percent. The reasons for not increasing the remittances proportionate to the rise in the export of manpower were attributed to :

- export of large proportion of unskilled in place of skilled manpower;
- export of unclassified manpower;
- remigration of skilled manpower at higher rate;
- unofficial remittances due to higher blackmarket exchange rate;
- abolition of wage earner scheme;
- unscrupulous practices of certain recruiting agencies;
- cumbersome official procedures; and
- deposit to foreign account.

The export of unskilled manpower increased 3 folds whereas skilled manpower export just doubled during the period from 1988 to 1992. The export of skilled manpower fell by 10 percent that is from 37 to 27 percent and export of unskilled manpower rose by 8 percent from 43 to 51 percent during the same period of 1988 to 1992. In order to arrest this situation of large scale unskilled manpower export it is essential to put into operation the NCSDT National Skill Standard classifications in the training of skilled manpower.

Training Need Survey for PDB Power Plant Skilled Workers:

- 4.5 A training need survey for the PDB power plant skilled workers conducted by the BTEB in 1991-92 through an agreement with German Agency for Technical Cooperation (GTZ) has identified performance competence level of the employed skilled workers and relevant issues regarding training programme for them. There are 1288 skilled workers employed in 16 power plants in 17 occupational areas against a total posts of 1332. As per the self-assessment rating the performance competence of the skilled workers is less than 40 percent of the requirement. The study report clearly states that for most of the issues the findings centre around the non-availability of skilled standard and skill standard tests. For this PDB needs to address basic issue and undertake job analysis involving job description, job specification and personnel specification on the basis of the NSS for the power plant skilled workers.

VTI Graduate Job-market Survey 1993-94:

- 4.6 The Bangladesh Technical Education Board through an agreement with Directorate of Technical Education has mounted a study on the job-market survey for the VTI graduates. The data collected through a well-designed questionnaire by the trained investigators from 285 industries have been tabulated. The main sectors of industries and services covered by the survey are: engineering, textile, construction, petro-chemical, food preparation and preservation, gas, water, electricity, transportation and communication. The total number of employees of these industries are 199,080.

The distribution of these employees in different categories show that :

Officers and Office staffs	34,147
Supervisors	3,115
Skilled workers	141,834
Unskilled workers	18,984

The skilled workers employed in these industries are not classified according to the NSS. Both the management and the representatives of skilled workers expressed sincere desire and interest for introducing NSS classification in their industries. Our investigators through their discussion with the management and the representatives of the skilled workers have managed to categorise the employed skilled workers in the frame of NSS :

Basic	15,253
NSS III	38,760
NSS II	74,454
NSS I	11,316
Master	2,051

Total : 141,834

Skilled Manpower Training Facilities as per NSS

- 4.7 The Bangladesh Technical Education Board is responsible for developing curriculum of vocational training programme as per the NSS set by the NCSDT. The curriculum for the NSS grade II, III and basic level for different trades have been developed on which training is being conducted. The duration for the NSS basic trade training is 360 hours and its entry requirement is open and decided as per the requirement of trade. The duration of training for the NSS III and II is 9 months of institutional training 3 months industrial attachment for each grade. The entry requirement for NSS III is eight years of schooling for most trades and 10 years of schooling for selected few trades. The entry requirement for NSS II is NSS III. The NSS grade I and Master yet to be developed by the NCSDT. The skill testing is done by the Bangladesh Technical Education Board for the regular trainees of the BTEB affiliated and approved training institutions. The affiliated institutions follow the BTEB curriculum and regulation for the implementation of the training programme. The approved training institutions follow their own regulation and curriculum that cover the BTEB requirement. The employed skilled workers can take the NSST conducted by the BTEB in the designated centres. The employed skilled workers are required to qualify in the pre-test before sitting for NSST.

The VTIs and TTCs are the BTEB affiliated vocational training institutions following curriculum designed as per the NSST. The trainees of these institutions are taking NSST. There are a number of approved NGO institutions following their own regulation and curriculum but their trainees take NSST. The total number of seat for NSS III and II in the VTIs and TTCs is 10,650. The capacity of the approved NGO institutions for NSS III and II is about 600 only.

The UCEP trade training programmes of the three trade schools have been affiliated by the BTEB for 13 trade courses of NSS level III from 1994. The curriculum of the UCEP have been adjusted to conform the NSS requirement specified by the BTEB and the training programme will be implemented as per the BTEB regulation. The NGO institution like TTC of Swedish Free Mission and of the Rabitat-Al-Alam Al-Islami are affiliated with the BTEB. The combined capacity of VTI, TTC, UCEP and the NGO institutions for NSS III and II are 11,410 seats. The basic trade skill training introduced for the 5,000 secondary school students from 1994 in NSS basic and will be tested by the BTEB. The 27 Textile Mobile Schools admit 540 students after eight years of schooling. Their training programmes are non-formal and non-standard and affiliated with the BTEB.

Articulation of TVET with Secondary Education System:

- 4.8 The Vocational education/training in agriculture and basic trade started from 1994 as a part of general education at the secondary level is a significant step to orient and train large number of secondary school students -- both failures and graduates; to enter either into the world of work or continue study with a skill. In order to ensure, especially through basic trade training achievement of skill provision has been made for double certification -- one by the Secondary Education Board and the other by the BTEB. The community school training programme now in operation will be replaced gradually by the basic trade training programme. Depending on its success, attempt will be made to introduce the basic trade training programme as a compulsory subject for all the students of the secondary schools and madrashas. The compulsory subjects on agriculture and basic trade when achieved will provide facilities for skill training through vocational education at the secondary level to about 0.7 million boys and girls. This will bring the articulation of TVET with the general stream of education.

Training Capacity and Related Issues:

- 4.9 Analysis of the different aspects of the people, economy, human resource development, the TVET system, demand for and supply of skilled manpower emerge with a number of issues and important among them are : very high level of unemployment, high level illiteracy, very low level economic development, inadequate allocation for human resource development. Furthermore, achievement of the set objective of compulsory primary education by the year 2000 will bring large number of students to be secondary level. This will create more pressure on the secondary schools where there are no seat available. Expansion of the seat in the existing secondary schools, for which enough resources are not available, will create more educated unemployed. The existing TVET system is inadequate to meet the demand of the internal job market. The demand for skilled manpower from overseas job market remains unmet and as a result large scale unskilled workers are being exported in place of skilled workers. Most of the NGO vocational training institutions are running non-standard and non-formal training courses. The private vocational training institutions are also running non-standard and non-formal training courses. There is limited range of enterprise-based vocational skill training that are run by the employers. Such enterprise based training is centred around specific job that restricts the mobility of the workers in the job market and also for their retraining. There is no proper coordination among the training agencies of Government, enterprise-based, NGO and private sectors.
- 4.10 The combined capacity of the VTI, TTC, NGO and UCEP for NSS III and II is 11,410 seats. The non-standard training capacity run by the Government agencies, NGO and private institutions of duration 3 months and above, the level of which can be compared with basic level will not exceed 10,000 trainees in all trades.

- 4.11 As per the BTEB record the percentage of passing of the VTI and TTC for the period from 1985-1992 for NSS III is 53 and that of NSS II 57 and that of MAWTS about 95. As per the Tracer Study of Graduates of 36 VTIs in 1989 about 60 percent of VTI graduates got employment within one year of graduation and 38 percent within 6 months. The percentage of employment for the graduates from MAWTS within a short time after graduation upto 1992 for their 3-year courses was about 94 percent.

For the Dhaka UCEP the passing rate of the graduates from 1988-89 to 1992-93 varies from 93-100 percent. The employment rate for the UCEP graduates within 6 months of graduation was 93 to 100 percent during the period from 1991 to 1992. The high rate of employment for the MAWTS and UCEP graduates was possible due to good quality of training and placement services provided by these institutions.

- 4.12 The World Bank study Report No 7604-BD Bangladesh Vocational and Technical Education Review 1989, observes in its policy recommendations through a theoretical exercise that by internationally recognised practices the VTI and TTC NSS-III and NSS-II two year training duration too long for the objectives and skills being taught. The study recommended that the 2-year duration for NSS-III and NSS-II should be reduced to one year. Such an observation is very much unwise on the basis of the single study of the rate of return approach for the socio-economic sector like vocational training, because it has bearing on the overall socio-cultural aspect, economic policy, industrial policy and host of other micro and macro policies and practices.

4.13 The World Bank Report No. 7504 BD observes that non-standard training courses provided by the Government Agencies, NGO and private initiative vary a great deal in their administrative structure, goals and clients. The report adds that there is a need to establish minimum standards for facilities, equipment, curriculum and personnel who teach in these institutions. Policy should be established requiring MOE to authorize and finance the BTEB to establish and manage an accreditation programme for these institutions.

4.14 Looking through the sections 4.2 to 4.6, demand for skilled manpower within the country and overseas market it is evident that NSS classification that was partly approved (NSS III and II) before 1985 and used by VTI and TTC for their training programmes and the complete NSS frame work approved by NCSDT in 1993 is not in practice in the employment market. Under such conditions both the skilled workers and the employers are not sure about the level and quality of skill they are being paid and paying.

A UNDP/ILO Project BGD/80/030 Study Report 1986 on Recruitment Rules and Pay Structures for skilled workers made series of observations and one of the observations was about the classification of skilled workers. It states that among the 25 establishments considered by the study none did have a clear cut description/definition of semi-skilled and skilled workers. The Report adds that an uniform definition of unskilled, semi-skilled, skilled and high-skilled categories is also desirable for the proper application of pay-scale. The BTEB study on the exportability of skilled manpower from Bangladesh 1993 has identified eight reasons and one of them is export of unclassified manpower for not increasing the remittances proportionate to the rise in export of manpower during the period from 1989 to 1992.

4.15 The steering committee constituted by the Government with Member Planning Commission as Chairman to examine the different issues on TVET, recommended in November 1992 that the training programmes run by the NGO training institutions should conform to the NSS curriculum of the BTEB. It further adds that the MOE and the MOLM should take appropriate steps for setting up of regular functional institutional relationship of the BTEB with NCSDT with the purpose that the BTEB could develop appropriate curriculum both for the formal and non-formal training programmes as per the present and future need of the job market further more BTEB should develop a scientific feedback mechanism involving labour market and training institutions for regular updating of the curriculum. The BTEB needs strengthening and consolidation of its physical facilities and professional expertise.

4.16 For the entire jobmarket both within the country and overseas employment job description, job specification and personnel specification at the different NSS level are not in operation. The TVET system is quite inadequate to meet both the internal job market and overseas employment demand for skilled manpower. The most serious lapse in the job market is the absence of NSS classification for the skilled workers.

The BTEB is in the process of entering into two more job market surveys for skilled manpower. Findings of these two studies are expected to be available by August 1994. Findings of these studies alongwith 4 other studies completed by the BTEB and number of other recent studies conducted by the ILO and other agencies provide enough information to prepare new NSS at the basic, III and II level for number of occupational areas.

The BTEB has the official responsibility to prepare NSS for the approval of NCSDT. This will facilitate the preparation of NSS and their implementation in the job market and in the vocational training system.

The nationwide survey of the training institutions as indicated in para 3.11 has been completed by the BTEB. There are as many as 385 vocational training institutions run by the Government agencies, NGO and private and trust initiative. The bulk of these training institutions except VTI, TTC, and UCEP run non-formal and non-standard training programmes. It is not possible to produce standard product and services without appropriately classified skilled manpower. It is imperative that the NSS is followed in the job market by appropriately designing job description, job specification and personnel specification and enforcing them in the recruitment and promotion of the skilled manpower thereby compelling the training institutions and testing agencies to follow the NSS in designing their syllabuses.

5. Findings and Conclusions:

The analysis and synthesis of the secondary data/information presented in the section 4 of the study emerge with a number of issues that need immediate attention within the purview of the TVET and significant among them are:

Issues

- a large scale unmet demand of skilled manpower both for the internal job market and for the overseas employment warrants strengthening of TVET facilities.
- NSS classification should be established and put into operation both in the internal job market and for the overseas employment and all the Government, NGO, private and enterprise-based training programmes should be designed and implemented in line with the VTI and TTC NSS basic, III and II training programmes.
- articulation of TVET system with the general stream of education.

Findings of the study has created an adequate information base for decision alternative in resolving the emerged issues through the implementation of a series of recommendations within the TVET and secondary education system that will enhance the status of the TVET system of Bangladesh.

Recommendations:

- 5.1 Arrangement should be made to conduct detail job market survey for different occupations to develop NSS, NSST, job description, job specification and personnel specification and ensure implementation thereof in the job market.

(BTEB, NCSDT, MOE, MOLM)

- 5.2 A Directory of classified jobs for different occupations should be prepared, printed and made available to the employers and training agencies.

(BTEB, NCSDT, MOE, MOLM)

- 5.3 A National Directory of classified skilled manpower should be prepared, printed and made available to planners, employers and training agencies.

(BTEB, NCSDT, MOE, MOLM)

- 5.4 The curriculum of the TVET programmes should be prepared as per the NSS e.g NSS basic, III, II, I and master and strategies should be framed to ensure implementation of such curriculum in Government, NGO, private and enterprise-based training institutions.

(BTEB, MOE, MOLM)

- 5.5 The agriculture subject introduced in the secondary level from 1994 should aim achievement of saleable skills and on the basis of findings of implementation of the subject basic trade gradually it should be made compulsory in the secondary level.

(BTEB, NCTB, MOE, MOA, MOLM)

- 5.6 There should be provision for lateral transfer of students from the TVET stream to the general educational stream and from the general education stream to the TVET stream at an appropriate stage by restructuring both the TVET and secondary general education structure.

(BTEB, NCTB, MOE)

- 5.7 The Government, NGO, private and enterprise-based training facilities should be expanded on the basis of the job market survey and NSS classification with special attention to garment and such other industries and occupational areas both for the internal job market and overseas employment.

(BTEB, BMET, DTE, NGO, Private)

- 5.8 Arrangement should be made to conduct and initiate research in the different aspects of TVET and in the process of development of NSS, NSST and in the areas of articulation of TVET with the general stream of education.

(BTEB, NCSDT, MOE, MOLM)

- 5.9 In order to achieve all these the physical infrastructure and the professional capacity of the BTEB and the working relationship between the NCSDT and BTEB should be strengthened as per the recommendation of Steering Committee constituted by the Government.

(BTEB, MOE, MOLM)

(BTEB, BMET, DTE, NGO, Private)

(BTEB, NCSDT, MOE, MOLM)

- 5.9 In order to achieve all these the physical infrastructure and the professional capacity of the BTEB and the working relationship between the NCSDT and BTEB should be strengthened as per the recommendation of Steering Committee constituted by the Government.

(BTEB, MOE, MOLM)

ATTACHMENT-1

UCEP MODEL:

1. This paper seeks to highlight the experience of the Underprivileged Children's Education Programmes(UCEP)-Bangladesh in enhancing employment generation and poverty alleviation. UCEP has passed through several phases of its growth and development since its inception in 1972. And obviously has accumulated a lot of experiences upon which it has built its present patterns of growth and development. While it has set itself for significant qualitative improvement of the project, which is subject to constant watch and evaluation. To create improved employment opportunities that subsequently alleviate poverty of the urban working illiterate children and youths through a model educational system that encourages them to enrol and continue it, is really the theme of UCEP programme.

2. Origin and background of UCEP:

The origin of UCEP-Bangladesh is traced back to a study on child labour in Dhaka city conducted in 1970. The study described and analyzed the life situation of urban poor children who did not have any schooling and instead were engaged in selling physical labour in order to earn to support their families. The same study suggested some approach and programme outlines aimed at alleviating the deprivation and improving the life situation of the working children. The problem was magnified in the post liberation war situation of 1972 when there was an enormous increase in the number of destitute children and large scale immigration of rural poor families into the cities. It was in the context that UCEP came into being in order to provide opportunities for schooling of the poor working children in urban locations and thereby to increase their access to a better socio-economic opportunities.

3. Objective of UCEP Programme:

UCEP project goal is to establish opportunities for urban poorest children in enhancing their chances for better employment and increasing their access to a better socio-economic opportunities through a suitable education system in line with the national priority to remove illiteracy. Towards reaching the goal the following objective have been identified by UCEP to :

- provide special schooling facilities for the urban working children or street boys and girls who have had no opportunity
- provide such children with training opportunities to acquire employable technical skills after they have their basic education in UCEP schools;

- assist such children to find suitable employment and for that purpose, establish links with potential employers;
- undertake social work services to ensure cooperation of families and other concerned in promoting education and social rehabilitation of the children;
- organise and conduct activities in cooperation with other agencies in order to contribute to the establishment of the rights of the working children and thereby increase the conditions of human right fulfilment at a widescale; and
- develop appropriate staff and necessary training facilities for staff to fulfil the above objectives efficiently and economically.

4. Target Group:

The Target group of UCEP consists of children of the poor families of urban slums in particular. These children of school age either roam about in the street, without having any parental care, or are engaged in ill-paid manual labour for a sustenance or for supplementing their family income which is a meagre one. The major categories of such working children/street children are as follows:

Type of occupation	Percentage
House servant	15.89
Hawker	15.45
Shop Assistant	9.39
Porter(Cooli)	7.57
Factory Labour	7.49
Small Trade	7.40
Day Labour	7.11
Workshop Assistant	6.15
Garbage Collector	4.79
Wood Collector	4.44
Ice-Cream Seller	3.86
Tiffin Carrier Boy	3.39
Hotel Boy	2.42
Rickshaw Puller	2.14
News Paper Seller	0.92
Service	0.80
Shoe Shine Boy	0.72
Others	0.04
Total	100.00

5. The UCEP Curriculum:

The primary feature of the UCEP curriculum lies in its intervention to need based concepts. They are a basic education, followed by a one year preparatory course for entry to vocational training programme, need based and appropriate vocational training and finally a continuous process of support for creating employment opportunity.

UCEP general school basically follows the curriculum and text books as prescribed by the National Curriculum and Text Book Board. However the syllabus given at UCEP is a condensed one and non-formal character but maintains a close link with formal type. The non-formal character is adopted in order to make the education more attractive and meaningful to the target group. Furthermore experience teachers of UCEP under the guidance of curriculum experts have worked upon designing the curriculum specially suitable to the working children. It has been tried on pilot basis and reviewed prior to its full scale implementation.

The curriculum is so designed that it covers two academic sessions each having 135 school days a calendar year. Including 6 months preparatory course it covers 3 years to complete upto academic standard of class five which is followed by two session (one calendar year) of preparatory bridging course aiming at preparing the student for vocational training. After passing preparatory bridging course a student reaches to the standard equivalent to grade seven under the public school system where it takes seven years.

After the bridging preparatory course the intervention of need based vocational training course comes. The curriculum is such that it is updated and appropriate with modular skill concept. It is flexible, sensitive and responsive to the labour market changing and demand. This sensitive character of UCEP vocational training curriculum opens a greater accessibility to employment opportunity for the passed out graduates.

6. A Brief Description of Programmes:

A comprehensive description of programme would give a better exposure to UCEP experiences in establishing its basic educational programme, its intervention with vocational training programme and employment support programme, all those contribute significantly for creating a wider circumference for better employment opportunity for UCEP graduates and ultimately to poverty alleviation.

6.1 The General School Programme.

The objective of this programme are:

- To fulfil the basic educational needs which makes the literate and thereby enable them to live a more active and participative life that will lead them to seek an improved living environment.
- To prepare and encourage the children for UCEP vocational training education.

The general school component consists of 23 general schools all of which are located in urban slum areas concentration places of Dhaka Chittagong and Khulna. In Dhaka 11, Chittagong 7 and Khulna 5 general schools are located. A total of 11,700 (1993-94) children out of which 46% are girls attended general schools. This programme consists of (i) a three year course of basic learning which brings the children to an academic standard equivalent to grade five in the public school system and (ii) a one year bridging course (BCP-1 & 2) aiming at preparing the students for UCEP vocational training or further regular education. The academic standard of the students graduated from the bridging course is considered equivalent to grade seven under the public school system. The bridging course includes English, Bangla, Mathematics, Social and Physical Science. The learning contents are so selected as to meet the general academic requirements and an orientation to vocational training along with an introduction to employment prospects in various trades. Increase of attendance; decline of dropout; and rate of success in examination from general schools are compared as follows:

TABLE-1

UCEP General schools	Student's attendance rate %	Students' dropout rate %	Students' passed in exam. %
1992-93(July-Dec)	86.79	5.58	96.02
1991-92	84.96	6.23	90.68
1990-91	81.02	7.19	89.18
1989-90	76.76	10.22	85.44
1988-89	76.50	10.70	87.44

6.2 The Vocational Training Programme:

The Children after passing from general school's basic preparatory course comes as input to vocational training programme. Every year about 2000 students(boys and girls) pass out from general schools of which about 900 students get opportunity for vocational training under UCEP Technical Schools.

The Vocational Education Component consists of three Vocational Training Centres located in Dhaka, Chittagong and Khulna. A total of 1125(1993-94) trainees attend the courses of which 31% are girls. The capacity of utilization is 90%.

The activities of Dhaka Technical School comprises the trades on Electronics, Computer Compose, Garments, Tailoring, Printing, Auto Repair, Welding & General Fitting, Textile, Electrical, Air-conditioning and Refrigeration and Carpentry. The first four trades are for girls intake. The courses duration are from two to three years of institutional training. However the curricula will undergo further development in respect to Modular skills concept. A total of 705 (1993-94) trainees attended the courses. The capacity of utilization was 95%. Increase of attendance; decline of dropout; and rate of success in examination from Dhaka Technical School are compared as follows:

TABLE - 2

Dhaka Technical school	Students' attendance rate%	Students' dropout rate%	Students' passed in exam. %
1992-93(July-Dec)	92.32	3.45	96.88
1991-92	88.40	5.41	95.07
1990-91	88.56	5.35	93.23
1989-90	87.64	7.85	100.00
1988-89	85.00	6.82	96.73

The reasons of drop out (constraints) are: early marriage in case of girls, migration from one slum to other for removal or demolition of slums by the authority, lack of employment in the existing area, full time employment because of family hardship, sick & physically unable to continue program due to malnutrition, want of medical facilities and lack of parental care.

Chittagong Technical School started from July 1992 with three trades of Metal, Electrical and Garments. It has a total of 240 trainees with 100% utilization capacity. The courses are of one year institutional training plus three to six months on the Job Training in industry.

TABLE - 3

Chittagong Technical School	Student's attendance rate %	Students' dropout rate %	Student's passed in exam. %
1992-93(July-Dec)	93.30	3.28	100

Khulna Technical School started functioning from July '93 with three trades of Metal, Electrical and Tailoring with an intake of 120 trainees. The courses are on Modular skills concept. The utilization capacity is 100%.

The methodology of training is "Hands-on" with 20% of the time for theory and 80% for practical exercises out of which 50% shall aim for production oriented training. It should be mentioned here that UCEP has no intention to combine systematic income generating activities with the technical training.

A comparative picture of students graduated over last 5 years from General & Technical School are shown below:

TABLE - 4

Gen. School	1992-93	1991-92	1990-91	1989-90	1988-89
Grade V	870	2173	2476	1830	1509
Grade VIII	-	841	1141	810	680
Grade BCP-2*	964	1179	-	-	-
Sub-total:	1834	4190	3617	2640	2189
Dhaka Techni- cal School	148	264	141	134	188
Grand Total:	1982	4454	3758	2774	2386

6.3 Job Placement:

The Job placement Activity is a necessary follow up service to promote employment and create favourable fields for employment opportunities. It is at its initial stage of development and started functioning from July 1991.

*** Note:**

UCEP has developed a Bridging Course which has substituted its grade VI through VIII. This new course was implemented during the January-June 1991.

In order to ensure proper employment of the UCEP students and mobilize supports from the local employers to the UCEP vocational training, the activities of the Job Placement Component concentrate on the establishment of a network of suitable employers in the areas of operation of UCEP. Efforts are made to make UCEP concept market related and to encourage direct participation of the private sector in the vocational training. The specific job placement activities are concerned with:

- supporting the General School student' to find gainful employment according to the students ability and desire,
- arranging placement of UCEP Technical Graduates in workshops appropriate for further technical training,
- providing Employment Support to UCEP Technical School graduates corresponding to their skills including promotion of Self Employment.
- promoting local community awareness through various communication media and methods on the importance of proper education and training.
- Identifying the quality of performance of the employed graduates for recommendation to Training Centres for adjustment in training system or for addition/alteration in curriculum.

UCEP graduates spend about 6 to 7 years under UCEP care and develop mentally and behavioral changes take place in them. They become quite adjustable to the real situation of life and work. Yet since they come from lower status of society the required mental maturity for making liaison with upper label of personnel are found lacking. This makes them difficult to look for any employment opportunities in terms of wage employment or self employment through suitable entrepreneurship of their trades. So they need employment support and job placement component of UCEP extended this support.

Annexure-1

National Skill Standard Classification
(As approved by NCSDT)

<u>NSS</u>	<u>Skill Level</u>	<u>Competence Level</u> <u>(Capable of doing)</u>
Basic	Less-skilled	Routine/Repetitive job under 100% supervision.
III	Semi-skilled	Routine/Repetitive job under minimum supervision and new job under direct supervision
II	Skilled	Routine/Repetitive job without supervision and new/complex job with supervision
I	Highly skilled	Limited planning of job and coordination and supervision of activities of a group of workers
Master	Master Craftsman	Planning of a new complex job, coordination and supervision of activities of a group of workers and evaluation and control of quality of works.

Annexure-2

**Gross Domestic Product (GDP) and
Employment in Major Economic Sectors**

Major Economic Sector	Percentage	Labour Force X 1000	Percentage
	GDP 1990-91	1989	
All Sector	100	50,148	100
Agriculture, Forestry, Fishing	37.60	32,571	65
Mining, quarrying	0.02	89	-
Manufacturing Industry	9.8	6,976	13.9
Electricity, Gas, Water	1.3	18	-
Construction	6.04	662	1.3
Trade, Hotels, Restaurants	9.08	4,130	8.2
Transportation, Storage, Communication	11.83	1,278	2.5
Finance, Business and Services	1.90	238	-
Community, Personal Services	10.45	1,795	3.6
Household Sector and not adequately defined	7.64	2,391	4.8
Public Administration and defence	4.34	-	-

Annexure-3**Demand for Skilled Manpower for 5 Years, 1986-90**

Trade	Demand (Number)
Automotive	8,080
Radio Television	197
Refrigeration and Airconditioning	161
Electrical	21,606
Turner	7,160
Machinist	10,004
General Mechanics	46,971
Welding	8,386
Drafting (Civil)	792
Drafting (Mechanical)	259
Carpentry	6,717
Plumbing	1,670
Masonry	3,222
Farm Mechanics	716
Power Pump Maintenance	772
Tin/Black Smith	1,963
Foundry	5,423
Pattern Making	597

Total	: 124,696

REFERENCES:

1. Al-Hussainy S M Vocational Training for Youth Employment, 1993, Dhaka.
2. Asian Development Bank Technical and Vocational Education and Training, 1990 Manila.
3. Bangladesh Bureau of Statistics Statistical Yearbook of Bangladesh, 1992 Dhaka.
4. BTEB Education and Training Programme of BTEB 1993, Dhaka
5. Foundation for Research on Education Planning and Development A Tracer Study of Graduates of 36 Vocational Training Institutes in Bangladesh, 1989, Dhaka
6. Hassan H M and Kashem A Vocational Training for Employment Generation, 1993, Dhaka
7. Kashem A An Outline of UCEP Model
8. Khairul Bashar A M M and Islam S S Job Descriptions in Garment Industries of Bangladesh 1993, ILO, Dhaka.
9. Mohammad Ali, Pasha M Recruitment Rules and Pay Structure, 1986 BMET, Dhaka
10. Mesbahuddin M A Assessment of Training Needs for TTC and VTI of Bangladesh, 1986, Dhaka
11. Rafique A Exportability of Skilled Manpower from Bangladesh, September, 1993 BTEB, Bangladesh.
12. Rafique A Needs Assessment for Curriculum Revision, 1983 VTTI, Bangladesh.
13. Rafique A Study of job Market for the VTI Graduates, 1993-94 BTEB, Bangladesh.
14. Rafique A Training Need Survey for PDB Power Plant Skilled Workers 1992, BTEB,
15. UNDP Human Development Report, 1992.
16. World Bank Report No. 7604-BD Bangladesh Vocational and Technical Education Review 1989.
17. World Bank The East Asian Miracle, 1993 Oxford University Press
18. World Bank World Bank Development Report, 1991

Note : Time bound data are lagging 2-3 years.