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A sector survey with special emphasis on the vocational sub-sector.

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EDUCATION AND TRAINING IN BANGLADESH:

A Sector Survey with Special Emphasis on the Vocational Sub-Sector.

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PREFACE

During the 1970s Swedish aid to education in Bangladesh has concentrated on efforts to increase the output of skilled manpower from the country's vocational training system. While attention has generally been focused on formal training institutions, there is also a growing interest in the potential of informal and non-formal modes of training for meeting these manpower goals and requirements. In particular, there is a desire on the part of both national educational authorities and supporting development agencies alike, to explore the possibilities for using existing education structures, equipment and personnel to extend a wide range of training services to various target groups in both the urban and rural sector. Clearly, a prerequisite to such efforts is an overall awareness of the different education and training facilities presently available in Bangladesh, especially as regards those which are designed for the development of skilled manpower to meet the country's economic needs.

The purpose of this paper therefore is to provide an up-to-date description of the educational sector in Bangladesh and, within the general framework, to analyse various aspects of the country's vocational training sub-sector. Thus, while we will look at all aspects of the educational system in Bangladesh, we will be primarily concerned with those projects and programmes which deal with labour market oriented vocational training. Our conclusions and recommendations also reflect this priority.

The present study has been commissioned by the Swedish International Development Authority(SIDA) and has been carried out in accordance with the terms of a research agreement between SIDA and the Institute of International Education, University of Stockholm. The study has gone through the following stages: on the basis of available documentation, a desk study of education and training in Bangladesh was carried out in Stockholm in late 1981. These findings were then discussed with SIDA personnel in early 1982 and served

as a framework for a consultants' visit to Bangladesh in February-March,1982. During a three week stay in the country, additional material was collected, various educational and training programmes visited and discussions held with educational authorities in Dacca and at the regional and local levels. This combined information has been used to revise the original draft desk study and to prepare a final report with specific recommendations regarding areas of future SIDA support to education and training in Bangladesh.

A number of individuals and authorities have contributed to this study. In particular we would like to thank Mr. Sven-Bertil Magnusson, who participated in the consultants visit to Bangladesh and whose observations have been incorporated into the final report. Appreciation is also expressed to Mr. Lennart Nilsson, SIDA Project-Advisor in Bangladesh who provided a number of important insights into the Vocational Training Institute project supported by Swedish development aid, and to Mr. Habibur Rahman, who acted as our guide and interpreter while we were in Bangladesh. Finally, we would like to acknowledge the assistance received from SIDA personnel both at the Education Division in Stockholm and at the Development Co-operation Office in Dacca.

Stockholm, 2 June,1982

Alex Gorham
Jan-Ingvar Löfstedt

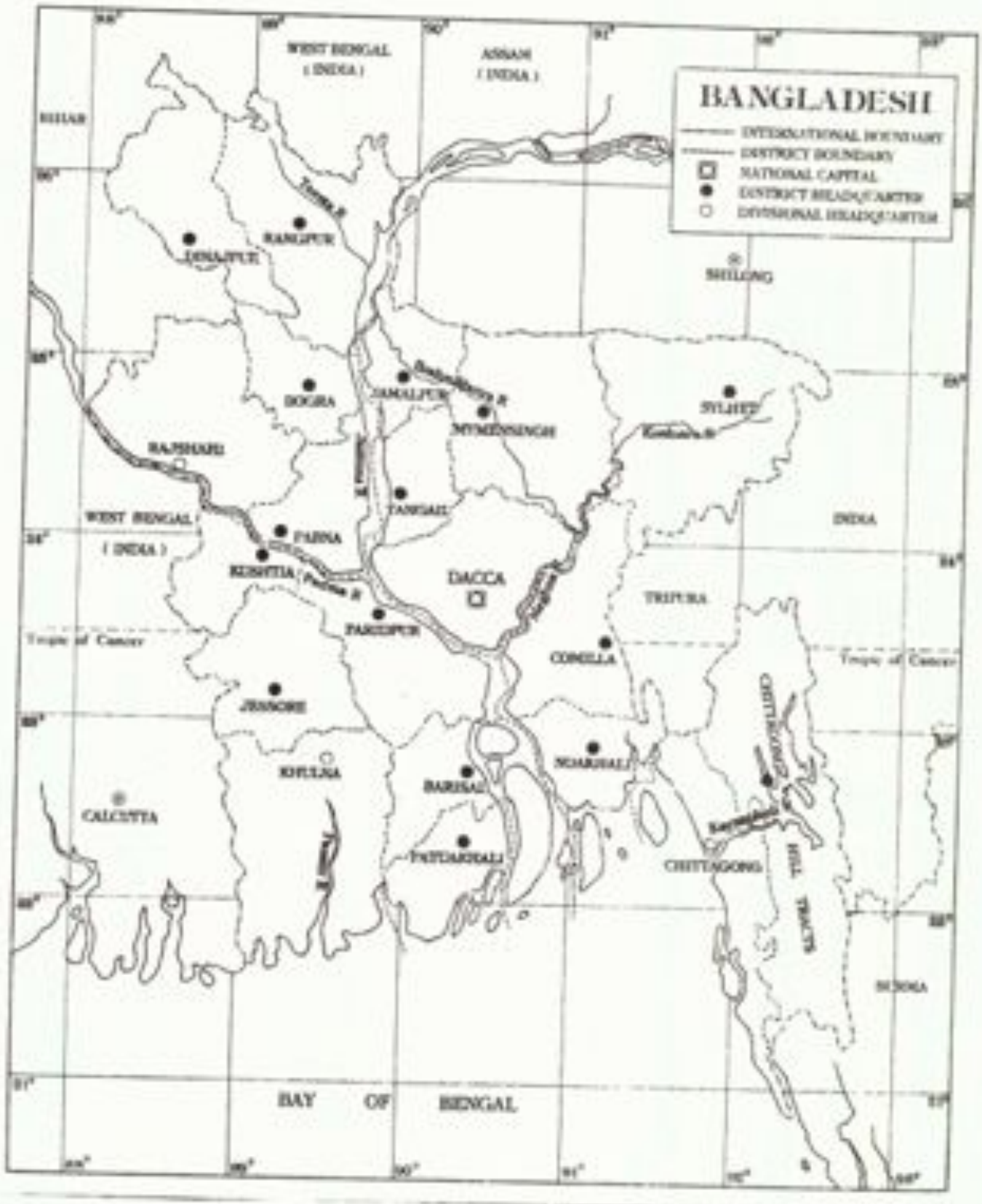
GLOSSARY

ADB	Asian Development Bank
BANBEIS	Bangladesh Bureau of Educational Information and Statistics
BARD	Bangladesh Academy for Rural Development
BMET	Bureau of Manpower, Employment and Training
BRAC	Bangladesh Rural Advancement Committee
BRRI	Bangladesh Rice Research Institute
DTE	Directorate of Technical Education
FFYP	First Five-Year Plan
FREPD	Foundation for Research on Educational Planning
Gram Sarkar	Village Council
HSC	Higher Secondary Certificate
ILO	International Labour Office
LDC	Less Developed Country
MOE	Ministry of Education
MOLGRDC	Ministry of Local Government, Rural Development and Co-operatives
MOLIW	Ministry of Labour and Industrial Welfare[1/]
MOLMSW	Ministry of Labour, Manpower and Social Welfare[1/]
MOMDSW	Ministry of Manpower Development and Social Welfare[1/]
MWA	Ministry of Womens'Affairs
MYD	Ministry of Youth Development
NCSDT	National Council for Skill Development and Training
NFRRHD	National Foundation for Research on Human Resources Development
NSI	National Skill Instructor
PTI	Primary Teachers' Training Institute
RSSC	Rural Social Service Centre
SEIB	Socio-economic Indicators of Bangladesh
SFYP	Second Five-Year Plan
SIDA	Swedish International Development Authority
SSC	Secondary School Certificate
SSCI	Small Scale and Cottage Industries
SYB	Statistical Yearbook

1/ MOLIW and MOMDSW were merged to form MOLMSW in 1982, but are referred to as separate ministries in several documents.

GLOSSARY (Continued)

TRUGA	Training for Rural Gainful Activities
TTC	Technical Training Center
UNDP	United Nations Development Programme
VTI	Vocational Training Institute



Map of Bangladesh

CHAPTER 1

BASIC FACTS ABOUT BANGLADESH

1.1 The people

With a population of close to 90 million inhabiting an area of 144,000 km^2 Bangladesh is one of the most densely populated countries in the world. The annual population growth was found to be 2.36 per cent for 1981, and the compound rate for the period 1961-81 was 2.59 per cent. The previous population explosion has thus subsided to a small degree, but estimates assuming declining fertility and mortality have put total population at about 98 million for 1985 and over 109 million for 1990. The present size of the population is grossly incommensurate with the level of production and the utilization of resources, and family planning together with population education will remain major elements of the development strategy of Bangladesh for a long time to come. So far control of population growth has been counteracted by a number of factors such as early marriage, widow remarriage (among the Muslims), lack of social security and low level of education.

Practically the whole population are Bengalees and speak Bengali as their mother tongue. Around 85 per cent of the population are Muslims and 10-12 per cent Hindus. Buddhists, Christians and others form very small minorities. Bangladesh still has a predominantly agrarian subsistence economy and the lives of the people are determined by a feudal-agrarian tradition and the Islamic culture. Power is related to socio-economic status and sex, and a number of complex rules regulate the relationship between the social classes and the sexes. Status consciousness is high, and the more or less hidden infrastructure of segregation rules sometimes makes development projects which are based on (Western type of) interactions between different groups of people problematic.

The mere struggle for survival is a factor that dominates the lives of at least 60-70 per cent of the population who live on or below the poverty line. Poverty is together with lack of education, bad health, shortage of land and lack of technology as well as social injustice, elements of the vicious circle which constitutes underdevelopment.

According to the 1974 census, life expectancy at birth was 48 years, and the infant mortality rate (per 1,000 births) was 138. The latter figure was down to 114 in 1978 and this could be compared with 49 for Sri Lanka. The low level of health is, of course, both a symptom of poverty and a serious obstacle to development. One study suggests that about 26 per cent of the children born do not reach the age of five. Those who survive often suffer from malnutrition and parasites, and the latter, in their turn, bring parasitic infections. Vitamin A deficiency is frequently found in children under five, and more than 80 per cent of the children below four suffer from anemia, according to one survey. Moderate to severe malnutrition, in

fact, doubled in the middle 1970s and was found to affect around 15 per cent of the primary school children under 12 years in three districts under survey.

1.2 The Economy

A GNP per capita of US$ 90 places Bangladesh among the poorest of the low-income countries in the world, and in a relatively small group of countries with a negative average growth rate (-0.1 for the period 1960-1979). The economy is agro-based with approximately 90 per cent of the population living in the villages, and about 80 per cent depend on incomes earned from agriculture. Fertile soil and a generous climate create good conditions for high agricultural yields, but overpopulation makes land shortage a problem, and there is only 0.3 acres arable land available per capita. A little over half of the Gross Domestic Product, GDP, is earned from agriculture. Still small but potentially important areas are the manifacturing sector (with 6 per cent of GDP) and the small-scale industrial (cottage industry) sector (with a little over 4 per cent of GDP).

Besides the landowner system (with a growing majority of peasant households with no or very little land), insufficient irrigation, lack of mechanization and transportation are major obstacles to agricultural development. Less than 12 per cent of the total cultivated area was irrigated in 1977. The electricity needed for irrigation and mechanization is also lacking, and less than 6 per cent of all the villages had electricity facilities in 1980-81 (SEIB, p. 108).

Industrialization has so far been relatively slow, and industry increased its share of the GDP from 8 per cent in 1960 to 13 per cent in 1970. The services sector has kept a rather constant share of a little more than 30 per cent of the GDP.

Bangladesh depends heavily on foreign assistance. Total foreign aid amounted to US$ 1,642 million in 1980-81, constituted between 70 and 80 per cent of the total development expenditure in Bangladesh in the 1970s, and amounted to more than 10 per cent of the 1978-79 GDP (1980 SYB, p. 395).

Income, wealth and consumption are unevenly distributed in the country in terms of urban-rural areas and socio-economic strata. (The urban population has increased its share from about 8 to 12 per cent in the last decade.) In the urban sector, the poorest 40 per cent of the population have about 17 per cent of the total income, whereas the richest 10 per cent have more than 30 per cent of the income. Income distribution in rural areas is slightly less unequal, and the poorest 40 per cent of the population get close to 20 per cent of the income while the richest 10 per cent get more than 25 per cent.

1.3 Manpower and Labour

In 1979, close to 36 per cent of the total population were classified as economically active (and 45 per cent as economically inactive). In the same year, about 54 per cent of the population of ten years and over participated in the labour force

(1980 SYB, p. 457). According to the 1979 Pilot Manpower Survey, about 74 per cent of the labour force were engaged in agriculture and a little less than 27 per cent in the non-agricultural sector (about 11 per cent in industry). The composition of the rural labour force is shown in Table 1.3 below.

Table 1.3 Employment status in rural Bangladesh

Status	Per cent of Rural Labour Force
Employer	0.56
Employee (wage earner)	13.38
Self-employed	36.53
Unpaid family helper	18.86
Day labourers etc	30.27

Source: 1980 SYB, p. 459

In the 1979 Pilot Manpower Survey, more than one-third of the 10+ population (of around 60 million people) were classified as unemployed (3.13 million) or economically inactive. The Draft SFYP estimated that the total labour force would amount to 28.43 million out of a total population of 90.25 million in 1980. However, if "labour force" is defined as the entire population of working age (10-59 age group) including also the women, the labour force available would instead be close to 60 million, and the actual unemployment figure would be more than 33 million or around 55 per cent of the total labour force. (It can, of course, be argued that perhaps more than 20 out of the 33 million "unemployed" are household workers and thus contribute to the household economy.

Of the "registered labour force" of 28.43 million (1980) a little over 5 per cent have received secondary education(SSC level and above) A particularly wasteful form of unemployment is the high proportion of educated unemployed, which according to official sources, was as high as 40-50 per cent before the SFYP period.

The single most important untapped manpower resource is, of course, the women. According to official figures, close to 90 per cent of the male population over 10 years were in the labour force, whereas the corresponding figure for the women was only less than 4 per cent (1979). Or more exactly, only 3.81 per cent of the total female labour force (10+) were actually employed in 1979 (1980 SYB, p. 458).

It is typical for the Bangladesh paradox that surplus and shortage of trained manpower exist side by side. As noted above, nearly half of the educated are unemployed, and at the same time, there is an officially admitted annual deficiency of 200 engineers, 5,500 technicians and 25,000 skilled workers (SFYP, §16.59). It is also estimated that the number of scientists, technologists and skilled workers is four per 10,000 inhabitants (30,000 scientists and 100,000 skilled workers) compared to over 21 in some of the neighbouring countries. The present ratio of skilled workers, technicians and engineers is 2:3:1 as opposed to a planned ratio of 25:5:1.

Besides lack of training facilities and employment opportunities, insufficient vocational guidance and employment exchange constitute obstacles to a rational utilisation of manpower resources. In 1978, only 55,505 persons had registered with the employment exchanges, and around 24,000 of these were placed, but as many as close to 23,000 abroad (1980 SYB, p. 487). Up to December 1979, the total number of workers working in the Middle East was estimated to be a little over 60,000 out of which 60 per cent were semi-skilled and unskilled and 40 per cent professionals, semi-professionals and skilled workers (Development Planning in Bangladesh ..., 1980, p. 156).

1.4 The Political System

Bangladesh is since secession from Pakistan and independence in December 1971 a People's Republic. The political system was originally based on the four principles of Democracy, Nationalism, Socialism and Secularism. After the military coup against Sheikh Munibur Rahman in 1975 martial law was promulgated. The 1972 Constitution was amended when General Ziaur Rahman was made president in 1977, and Secularism was replaced by Islam as one of the four principles of the state. In the new programme presented by the President, Socialism was kept as one of the basic principles, but it was redefined to conform with Islamic ideas. Parliamentary elections were held again in 1979, after the martial law had been lifted. A certain measure of political relaxation together with relative stability and some economic progress (and ever increasing foreign assistance) brought about some general improvement in the late 1970s.

The slightly positive trend was halted with the sudden assassination of President Ziaru Rahman in May 1981 by a group of army rebels. The successor, President Abdus Sattar, was not able to solve the ensuing political crises, which eventually led to a military coup in March 1982.

President Sattar, in a sense, summarized the background to his own downfall when he characterized the political situation (in February 1982) in the following words:

> "But due to negligence, corruption, irresponsibility and attempts at realising self-interest on the part of a few people placed in various responsible capacities had created numerous problems in social and state lives, creating a bar on the way of advancement of the nation by generating dissatisfaction, frustration and chaos in the lives of the common men" (Speech to Parliament).

According to the Constitution, the President is the head of the state, and he is to be elected for a five-year term through universal franchise. The President has a council of ministers headed by a Prime Minister who are appointed by the President. The officers-in-charge of various ministries and divisions are designated as secretaries and belong to the permanent service. Before the reshuffle of the government in early 1982, there were 31 ministries with 19 divisions. The Ministry of Planning comprising Planning, Project Implementation and Statistical

Divisions formulated the five-year and annual plans of the government, coordinates planning and development and operates the national statistical system. The Planning Commission, which is the highest planning body in Bangladesh, is headed by the President.

Local government in urban and rural areas is entrusted to elected bodies. These bodies are called pourashavas in urban areas and union councils or union parishads in rural areas. There are also district and thana councils at the respective levels. One of the innovations of the late President Ziaur Rahman was the establishment[1/] of village councils or Gram Sarkars in the countryside in 1980 as a step towards decentralization of administration.

1.5 The Administrative System

Bangladesh is administratively divided into four Divisions under Divisional Commissioners. As of March, 1981, there were 20 districts under the four divisions administered by Deputy Commissioners. Below District level, there are 64 sub-divisions which are divided into thanas (469 in 1981). The small thanas have a population of a little over 10,000 inhabitants, whereas the big ones have more than half a million. The thanas are divided into unions (which are divided into Mouza), and the 4,365 unions have an average population of close to 18,000. According to the 1974 census the total number of villages in Bangladesh was 68,385 but the 1980 census reports a little over 20,000 villages with less than 50 households and close to 65,500 villages with more than 50 households. Seventy-six per cent of the 85,650 villages were reported to have set up Gram Sarkars by 1980. The administrative system of Bangladesh is shown in Figure 1.5 below.

1/ Or, in a sense, revival...

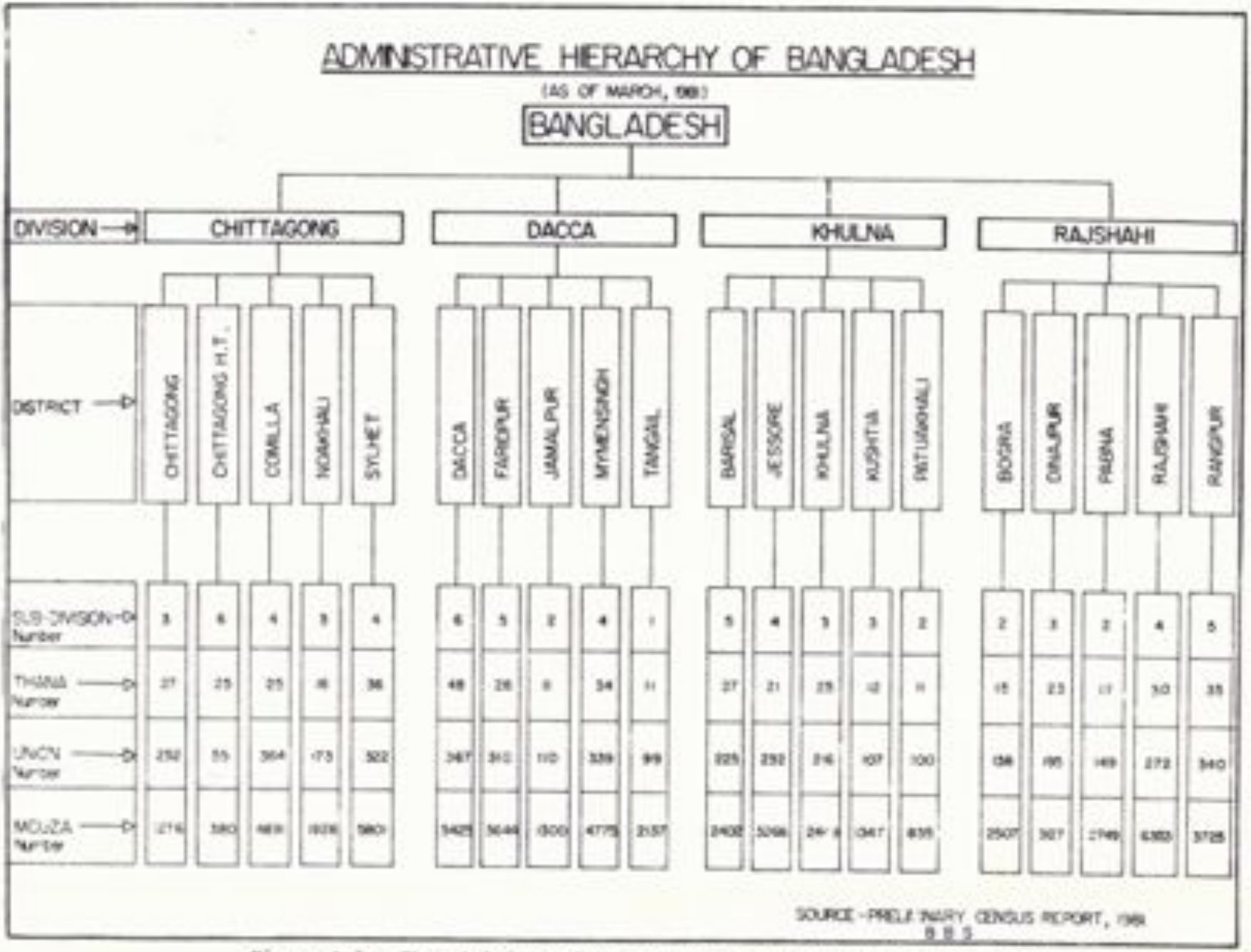


Figure 1.5 The administrative system of Bangladesh as of March, 1981

CHAPTER 2

THE DEVELOPMENT STRATEGY

2.1 The First Five-Year Plan

The First Five-Year Plan, FFYP, was formulated in 1972-73 on the assumption that Bangladesh was to embark on the road to socialism. A mixed-economy system would prevail during the transition period, but the public and cooperative sectors would expand gradually and a more equitable distribution of income be effected. Landholdings, according to the plan, were to be limited, and the masses of the population were to be mobilized into active participation in the development process. Steps to enlarge public ownership had, in fact, been taken already in 1972, but the FFYP allowed private enterprises especially in the areas of trade and agriculture.

The optimistic visions expressed in the FFYP were not, however, realised, and the quantitative goals of the plan were far from reached. Around four-fifths of the population were still illiterate and below the poverty line. All the same, there was a political commitment to planned development, on the part of the new political leadership, and a planning commission had, in fact, been set up already in 1972. Great importance was attached to planning even if there has continued to exist a considerable gap between planning and implementation.

2.2 The Second Five-Year Plan

The failure of the FFYP and the economic and political crises of the middle 1970s made long-term planning very difficult. A two-year plan for 1978-80 was formally adopted, and the Second Five-Year Plan was not ready for launching until 1980. The SFYP, 1980-85, set up the following objectives for national development:

(1) improvement of the standard of living and satisfaction of basic needs; (2) improvement of living conditions in rural areas and mass participation in development; (3) the expansion of employment opportunities, (4) the elimination of illiteracy; (5) the reduction of the population growth; (6) self-reliance and self-sufficiency (especially in food-grains); (7) equitable and just distribution; (8) acceleration of economic development; (9) energy development; and (10) expansion of primary education and more stress on technical work-oriented education.

In agriculture, the plan emphasises small irrigation and flood control projects. Much attention is also directed at rural and cottage industries. Small-Scale and Cottage Industries, SSCI, are potentially a very important area in terms of employment opportunities (especially for women) and warrants a careful definition of training needs. During 1969-70, the SSCI subsector contributed around 36 per cent of the total value of the industrial sector and employed more than 80 per cent of the country's total labour force. A small industry is normally defined as a privately-owned manufacturing unit with less than

50 workers and a fixed capital not exceeding Tk. 2.5 million. There were around 27,000 such small industries in Bangladesh in 1982 with 222,000 employees. A Cottage Industry is an industrial establishment which employs less than 11 workers, some of whom may be family members, on a full-time or part-time basis. In 1982, 1.17 million workers were employed in small cottage industries 1/. The handloom industry which is mainly rural based and accounts for about 70 per cent of the textiles produced in Bangladesh, is a part of the SSCI sector that receives much attention in the SFYP.

Development of the cooperative system is also seen as an important measure to promote rural advancement. Cooperatives will, according to the present development strategy, be formed in each village for small farmers, landless groups, youth, women, weavers, fishermen and artisans, and will be federated with the Gram Sarkars. These primary cooperatives will then be linked up with the thana level cooperatives. (There were 250 thana cooperatives in 1980 covering a little over half of the nation's thanas.) In 1978, around 12 per cent of the rural adults were members of cooperatives (SEIB, p. 126). According to the 1980 SYB, the total number of coop members in the country in 1979 was well over five million. A further expansion of the cooperative sector will no doubt lead to considerable training needs. Further investigation with a view to defining the training needs in the cooperative sector would definitely be a most worthwhile undertaking.

As regards industry, the SFYP places main emphasis on agro-support and agro-based industries. One important area in this context is the production of urea based on natural gas.

1/ The total number of SSCI enterprises is probably more than two million. For a detailed account of this sub-sector, see M. U. Ahmed, in Development Planning in Bangladesh - A Review of the Draft Second Five-Year Plan, Dacca 1980.

CHAPTER 3

THE ROLE OF EDUCATION IN THE DEVELOPMENT STRATEGY

3.1 Education in the Early 1970s

The educational sector was extremely backward and dysfunctional in the early 1970s. Only around 40 per cent of the primary school age group were enrolled in some 30,000 primary schools, and nearly two-thirds of the villages did not have a school at all. Attendance was low and irregular and drop-out very high. Generally speaking, the educational system was highly elitist and urban-centred, and reflected the old needs of colonial times. Some 20-25,000 students (about 10 per cent girls) were enrolled in the universitites, where liberal arts education dominated. Despite the fact that university output was disproportionately high in relation to the rest of the education sector and far from oriented towards development needs, the First FYP proposed that enrolment should be increased in five years by 60 per cent in the universities and by 50 per cent in the colleges. This tendency was reinforced by external aid to education, and in 1973 tertiary education received US$ 13 million compared to 8.5 million to primary education and 8 million to technical and vocational education.

The low priority given to primary and mass education resulted in a continued high rate of illiteracy (i.e. about 80 per cent).

3.2 Early Plans and Achievements

The development strategy for education according to the FFYP and the Two-Year Plan (1973-78 and 1978-80) aimed at

(1) expanding primary and secondary teacher training,
(2) strengthening science education,
(3) stressing vocational and technical education,
(4) making higher education more selective,
(5) launching adult literacy programmes, and
(6) enhancing female participation in education.

A certain amount of development, mainly in quantitative terms, did take place during the two plan periods. The total number of schools and colleges increased by one-third; primary school enrolment increased from about 17 million pupils, or by around 17 per cent (population growth during the same period was about 20 per cent). University enrolment increased by about one-third despite the "selective approach", but there was a certain shift towards more emphasis on technical and vocational training.

The already large share of resources devoted to university education according to the FFYP increased from a planned allocation of 10 per cent to an actual allocation of 30 per cent of the allocation for education. The corresponding share of primary education decreased from 17 per cent to 12 per cent, so that in fact actual expenditure on primary education proved to be even less than half of that on university education. The net effect of the FFYP allocations was that educational inequalities widened, as did the rural-urban gap and the imbalances between and among levels of education. The literacy rate failed to increase, and unemployment among the university graduates of liberal education remained around 25 per cent (SFYP, § 16.4).

3.3 The SFYP Strategy

Assessment of the FFYP period revealed a number of citical problems. In primary education, total enrolment and attendance were still low, girls' enrolment was way out of proportion (around 30%), drop-out rates varied between 50 and 70 per cent, and much too little had been spent on primary education. Secondary and tertiary education were too general and academic and the mismatch between the supply of trained people and the manpower needs was striking. The rural areas were at a gross disadvantage, and the links between formal and non-formal education were almost non-existent. Planning and administration were too centralized and inefficient with a resulting lack of local participation.

It was against this background that the SFYP listed the following main educational tasks: (1)to broaden the base of primary education (and put 91 per cent of the age group in school by 1985); (2) to link the education system to employment; (3) to make science and agriculture a basic component of the education system; (4) to accelerate the expansion of womens' education; and (5) to reduce the urban-rural gap in educational facilities.

The share of primary education in education development expenditures was to increase from 33 per cent to 41 per cent (of total education expenditure)[1]. Other priorities were to increase the percentage of female teachers, decentralize administration (i.e. by putting the control and management of the schools in the hands of local managing committees at the village level), strengthen supervision, construct and renovate schools, supply free textbooks and uniforms to the girls, and to raise the level of total educational spending to above 2 per cent of the GNP (already in the middle 1970s, less developed regions of the Third World spent 3.9 per cent of GNP on public education, and the corresponding figure for more developed regions was 5.7 per cent).

The SFYP also recommends other measures such as expanding health and lunch programmes for primary schools, synchronising the schoolyear with rural production, promoting rural skills and improving teacher training.

The "community school" concept is an example of the new attempt to establish better linkage between formal and non-formal schooling at both primary and secondary level. Regarding the primary level the SFYP says:

> "It may appear that several agencies at the primary stage will be providing non-formal programmes, viz. the Primary Community School, the Village Development Complex and voluntary agencies. Considering the enormous need for non-formal programmes, particularly in a large village, a multiplicity of agencies will not necessarily create any duplication of facilities. The main constraint will be skilled instructors" (§8.52).

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[1] See Table 6.1.3.

The "community school" is also conceived of as a type of secondary school at the Union level. The role of the formal educational system in the human resource development is described in the SFYP in the following way:

> "The formal educational system is overhauled and the courses provided by the educational institutions of the general type are reformed so as to make these more relevant for life and productive activities. As a part of this process, the existing institutions are converted into community schools at the village level. This reform aims not only at involving the local communities in school affairs but also the school in local development activities, particularly through organizing non-formal programmes of many types" (Ch. VII, p. 14).

In defining the overall aims of educational development, the SFYP states:

> To begin with, the Second Five-Year Plan aims at the development of a low-cost functional education by linking different levels of education with production processes as far as possible. Efforts will be made to broaden the base of primary education, link education with employment, make science and technology a basic component of the educational system, accelerate the development of womens' education and reduce the rural-urban gap" (Ch. XVI, p. 6).

In summing up the new educational strategy expressed in the SFYP, four distinct priorities can be discerned. The first one is to promote universal primary education, and some of the measures are to employ 2,000 inspectors (Assistant Thana Education Officers), construct 2,000 new primary schools and renovate 10,000 sub-standard schools. The mass literacy campaign aimed at 40 million youth and adults within five years, is the second priority. The main responsibility for the implementation of this programme will rest with the local authorities and the Gram Sarkars. The third major programme is the introduction of vocational courses at the secondary level of the formal system besides the general programme. The cornerstone of this vocationalisation programme is the "community school" scheme referred to above. One secondary school in each Union[1] will be transformed into a Community High School offering courses in metalwork, building and agriculture for men and sewing and food courses for women. (In fact, the "community schools" are supposed to offer both formal vocational courses to the regular pupils, and non-formal training to adults, but there was still in early 1982 considerable confusion in Bangladesh as to how this is going to work out.) The fourth cornerstone of the new strategy expressed in the SFYP is the overhaul of the technical education system in order to increase the output of skilled workers and technicians.

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[1] Private High Schools are being selected for this scheme. See also p. 28.

3.4 The New Educational Structure

As a consequence of the new educational strategy, the major components of the new educational structure (according to the SFYP) are:

(1) a broad-based primary education,
(2) complementary mass education,
(3) three-year general junior secondary stage and non-formal skill development programme,
(4) the introduction of three branches at the secondary stage: (a) a general programme, (b) a community-based programme, (c) a vocational and skill development programme,
(5) a two-year general higher secondary stage, and a 2-3 year technical and vocational programme,
(6) vocationalization of the programmes at various stages, and
(7) flexibility of academic programmes and easy mobility of students both vertically and horizontally (Ch. VIII, p. 10).

The new structure is summed up in Figure 3.4 below.

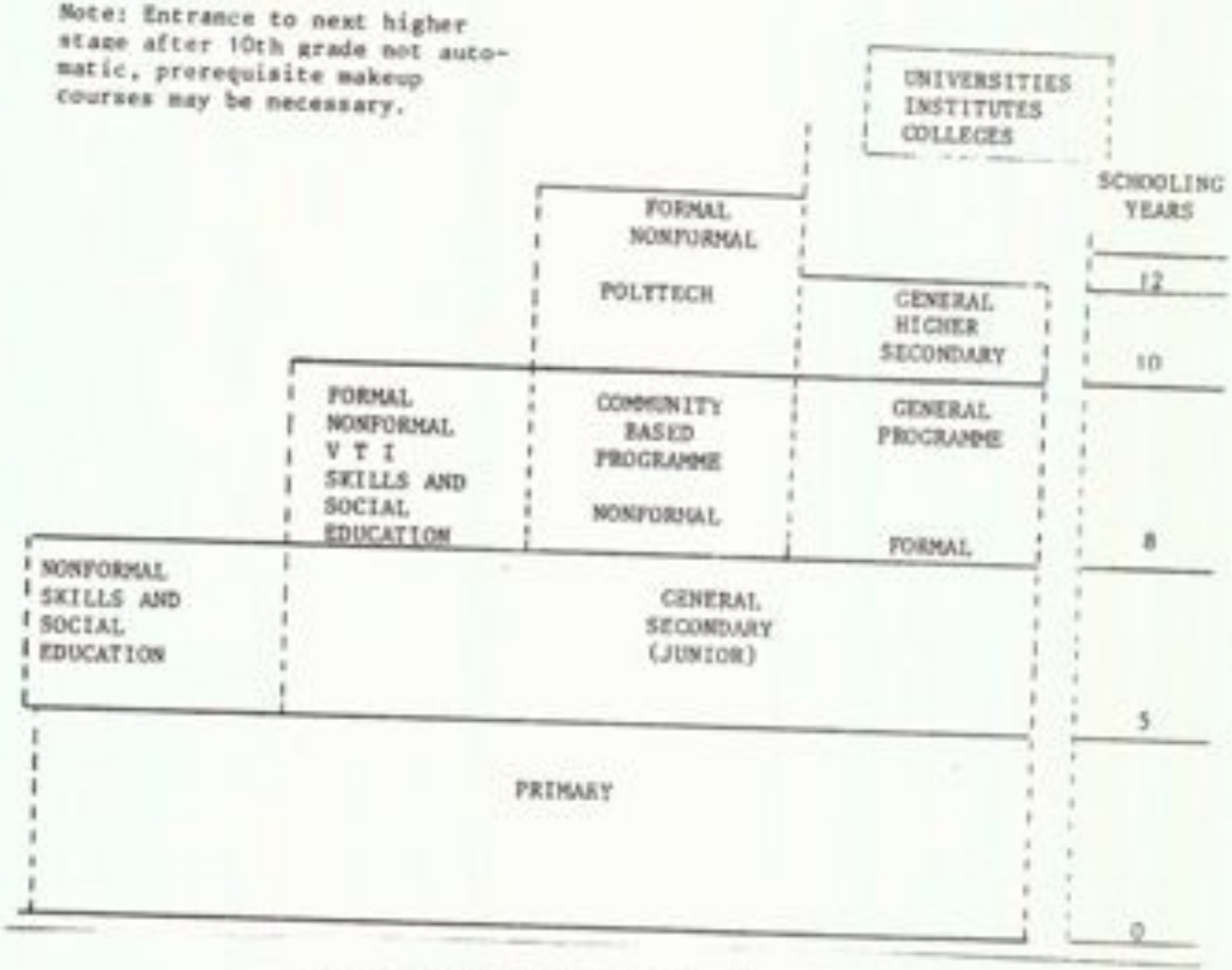

Figure 3.4 The New SFYP Education Structure

CHAPTER 5

PLANNING AND ADMINISTRATION OF EDUCATION

4.1 Reorganization

The educational system has undergone some expansion over the years despite problems and shortcomings. The administrative system has not, however, kept pace with this development. This has led to a number of bottle-necks in the planning and implementation machinery: planning for the future has been neglected; senior officials have been overburdened with matters of minor importance; supervision and control of the whole system is inadequate; and, probably most important, actual implementation is slow and inefficient.

The planning and implementation system for about 60,000 schools and institutions with more than 300,000 teachers was run by no more than 570 administrators and supervisors from the top level down to the thana level, in 197[illegible]. A number of steps have been taken in the last few years to redress the situation by reorganizing the Ministry of Education and decentralizing administration and supervision. The main objectives of the reorganization are to: (1) ensure wider participation at all levels, and (2) to minimize wastage and misuse through better supervision. With these aims in view, three new Directorates (Primary and Mass Education, Secondary and college Education, and Inspection) have been set up to replace the old Directorate of Public Instruction. Other steps have been the establishment of Local Education Authorities, special Thana Education Officers for primary education and School Management Committees responsible to the District Councils and the Gram Sarkars (Village Governments).

Besides a number of autonomous bodies such as the Public Examination Board, the Textbook Board, the University Grants Commission and the Madrasah Education and Textbook Board, the Ministry of Education now also has at ist disposal professional bodies like the Bangladesh Bureau of Education Information and Statistics, BANBEIS, the Curriculum Development Centre, the Academy for Fundamental Education, the National Institute for Education Administration and Management and the Bangladesh Educational Extension and Research Centre (see Figure 4.2).

A plan of educational administration is given in Figures 4.1, 4.2 and 4.3.

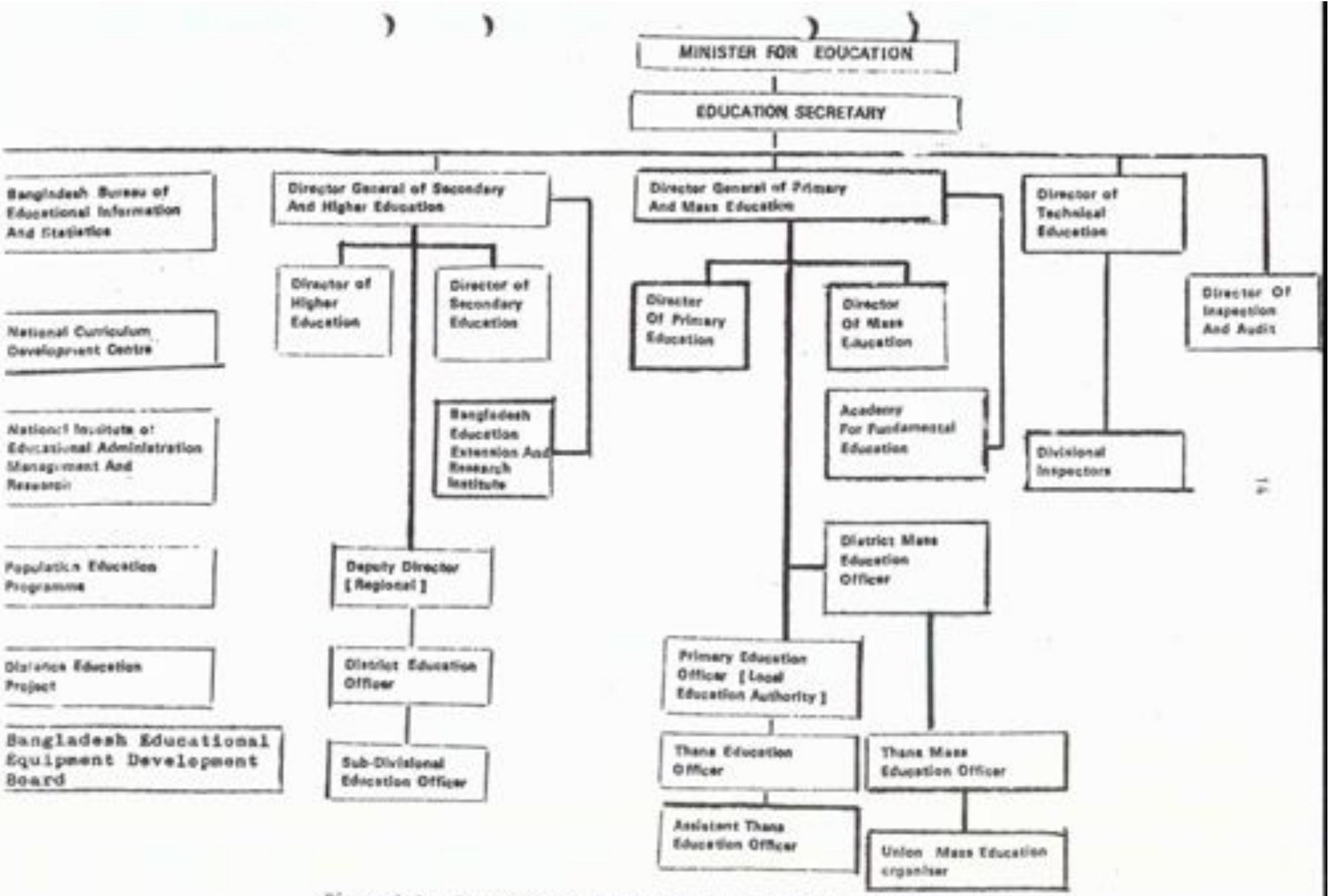

Figure 4.1 Educational Administration in Bangladesh (1982)

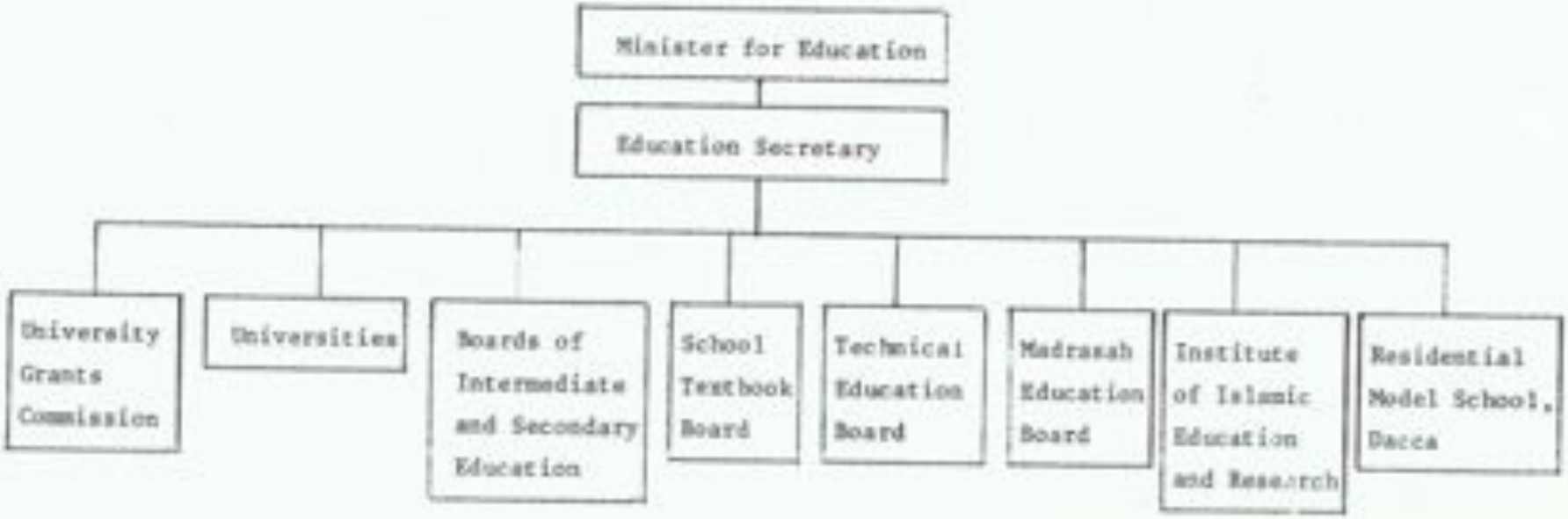

Figure 4.2 Autonomous Bodies under the Ministry of Education

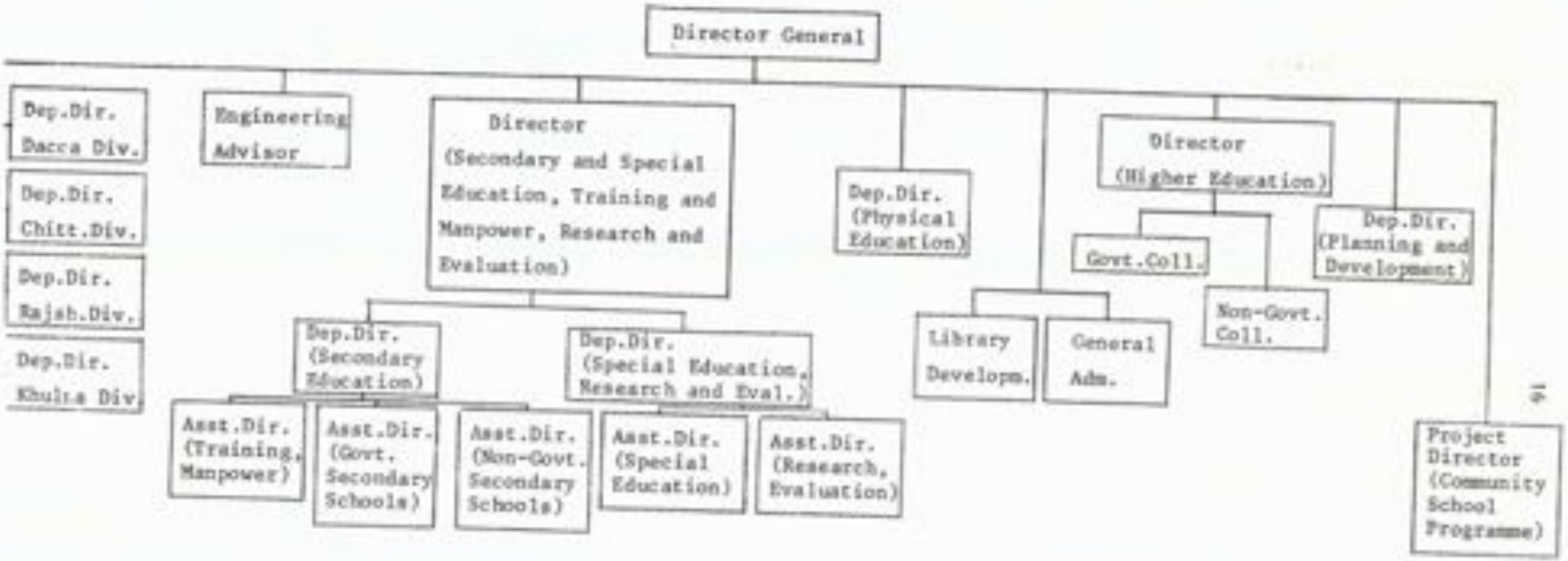

Figure 4.3 Organogram of Directorate of Secondary and Higher Education

4.2 Educational Projects Under the Ministry of Education

A number of projects have been launched by the Bangladesh government in order to bring about reform and development in education. The following list of major government educational projects in the Annual Development Programme for 1980/81 reflects the present thrust of the development strategy in education.

On-going Projects in Primary Education:

1. Improvement of Primary Education (Tk. 4,204 mill.)[1/]
2. Establishment of Academy of Fundamental Education.

Initiated Projects in Primary Education:

3. Universal Primary Education (Tk. 6,537 mill.)
4. Universal Primary Education (Non-Aid) (Tk. 36,935 mill.)

On-going Projects in Secondary Education:

5. Development of 66 Nationalized Secondary Schools at Sub-Divisional Headquarters (Tk. 1,050 mill.)
6. Development of 79 Government High Schools (Tk. 870 mill.)
7. Development of 700 Non-Government High Schools (Tk. 2,100 mill.)
8. Development of Non-Government High Schools in Sub-Divisional Headquarters (Tk. 100 mill.)
9. Construction of Office Building for Education Extension at District and Sub-Division Headquarters (Tk. 150 mill.)
10. Shifting of Government Secondary School Attached to I.I. College Chittagong at Haji Mohd. Mohsin Bidya (Tk. 4.4 mill.)
11. Development of Rangpur Cantonment Public School (Tk. 8.9 mill.)
12. Development of Bogra Cantonment Public School (Tk. 103.75 mill.)
13. Development of Chittagong Cantonment Public School (Tk. 5.0 mill.)

Initiated Projects in Secondary Education:

14. Development of One Boys' and One Girls' Nationalized School in the Newly Created Sub-Division Headquarters (Tk. 250 mill)
15. Conversion of Selected Secondary Schools into Community Schools (Tk. 2,363.2 mill.)

On-going Projects in College Education

16. Development of 35 Government Colleges (Tk. 1,119 mill.)
17. Development of 17 Non-Government Women's Colleges at District Headquarters (Tk. 340 mill.)
18. Development of Government B.M. College as University College (Tk. 190 mill.)
19. Development of Government B.L. College as University College (Tk. 256 mill.)
20. Development of Sylhet College as University (Tk. 191.13 mill.)

1/ Total cost.

21. Development of Carmichael College as University College (Tk. 199.46 mill.)

Initiated Projects in College Education:

22. Introduction of Science Education and Development of Selected Non-Government Colleges (Tk. 207.90 mill.)
23. Establishment of a College at Sher-E-Banglangar Dacca and Double Mooring (Chittagong) (Presidential Committment) (Tk. 469 mill.)
24. Development of Nationalized Colleges (Tk. 199.95 mill.)

On-going Projects in Teacher Education:

25. Development of PTI:s (Tk. 1,142.55 mill.)
26. Development of Six Existing T.T. Colleges (Tk. 198 mill.)
27. Development of Four Existing Colleges of Education as T.T. Colleges (Tk. 195 mill.)

Initiated Projects in Teacher Education:

28. Development of Bangladesh Education Extension and Research Institute (BEERI) (Tk. 150 mill.)
29. Establishment of Institute of Instructional Materials (Tk. ?)
30. Orientation, In-Service and Refresher Courses (Tk. 100 mill.)

New Projects in Madrasah Education

31. Instruction of Science in Selected Madrasah Schools (Tk. 748.7 mill.)
32. Introduction of Technical and Vocational Courses in Selected Madrasah Schools (Tk. 156 mill.)
33. Development of Madrasahs in 17 Districts as Government Madrasahs (Tk. 680 mill.)
34. Development of Madrasah Education Board (Tk. 50 mill.)

In technical and vocational education and training the follwoing projects were listed in the 1980/81 Government Annual Development Programme (new and on-going):

1. Rajshahi Engineering College
2. Chittagong Engineering College
3. Khulna Engineering College
4. Re-Organization of Technical Education Staff College into College of Engineering
5. Conversion of Bangladesh Textile Institute (inot College of Textile Technology)
6. Establishment of Engineering College at Dinajpur and Patuakhali
7. Conversion of Bangladesh Institute of Leather Technology into College of Leather Technology
8. Construction of Hostel in the College of Textile Technology
9. Introduction of Food Technology in the Dacca Polytechnic
10. Conversion of Five Technical Institutes (Bogra, Barisal, Pabna, Rangpur and Sylhet) into Polytechnics
11. Revised Scheme for Re-Organization of Glass and Ceramic Institute
12. Establishment of Mahila Polytechnic Institute
13. Establishment of Polytechnic Institute at Tangail and Patuakhali
14. Development of Chittagong Polytechnic Institute

15. Introduction of Mechanical Drafting Course in Dacca Polytechnic Institute
16. Completion and Expansion of the Works of Six Polytechnic Institutes (Dinajpur, Faridpur, Feni, Jessore, Kushtia and Rajshahi)
17. Completion of Incomplete Works of Dacca, Khulna, Comilla and Mymensingh Polytechnic Institutes
18. Completion of Incomplete Works of Bangladesh-Swedish Technical Institute at Kaptai
19. Conversion of 15 Commercial Sections Attached to Polytechnic Institutes
20. Introduction of Bangla Shorthand and 15 Commercial Sections of Polytechnic and Construction of Hostel in Dacca Polytechnic Institute
21. Establishment of Five New Commercial Institutes
22. Revised Scheme for Establishment of 35 VTI:s at Sub-Divisional Headquarters
23. Establishment of 17 VTI:s at Thana Level
24. Establishment of VTI in Khagrachari of Chittagong Hill Tracts
25. Vocational TTI at Bogra and Equipment to 35 VTI:s
26. Non-Formal Vocational Training Course
27. Establishment of a VTI in Kaipai under P.S. Daulatpur of Kushtia
28. Establishment of Laboratory VTI under VTI at Bogra and Equipment to 23 VTI:s
29. Establishment of VTI at Thana Level (Presidential Commitment)
30. Education Equipment Development Bureau
31. Extension of Technical Education Directorate
32. Establishment of Division Office for Vocational Education
33. Construction of Office Building for Technical Education Board
34. Planning Cell (for Technical Education)
35. International Scholarships for Technical Students

Among a number of projects directly under the Ministry of Education in the 1980/81 Annual Development Programme could also be mentioned: Education Planning and Administration, Planning Cell (in the Ministry), Institute of Islamic Education and Research, Establishment of National Institute of Educational Planning and Management, Establishment of National Curriculum Development Centre, Educational Statistics Evaluation and Research, and Distance Learning System. (A complete list of all projects is given in Educational Statistics of Bangladesh, BANBEIS, 1981.)

4.3 The Role of Other Ministries

Although the regular formal educational system naturally comes under the Ministry of Education, various formal and non-formal programmes come under other ministries, such as the ministries of Defence; Health, Population Control and Family Planning; Labour, Manpower and Social Welfare[1/]; Youth Development; and Women's Affairs.

1/ Formerly two separate ministries, namely Ministry of Manpower Development and Social Welfare and Ministry of Labour and Industrial Welfare.

It is not uncommon for similar or identical programmes or institutions to come under different ministries. The Vocational Training Institutes, VTIs, thus come under the Ministry of Education, Directorate of Technical Education, but the short-term (6 months) non-formal programmes offered at the VTIs are administered by the Ministry of Youth Development. At the same time, the Technical Training Centres, TTC, which provide more or less the same training as the VTIs, come under the Ministry of Labour, Manpower and Social Welfare.

Here a few examples will be given of educational institutions or programmes that come under ministries other than the Ministry of Education.

A number of Cadet Colleges (like Rangpur Cadet College and Sylhet Cadet College) come under the Ministry of Defence.

The Bangladesh College of Physicians and Surgeons, and Bangladesh State Medical Faculty both come under the Ministry of Health, Population Control and Family Planning.

The Ministry of Labour, Manpower and Social Welfare, MOLMSW, has great responsibilities for training, mainly through the Bureau of Manpower, Employment and Training, BMET. The Bureau has a Training Department which is engaged in institution-based vocational training, industry-based training and the formulation of the national training policy. Certificate courses are offered in five Technical Training Centres that come under the MOLMSW.[1] These centres were reported to have an annual output capacity of 5,196 in 1982. Six more TTCs are at various stages of completion. The annual output capacity of all the 12 centres is planned to rise to 7,791 by the end of 1982 and 11,396 the year after that, when all the 12 institutions are planned to be fully operational, evening shifts have been introduced and the two-year courses have been converted to six-month modular courses. (Source: Ministry hand-out.)

The training department of the BMET is also responsible for apprenticeship training, short-term in-plant training and various upgrading programmes. It is planned that the combined out-put capacity of the institution-based and industry-based training programmes under the BMET will reach 40,000 by the end of the SFYP period.

A National Council for Skill Development and Training, NCSDT, has been set up, the main purpose of which is to standardise Vocational Training Programmes, impart training to skilled workers and coordinate the activities of both public and private training institutions. It is not clear what results have been achieved so far by the national council.

Examples of development projects planned for the SFYP that the BMET is involved in are (1) the IDA Vocational Training Project (with a World Bank US$ 25 million credit), (2) the Establishment of 10 Technical Training Centres, and (3) the Creation of Apprenticeship and In-Plant Training Infra-Structure. The IDA project aims at, inter alia, staff training of 425 instructional staff for the TTCs and 1,500 training personnel for industry-based schemes. Under the TTC scheme it is proposed to set up ten TTCs at district headquarters which do not already have

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1/ And also in the [illegible]

such institutions. The ten centres will have a total annual output capacity of 26,880.1/

According to the Director-General of the Bangladesh Manpower Planning Centre (under the Manpower Development and Social Welfare Division of the MOLMSW), studies are also under way which evaluate the BMET programme of promoting self-employment of technically trained manpower through the provision of tool-kits, evaluate the training programmes sponsored by the MOLMSW and undertaken by nationalised industries for foreign employment, and investigate the employment problems of seamen. Reports on these studies will be available in the summer of 1982.

In the view of the Bangladesh Manpower Planning Centre, there is also further need for studies in the areas of (1) unemployment among educated manpower, (2) recruitment, pre-employment and post-employment practices in establishments employing educated manpower, and (3) a review of the education system to ascertain whether the current system is of relevance to the rural and urban informal sector. (Source: Interview with the Director-General in Dacca.)

The Ministry of Youth Development also takes responsibility for a number of projects in the non-formal sector. Three Youth Training Centres have been set up in Savar, Sylhet and Rajshahi for training on livestock and poultry farming projects. The centres can accomodate 200, 100 and 100 youths at a time respectively. The course is for a period of three months and four batches can be trained in a year. Applications are invited through newspapers, radio and television. The trainees receive a monthly allowance of Tk. 150. Another example of the projects of the Ministry of Youth Development, is the Pilot Project on Driving, Maintenance and Repair of Auto-Rickshaws. Three months training was given to 51 unemployed urban youths with incomplete schooling in the spring of 1981 on an experimental basis.

The Ministry of Women's Affairs (which was set up in December 1978) takes responsibility for the training of women through various projects. The Ministry is sponsoring the following programmes under the SFYP dealing with skill development and training-cum-production: (1) a Women's Skill Development Centre, (2) a crash teachers training programme for women to train 500 primary school teachers annually, (3) a Vocational/Leadership/Instructor Training Academy for Women, and (4) a Dairy, Poultry and Cooperative Management Training Centre. (Source: S. Khan et al. 1981).

The Ministry of Women's Affairs is also responsible for, among other programmes, a family welfare, nutrition and adult literacy programme, a radio and watch assembling plant as well as a training centre in Dacca and an Industry for Textile Printing and Training Centre.

1/ The 12 TTC institutions already existing or under construction are supposed to reach an annual out-put capacity of 11,396 by the end of 1983, as noted on the previous page.

The Bangladesh Academy for Rural Development in Comilla, BARD, comes under the Ministry of Local Government, Rural Development and Co-operatives, MOLGRDC, and offeres training to a wide range of clientele, both official and non-official, associated with the task of rural development and administration. The Academy trains civil servants, top and middle-level officers for various departments, thana-level officers, local leaders, local councillors, college and university teachers and students, workers of voluntary associations and social welfare organisations.

The Regional Academy for Rural Development in Bogra also comes under the MOLGRDC, and provides similar training to personnel connected with rural development.

CHAPTER 5

THE FORMAL EDUCATION SECTOR

5.1 Enrolment

The educational system in Bangladesh consists of a five-year primary level with less than half the cohorts, or about 8 million, formally enrolled, a three-year junior secondary, a tow-year senior secondary, a two-year intermediate college level and the tertiary level. Total enrolment at the secondary level is estimated at about 2 million, and some 250,000 students attend courses at about 400 degree-awarding institutions and teacher training colleges. The structure of the educational system is given in Figure 5.1 below.

5.2 The Heritage

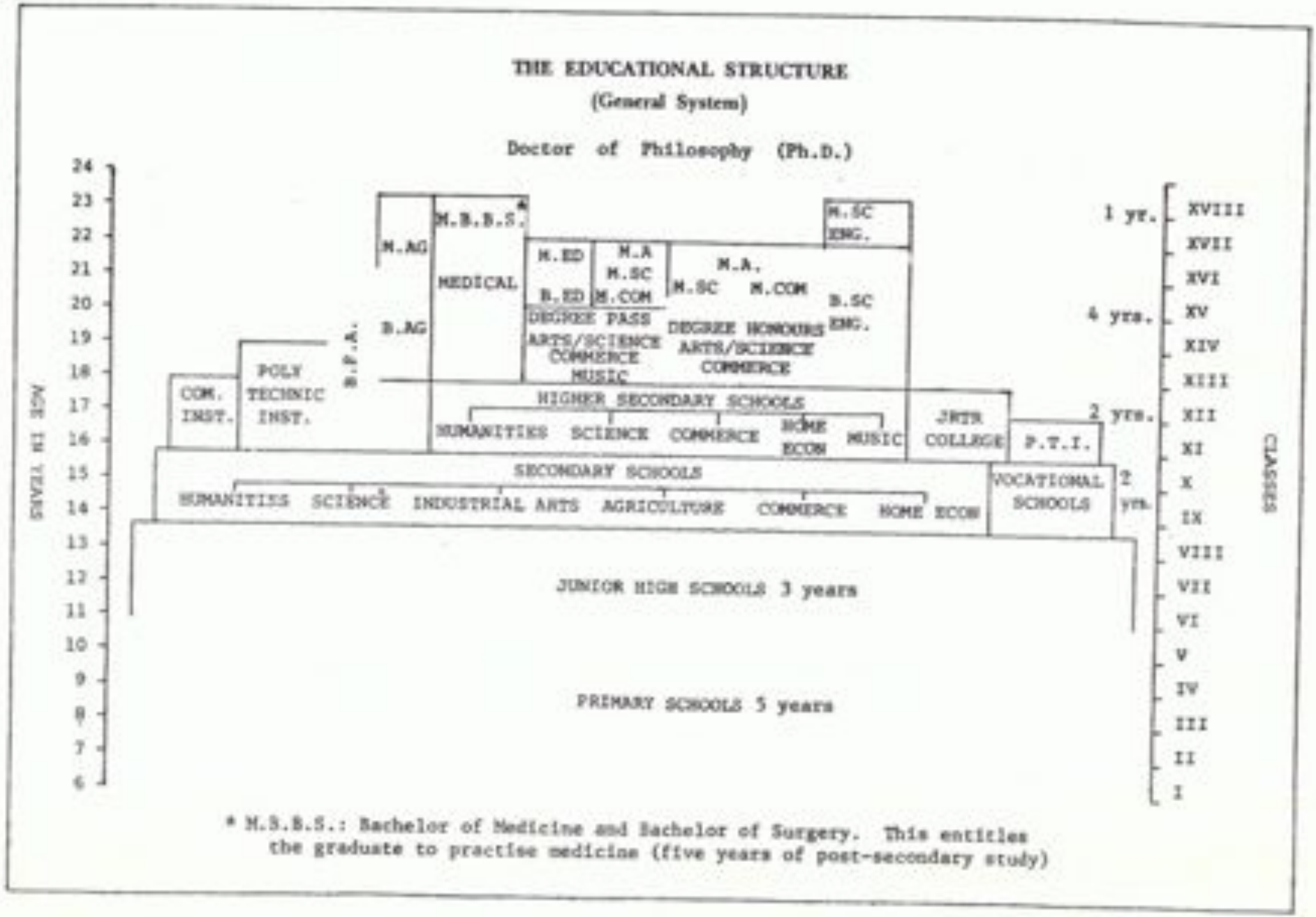
As noted before, some expansion of the formal education sector has taken place in the 1970s in absolute terms, but the system has, generally speaking, barely managed to keep pace with the population growth. Bangladesh inherited a colonial system geared to the needs of the British administration, and no structural change took place during the Pakistani time apart from certain attempts to put more emphasis on natural science, modern technology, vocational training and modern teacher training. The old elitist orientation was reinforced, and the number of tertiary students increased from less than 6,000 in the early 1950s to close to 80,000 in the late 1960s. The educational system of Bangladesh has still today, in form and content, a heavy Anglo-Saxon bias which in itself constitutes a cultural conflict vis-à-vis the surrounding society.

5.3 Selection System

The educational system is highly selective and biased against the rural poor and girls. Less than half the age groups enter the system, the net output of the primary cycle is less than ten per cent of the cohorts, even less advance to the secondary level and less than two per cent enrol at the tertiary level. There are two public examinations, the Secondary School Certificate examination, SSC, at the end of class 10, and the Higher Secondary Certificate examination, HSC, at the end of class 12. After the HSC, the students may pursue higher education in Pass/Honours Bachelor's Degree courses (2-3 years) in the Degree Colleges or the universities, possibly followed by the Master's Degree Course (1-2 years). The duration of Degree courses is four years in Engineering and Agriculture, and five years in Medicine (after the HSC).

5.4 Primary Education

Around 18 per cent of the 90 million population of Bangladesh, or more than 16 million, are of primary school age. According to official statistics, in 1978, 8.3 million children were enrolled in 36,142 Government primary schools and 7,492 private schools with 154,277 and 31,867 teachers respectively. In fact, however, recent studies suggest that even less than 40 per cent of the age groups are enrolled in primary schools. It has also



* M.B.B.S.: Bachelor of Medicine and Bachelor of Surgery. This entitles the graduate to practise medicine (five years of post-secondary study)

Figure 5.1 The Educational Structure of Bangladesh

been found that, in rural areas, 58 per cent of the boys were enrolled as opposed to 37 per cent of the girls (Qadir/Ahmed, NFRHD, 1981). Enrolment figures are highly misleading, however. A 1978 study found median rural enrolment and attendance per school to be 164 and 82 during the rainy season. In other words, only half of the enrolled pupils actually attend. Furghermore, attrition is of enormous proportions in Bangladesh, and the 1981 NFRHD study found that 80 per cent of the enrolled primary school pupils dropped out before they reached the final year (class 5). The final primary school output was found to be 2.55 pupils per teacher and six per cent of the age group.

According to recent estimates, the total number of primary school teachers is around 180,000 72 per cent of whom have received formal training. Only about five per cent of the teachers in rural areas are female compared to nearly 45 per cent in urban areas (where female teachers sometimes are found to be grossly overqualified). Teacher training is conducted in one-year courses at 48 Government Primary Teacher Training Institutes, PTIs. Slightly more than 7,000 teachers are trained annually, which means a four-per cent increase over the existing stock of 180,000 teachers[1]. If 90 per cent of the school-age children were to be put in school and the present teacher-pupil ratio kept constant, an additional 160,000 teachers would be needed. According to the SFYP, 90 per cent enrolment shall be achieved by 1985, which means that about 40,000 teachers would have to be trained annually. This is, of course, not possible and the only way out is to accept larger teaching groups (than 44 per teacher) and/or continued high attrition and drop out (or again to allow a larger proportion of untrained teachers).

The SFYP also stipulates that students of classes 9-12 will be enlisted to serve as teachers on a compulsory basis and be given credit for this in their SSC and HSC examinations.

The total number of primary schools in Bangladesh in 1982 was estimated at close to 44,000. Sixty per cent of the villages in rural areas still do not have a school building in their own village. The SFYP makes provisions for the utilization of Madrasahs, Community Centres, Union Parishad Offices and Mosques as mass education centres, but it is nevertheless difficult to see how it will be possible to more than double the primary school seating capacity by 1985.

The quality of the existing schools is also very low. A 1978 study found that 44 per cent of the schools are mud-bamboo-thatch houses and five per cent had no walls. Most of the schools were also found to be lacking in provisions like furniture, playground, reading materials, equipment like chalk boards, maps, charts, globe etc, and water and toilet facilities. Another school quality factor of importance is the prevalent teacher absenteeism. Teacher salaries are too low, and most teachers have to rely on supplementary income. Another reason

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1/ The SFYP gives the figure of 159,000 primary school teachers in government schools for 1980.

for the low teacher attendance is failing supervision. The most serious bottleneck in this respect is the thana level. The Thana Education Officer, TEO, or the Assistant TEO, is supposed to supervise some 100 schools and 400 teachers which is next to impossible because of lack of transportation facilities. As a matter of fact, the District Education Officer is expected to visit the primary schools within the District, or about 2,000 schools. In reality most of them are never or very seldom visited by either of the DEO or the TEO.

A most serious problem in primary education is the lack of textbooks. A survey of primary schools in 1977 (conducted by the Institute of Education and Research, Dacca University) found that only about two per cent of the primary schools in Bangladesh rural areas possessed all the textbooks that were required for the teacher's use, and more than three-fourths (!) of all the schools did not have any teacher's textbook copies.

The government has attempted to guarantee regular and timely supply of textbooks through the post offices and to provide the books free of charge to the poor pupils in class 1. The results so far, however, have not been very satisfactory. In fact, for the whole of Bangladesh, less than eight per cent of all the villages have post office facilities, and even where there is a post office have textbooks been known to be available much too late or not at all in many cases. Where the pupils do have textbooks these tend to fall apart or dissolve due to the humid climate and the low quality of paper. There is definitely scope for external assistance in this field, but care should be taken to consider both the distribution system and the type and quality of the textbooks. It is also possible that alternatives to at least some of the books could be found in the form of cards and posters made of wood or plastic.

Besides a large number of internal school factors, several external factors account for the low rate of enrolment. Although tuition is free, about 60 per cent of the families have been found not to be able to afford to bear the educational costs (books, stationery and clothing). More than 70 per cent of the rural families are estimated to rely on their children for the support of the family. Most parents in the villages also lack involvement and motivation to send their children to school, since most graduates would not be able to find work corresponding to their expectations. A special reason for not sending the girls to school is that this would cause the girls to expect a husband of higher status, and the result would be that the dowry would be beyond the family and that the girl then would marry a poor man anyway and be unhappy because of the mismatch.

The second perhaps most important external factor, as already mentioned, is related to the low level of health, prevalent malnutrition, parasites and parasitic infections.

The state of primary education in the late 1970s is summarized in Table 5.4 below in the form of basic statistics. (See also the 1982 provisional statistics in Table 5.7.)

Table 5.4 Primary education, basic statistics

	1975	1978
No. of schools:		
Government	36,165	36,142
Private	4,148	7,492
Total	40,313	43,634
No. of pupils:		
Government	8,788,852	6,982,198
Private	694,238	1,245,752
Total	9,483,090	8,227,950
Per cent girls:		
Government	-	37
Private	-	36
Total	-	37
Enrolment ratio:		
Total (appr.)	60	50
No. of teachers:		
Government	155,141	154,277
Private	17,307	31.867
Total	172,448	186,144
Pupils per teacher:		
Government	57	45
Private	40	39
Total	55	44

Source: BANBEIS, 1980 and 1980 SYB

5.3 Secondary Education

The secondary level comprises Junior High School (class 6-8) and High School (class 9-10). The combined enrolment was around 1.6 million pupils in the middle 1970s, increased to around two million in the late 1970s but was around 1.9 million in 1982. This means that a little less than 15 per cent of the age cohorts are now enrolled. Most of the secondary schools are private and a majority of these are of low quality. Out of nearly 9,000 secondary schools, about 170 (mostly located in urban areas) are managed and financed by the government. Many of the schools are facing financial problems, high tuition fees notwithstanding, which causes low teaching standard. The secondary level is also strongly sex-biased, and only about eight per cent of the schools are for girls.

There are also higher secondary schools, or intermediate colleges (class 10-12) which are normally regarded as belonging to the secondary level.

Secondary education is general academic in orientation, and since less than 2 per cent of the age cohorts can be admitted

at the tertiary level (or less than 10 per cent of the secondary output) a large proportion of the secondary school leavers end up as semi-educated job-seekers who are not very attractive to the labour-market. There is great danger that the expansion of the primary sub-sector will result in increased pressure on the secondary level causing dilution of the already low quality and an increased output of potentially unemployed youth. This is, of course, why the introduction of vocational courses at the secondary level is seen as a principal task during the SFYP period. And this is why the secondary stage will be made terminal for a substantial number of students. Several steps will be taken, according th the SFYP, to set up community high schools, introduce diversified curricula, increase the number of places for girls, supply workshops and equipment and improve and expand teacher training. This is going to be very costly and a number of problems can be foreseen. One problem anticipated in the Plan is the need for better linkage between school and labour market, and courses in vocational guidance and counselling are to be introduced in teacher training colleges.

It should be pointed out that, according to plans, the junior secondary school (Junior High School, class 6-8) will remain unchanged and continue to offer general-academic programmes. The previously mentioned community schools will be formed by the selection of some 2,000 private High Schools (class 9-10) and the transformation of these schools by attaching workshops (through the assistance of the Asian Development Bank).

There are at present in Bangladesh 266 intermediate colleges with a total enrolment of close to 60,000. Only three of the intermediate colleges are run by the government.

Some basic statistics relating to secondary education are given in Tables 5.5.1 and 5.5.2 below.

Table 5.5.1 Secondary education[1/] in 1978 and 1982, basic statistics

	1978	1982
No. of schools:		
Government	163	175
Private	9,062	9,051
Total	9,225	9,226
No. of students:		
Government	105,458	-
Private	1,877,513	-
Total	2,018,971	1,952,124
Enrolment ratio(10+ to 16+)	15	14
No. of teachers:		
Government	3,937	8,630
Private	82,865	92,911
Total	86,742	101,541
No. of students per teacher:		
Government	27	-
Private	23	-
Total	23	19

1/ Junior High School, High School and Intermediate College

Table 5.5.2 Total output and pass rate for SSC[1/] and HSC[2/] by subjects in 1980

	Humanities	Science	Commerce	Others	Total
1. SSC					
Passed	49,913	41,527	16,808	9,356	117,594
Rate	46	78	56	66	57
2. HSC					
Passed	22,911	26,361	10,815	2,294	62,391
Rate	52	66	61	63	59

1/ Secondary School Certificate, class 10

2/ Higher Secondary Certificate, class 12

Source: 1980 SYB

5.6 Tertiary Education

There are about 400 degree colleges and other colleges with a total enrolment of more than 200,000 students. Less than 8,000 students are enrolled in medical colleges, less than 2,000 take engineering and only around 400 go to (one) agriculture college. Although enrolment is expected to increase by around 25,000 during the SFYP period, selectivity and emphasis on quality are seen as the principal tasks. The setting up of new degree colleges and admission into liberal education will be discouraged, one reason being that there are about 180,000 unemployed graduates in the country. Many youth up till now have been admitted without proper qualifications. Several of these are negatively motivated and simply want to postpone their entry into the labour market. Pass rates are also very slow. The mismatch between the courses offered and labour market needs is likewise obvious.

There are six universities with a total enrolment of close to 32,000 (compared to 1,700 students in 1947). The expansion of the tertiary sector has taken place at the expense of other sub-sectors. In 1973, for instance, the per unit cost of a university student was Tk. 2,393 as compared to a little over Tk. 32 for a primary school student, which means than one university student cost more than 74 primary school pupils. The SFYP states that "university education has ceased to be relevant and innovative in its complex relationship with the society. ... A feeling is fast gaining ground that a university is a place to keep the young people off the labour market" (§ 16.64).

The number of students and teachers in the six universities is given in Table 5.6 for 1978 and 1979.

Table 5.6 Students and teachers in the universities

University	Students						Teachers					
	1978			1979*			1978			1979		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1. Dacca University	9,493	3,403	12,896	8,900	3,310	12,210	755	144	899	739	144	883
2. Rajshahi University	6,572	1,201	7,773	7,003	1,377	8,380	373	21	394	370	22	392
3. Chittagong University	1,953	472	2,425	3,672	777	4,449	315	17	332	329	20	349
4. Jahangirnagar University	969	127	1,096	966	160	1,126	74	13	87	138	17	155
5. Engineering University	1,833	57	1,890	2,158	80	2,238	218	6	224	220	6	226
6. Agricultural University	2,346	60	2,406	2,224	72	2,296	339	6	345	352	7	359
Total:	23,166	5,320	28,486	24,923	5,776	30,699	2,074	207	2,281	2,148	216	2,364

* Position as on June 30, 1979.

Source: Bureau of Educational Information and Statistics, Ministry of Education

The sometimes very low pass rate in university education is a symptom of serious problems. In 1978 for instance, 2,826 students received their B.A. (pass) and this was only a little over 15 per cent of those who appeared. Close to 1,800 students got their B.Sc. (pass) and that was about one-fourth of those who sat for the exam. For the higher degrees the pass rates tend to improve, and the 1978 M.A., M.Sc. and M.Com.Finals were given to more than 90 per cent of those who appeared (BANBEIS 1981).

5.7 Statistical summary

Some basic statistics regarding the number of schools, teachers and students summarises the situation in the formal education sector in Table 5.7 below.

Table 5.7 Educational statistics 1982 (provisional)

	No. of inst.	No. of teachers	No. of students 1/
1 Primary education	43,937	188,234	8,236,526
2 Secondary education			
Junior High School	2,269	15,883	223,966
High School	6,691	82,505	1,669,094
3 Intermediate College	266	3,153	59,064
4 Degree College	324	9,052	184,292
5 Madrasah	2,684	28,499	363,468
6 Medical College	10	494	7,885
7 Dental College	1	34	247
8 Engineering College	4	152	1,709
9 Agriculture College	1	59	397
10 Law College	22	201	5,606
11 Homeopathic College	18	181	5,036
12 Teacher training			
Teachers' Training College	10	196	2,639
Physical Education	1	10 1/	173
Primary Training Inst.	50	800 1/	7,500
13 Universities			
General University	4	1,813	27,400
Agriculture	1	373	2,304
Engineering	1	226	2,437

1/ Estimates

Source: Several sources. Mainly from BANBEIS hand-out.

5.8 Islamic Education

Besides the general and more secular formal system, there is in Bangladesh a parallel Islamic system known as the Madrasah education. The Madrasah system comprises the following stages:

(1) Ebtedayee, or four-year primary education;
(2) Dakhil, or an additional six years of education;
(3) Alim, another two years;
(4) Fazil, another two years; and
(5) Kamil, the last two years.

Traditionally, the Madrasah system taught mainly subjects such as the Holy Quran and Arabic language and literature, but provisions have been made for the teaching of general subjects like science, mathematics, social studies, Bengali, English, Persian and Urdu, in order to make transfer to the secular system possible or to qualify for general vocations as well.

At the primary level, there is on an average close to one Quran school per village in rural Bangladesh, and the Islamic system has been regarded as a supplementary vehicle for the promotion of universal primary education. According to the BANBEIS, there were in 1981 2,684 Madrasahs in Bangladesh (only two of which were run by the government) with a total of 28,499 teachers and 363,468 students.

5.9 Technical Education

Technical education is organised in three tiers: certificate courses, diploma courses and degree courses. The certificate courses, in general, train skilled workers for 2-3 years, and ten years of schooling is usually required for admission. The polytechnic and monotechnic institutes offer three-year diploma courses in engineering and industrial fields, and here ten years of previous schooling is required. The commercial institutes offer two-year courses.

Technical education is a very small sub-sector in Bangladesh. The number of institutions in 1978 under the MOE is given in Table 5.9.2.

The existing stock of engineers, technicians and skilled workers is far from sufficient. As noted before, this is also acknowledged in the SFYP. Table 5.9.1 below compares the annual output for 1979/80 with the needs as defined in the SFYP.

Table 5.9.1 Annual output in 1979/80 and needed output

	1979/80 output	Needed output
Engineers	670	1,200
Technicians	1,900	6,000
Skilled workers	2,965	30,000

Source: SFYP and University Grants Commission

The engineering colleges have been beset with serious problems and were on the verge of being closed in early 1982 due to a shortage of teachers which in its turn was closely related to the problem of inadequate funds. Out of a required number of 174 teachers these four institutions in 1982 had only 42 teachers. One aspect of the problem is that the University of Engineering and Technology, BUET, in Dacca offers much better facilities to the lecturers than the other engineering colleges, although the latter require the same qualifications.

Table 5.9.2 Technical institutions in Bangladesh, 1978

Type	Number of institutions		Number of teachers				Students in-take capacity (both sexes)	
	Both sexes		Both sexes		Female			
	1975-76	1978	1975-76	1978	1975-76	1978	1975-76	1978
1. Engineering College	3*	3*	180	129	4	-	2,160	2,080
2. Technical Teachers' Training College	1	1	28	13	1	-	150	150
3. Polytechnic Institute	17	16	906	773	7	7	11,400	13,588**
4. Institute of Graphic Arts	1	1	18	19	-	-	120	72
5. Textile Institute	1	1	35	18	-	-	300	384
6. Leather Technology Institute	1	1	15	12	-	1	105	143
7. Commercial Institute	1	1	23	22	-	7	480	183
8. Survey Institute	1	1	6	5	-	-	183	347
9. Vocational Training Institute	23	26	138	148	-	6	1,840	1,554
10. Trade Section attaced to Polytechnic Institute	13	-	253	-	-	-	2,120	-
11. Commercial Department attached to Polytechnic Institute	15	-	247	-	-	-	2,400	-
12. Glass and Ceramic Institute	1	1	13	10	-	-	120	32
13. Swedish Institute, Chittagong	1	1	23	18	-	-	300	270

Notes: * Number of engineering college stands at 4 in 1977-78 including the University of Engineering and Technology.
** Includes commercial section and trade course.

Source: Bureau of Educational Information and Statistics, Ministry of Education

In the field of vocational training the capacity of the public sector in Bangladesh in 1981 was 33 sub-divisional level vocational institutes, 8 thana level vocational institutes and 17 polytechnics second-shifts. Originally two-year programmes in 13 trades were offered to trainees with a minimum of eight years of schooling. To this has been added second-shift modular courses of six months duration under the programme of the Ministry of Youth Development aimed at unemployed youth. Plans have been made to offer such modular courses in about 30 trades.

Besides the above mentioned public vocational training institutes there are more than a hundred private institutions. Most of these are much smaller, however, than the regular VTIs. Total enrolment in vocational education institutions in Bangladesh is very small in relation to the part of the population that is aged 15-24 and is, in fact, even less than 0.1 per cent.

Table 5.9.3 below summarizes the vocational training sub-sector in terms of number of institutions, number of teachers and students and enrolment ratio.

Table 5.9.3

Vocational education enrolment as per cent of population in ages 15-24 (1980-81)

Sector	No. of inst.	No. of teachers	No. of students	Population in age 15-24	Vocational educational enrolment as per cent of population in ages 15-24
1 Public sector	58	1,000	12,000	-	-
2 Private sector	115	600	1,500	-	-
3 Total	173	1,600	13,500	18,876,453	0.071%

Source: SEIB, p. 98.

The SFYP aims at increasing the output of technicians and skilled workers through the following measures:

(i) Consolidation of facilities in all Engineering Colleges with marginal expansion so as to enable them to utilize their approved intake capacity;
(ii) Completion of Technical Education Staff College and College of Engineering at Joydevpur;
(iii) Completion of the work of conversion of the Textile College;
(iv) Upgrading of all Technical Training Institutes and some Monotechnics to Polytechnics;

(v) Establishment of a Mohila Polytechnic at Dacca and completion of the polytechnics at Patuakhali and Tangail on priority basis;
(vi) Completion of works of all ongoing VTIs including VTTI at Bogra;
(vii) Introduction of second shift trade course in all the polytechnics where these facilities do not exist;
(viii) Supply of equipment, teaching aids and instructional materials to all the technical institutes to make them fully operational and functional;
(ix) Augmenting the training of teachers at all levels of technical education; and
(x) Updating of curricula and textbooks for technician education.

(For a full treatment of the vocational sub-sector, see Chapter 10.)

CHAPTER 6

ALLOCATION OF RESOURCES

6.1 Priorities

In comparison to other Third World countries Bangladesh has devoted a small share of its total resources to education and training. This is also acknowledged in the SFYP which states: "Education ant training has been a neglected sector not only in the Pakistan era but also in the post-liberation period. Currently (1978/79) public expenditures on education in Bangladesh (recurring and developmental) amounts to 8.5 per cent of the budget. This compares with 13.2 per cent for 28 countries in Asia and 16.4 per cent for 36 countries in Africa in 1965. What is worse is that the educational budget in Bangladesh has probably been spent in a significant degree on the wrong type of education" (§ 8.10).

In relation to total development expenditure in Bangladesh, the educational share has dropped somewhat. The falling trend is shown in Table 6.1.1 below.

Table 6.1.1 Educational expenditure in per cent of total development expenditure

Year	Per cent of expenditure
1973/74	6.6
1974/75	5.5
1975/76	6.2
1976/77	4.7
1977/78	4.8
1978/79	5.4

Source: Educational Statistics of Bangladesh at a Glance, UNESCO, Bangkok 1981.

Total expenditures as a percentage of GDP was only about 1.2 per cent in the middle 1970s as compared to 3.0 for Thailand, 3.2 for Burma, 4.9 for Sri Lanka and 2.8 for Asia as a whole.

Education has suffered a large reduction also in relation to the revenue expenditures. Table 6.1.2 below gives the per cent of total expenditure devoted to education. It is not uncommon that budgeted money is being reallocated so that in some cases less money is spent than was planned for. This is, of course, one reason why sometimes plan targets are not reached.

Table 6.1.2 Expenditure on education: Revenue expenditure on education of total revenue expenditure

Year	Per cent current expenditure of total current expenditure
1972/73	20.1
1973/74	20.4
1974/75	15.7
1975/76	14.4
1976/77	14.0
1977/78	14.1
1978/79	14.3
1979/80[1/]	12.6
1980/81[2/]	13.9

1/ Revised estimates
2/ Budget estimate

Source: BANBEIS, Ministry of Education, 1981, p. 57.

If we look at allocation to the various educational sub-sectors, we find that primary education gets 41 per cent of the total allocation to education according to the SFYP. Secondary education receives over 18 per cent and university education gets close to six per cent. Allocations to some of the major sub-sectors are listed in Table 6.1.3 below.

Table 6.1.3 Allocations to some major sub-sectors of education in per cent of total allocation to education in the SFYP

Sub-sector	Per cent of allocation to education
Primary education	41.00
Mass literacy	9.44
Secondary education	18.53
Teacher education	2.85
Madrasah education	1.47
College education	5.31
Technical education	7.37
University education	5.90
Educational planning and administration	0.30
Bangladesh National Cadet Corps and Cadet College	2.46

Source: BANBEIS 1981.

CHAPTER 7

SUMMARY OF PROBLEMS AND ISSUES IN FORMAL EDUCATION

7.1 General

The educational system bears a heavy imprint of its colonial Anglo-Saxon heritage. It is, despite some improvement, still highly elitist, geared to the needs of a small modern sector of the economy, and, generally speaking, dysfunctional.

Resource allocation to education has been insufficient and frequently misspent. Lack of funds together with mis-allocations of funds constitute serious problems.

The quantity and quality of educational management are inadequate. The percentage of the budget allocated to management decreased in the late 1970s and is very low by international standards. There is a serious lack of planning, administrative and supervisory personnel.

Decentralization as it is now being implemented may lead to local involvement and mobilization, but it may also lead to problems in the form of local corruption and manipulation. It has met with resistence (eg. by the primary school teachers).

There has been hardly any change in literacy over the last twenty years in Bangladesh, and the net increase in literacy as a result of primary education at present barely manages to keep up with the rate of population increase.

The present educational system is heavily skewed with regard to rural-urban areas, traditional-modern sectors, poor-rich strata, and girls-boys. Numerous foreign interventions in the education sector sometimes tend to be uncoordinated and introduce different or even conflicting models. Foreign aid organizations are in some cases unaware of other interventions, and attempts on the part of the administration to coordinate the latter may cause considerable red tape and delay.

The imbalances in the educational system generally mean that higher levels have expanded disproportionately, and that general academic training has been allowed to expand at the expense of technical/vocational programmes.

7.2 Primary Education

Primary school enrolment is lower than has previously been recognized, or around 40 per cent of the age cohorts. Attendance is also lower than has been assumed, and may be as low as 20 per cent of enrolment in some rural areas. Attrition rate is high, and the net output of the primary cycle is less than ten per cent of the age groups.

Teaching content, despite curriculum reform, retains its general character and prepares for advancement in the academic secondary and tertiary systems which is open to only a few per cent of

the cohorts. Attempts to introduce agriculture based teaching in the village schools have not been very successful and sometimes directly circumscribed by the examination system.

There is still a considerable lack of school buildings (about one-third of the needed number). Most existing schools lack minimum facilities, and textbooks are in desperately short supply. Even the teachers in many cases don't have books, and the recently introduced postal distribution system cannot cope with distant rural areas. Books are too expensive for the poor families, and they don't last long in the humid climate.

Educational opportunity is unequal, wastage is high and quality low in primary education. Internal school factors and external socio-economic and health factors contribute to this. There is insufficient pre-service and in-service teacher training. The number of female teachers is very small[1]/causing girls to drop out more than boys (a tendency which, of course, is reinforced by the purdha rules, early marriage, the dowry system and the fact that the responsibility for the support of old parents rests with the boys). Attempts to adjust the teaching to rural needs have been known to stumble on the traditional (Western) format of schooling, i.e. the teacher role, the time units (lessons) and the subject fragmentation.

7.3 Secondary Education

Most secondary schools are privately run and charge high fees. Their distribution favours urban areas and relatively wealthy residents.

The secondary school system is general and academic in orientation, and there is a considerable mismatch between the secondary output on the one hand and the absorbtiveness of the tertiary level and the needs of the labour market on the other.

The examination system is a serious problem because of bad organization and various malpractices. Failure rates are high indicating considerable wastage.

7.4 Tertiary Education

University admission is indiscriminate leading to oversized enrolment with students many of whom are not properly qualified and/or motivated.

Courses and programmes are frequently of no relevance to the development needs of the nation. Education is heavily humanities biased and seldom conforms to professional needs.

The traditional faculties system may be a serious obstacle to reform and modernization of higher education.

The degree system is oldfashioned and rigid. The failure rates in the tertiary examinations are often very high.

1/ Presently, however, the intention is that, when possible, 90 per cent of the PTI trainees should be female.

In some respects, the universities are underutilized.

Tertiary education, in general, is isolated from the rest of society. There is a disturbing lack of discipline among both students and teachers. Students have very little work experience when they enter the system and tend to have little knowledge of job opportunities. There is a general lack of communication infrastructure in Bangladesh, and the authorities have not been able to compensate for this.

CHAPTER 8

LITERACY PROMOTION

8.1 The Literacy Rate

Available statistics on literacy are not always consistent. The SFYP gives a literacy rate of 22 per cent of the total population. According to the same source, the total number of illiterates in 1979 should have been 55 million (which, in fact, was around 65 per cent of the total population that year), but this figure probably included below 15-youth as well. A FREPD study (March 1979) bases itself on the 1974 census and claims that "out of a total estimated 37.1 million adult population over 15 years of age, 27.6 million are illiterate". This gives a literacy rate of 25.6, and that tallies with the SEIB, 1981, which gives the rates shown in Table 8.1 below.

Table 8.1 Adult literates as per cent of total population of age 15 and above

	National	Rural	Urban
Male	37.2	34.6	57.9
Female	13.2	11.5	32.2
Total	25.8	23.4	48.1

8.2 The SFYP on Literacy

The Second Five year Plan has set a minimum target of 80 per cent literacy over the plan period. This is, of course, a very ambitious target without precedence in non-socialist countries. The Committee on Non-Formal Education in Bangladesh has noted that a non-formal education programme is more likely to succeed if it is part of an income generating rather than purely literacy programme, and recommends that literacy should also be part of an integrated development programme rather than being isolated, unisectoral or unifunctional. Besides the already mentioned linkage between formal and non-formal education proposed in the SFYP, the plan also advocates a National Service system where educated youth could be drafted for a period of time and used as literacy teachers.

8.3 Literacy Organizations

There are in Bangladesh a great number of organizations engaged in literacy activities with a varying degree of Government support. A 1978 report mentioned 695 male and 671 female literacy centres all over the country. Among the various organizations engaged in this field can be mentioned: Bangladesh Rural Advancement Committee, BRAC; Jatiya Tarun Shangha, JTS (National Youth Organization); Bangladesh Shakkharata Samity, BSS (Bangladesh Literacy Association); Community Development Foundation, CDF; Jatiya Mahila Sangshad (or the Department of Social Welfare); and Cramti Sangshad (Anti-illiteracy Movement).

A great number of programmes have been initiated in Bangladesh with the purpose of emphasizing the various aspects of social, economic and physical development. In many of these programmes, literacy has been a component of a supplementary character. The functional aspect of literacy has not been stressed, however, and these activities have been rather limited in coverage. Some of the most important programmes are listed here: (a) the Comilla Cooperative Experiment; (b) the Integrated Rural Development Programme; (c) the Kanguria Thana Cooperative Experiment; (d) Agricultural Extension Service; (e) Family Planning Programme of the Ministry of Health and Planning; (f) the Non-formal Education Programme of the Ministry of Labour and Social Welfare; (g) Pilot Project on Adult Education of the Ministry of Education; (h) Bangladesh Rural Advancement Committee (BRAC) Programme; (i) Ganasilan, Gurudaspur (Rajshahi) Programme; (j) the Programme of the Ministry of Information and Broadcasting; (k) Students at Work Programme; (l) the Work Study Programme of Rajshahi University; (m) Self-help Project at A. H. University College, Bogra; (n) the Chittagong University Rural Development Project; (o) the Dacca University Project for Student Participation in IRRI-20 rice cultivation.

(For some additional voluntary organizations involved in non-formal education, see Appendix 7).

8.4 Feasibility and Problems

The Government programme to turn 40 million illiterates into functionally literate citizens in five years has not been deemed feasible by Western experts. So far, many efforts have failed because of low teacher and participant motivation, lack of linkage to agriculture and income generation, and bad planning, coordination and preperations. Although the country is practically mono-lingual and has a rich literacy tradition, the low level of development has resulted in lack of paper and printing technology and consequently very little reading material exists, especially in rural areas. All these factors taken together seem to indicate that the chances of achieving any immediate success on a mass scale are very small.

(For a short treatment of other non-formal programmes, please refer back to pp. 19 - 22. See also Appendix 23).

CHAPTER 9

FOREIGN ASSISTANCE

9.1 Size

Bangladesh depends to a very high degree on foreign aid and assistance. In 1979, a record level was reached, with commitments amounting to US$ 1.87 billion and disbursements amounting to 1.02 billion. Disbursements continued to rise sharply in 1980. Foreign aid, including grants and loans, as already mentioned, accounts for 75-80 per cent of the total development expenditures, which means that more than 100 per cent of public investment, or almost ten per cent of the GDP, is financed by foreign aid.

9.2 Aid Agencies

Bangladesh has also received assistance for the whole educational sector through multilateral or bilateral channels ever since 1970 to a total value of more than US$ 75 million (by 1980). UNESCO and UNDP have provided assistance in educational planning and administration (the IIEP in Paris has trained ten educational planners from Bangladesh). The World Bank/IDA education projects in Bangladesh are listed below.

Table 9.2 World Bank/IDA education projects in Bangladesh

Year	Project	Cost (million $)
1973	University and post-secondary technical and agricultural, teacher training	21.0
1976	Agricultural extension and credit co-operative training	12.0
1979	Technical training centres, inplant training	25.0
1981	Primary education expansion	40.0

The Asian Development Bank started operations in Bangladesh in 1973, and by 1978 had granted 21 loans to the amount of US$ 275 million. The ADB is also supporting a project to improve the quality of teaching in schools in Bangladesh through the provision of equipment through a loan amounting to US$ 6 million.

9.3 Primary Education

UNICEF has been one of the main donors in education, and more than US$ 23 million was directed to primary education in the 1970s. The most important contributions have been in the fields of primary teacher training, textbook production and distribution, and the distribution of school supplies. Sweden has supported the primary sub-sector, mainly school building and teacher

training, through the Swedish Free Church Aid by committing approximately Skr. 10 million. Non-formal primary education has also been assisted by OXFAM, USA and Canada, mainly via the Bangladesh Rural Advancement Committee, BRAC.

9.4 Secondary Education

Besides the already mentioned ADB programmes in secondary education (US$ 8 million), USAID has assisted in the reconstruction of 660 secondary schools to a value of US$ 1.9 million. Considerable assistance has also been rendered to technical and vocational training by the USSR (US$ 0.4 million) and SIDA (US$ 7.1 million to the establishment of a vocational teachers training institute and equipment for 35 vocational training institutes).

9.5 Tertiary Education

The tertiary sector has not received any external support since 1973 (US$ 1 million in 1978 being the only exception).

9.6 Technical Education

In terms of outside aid the technical and vocational sub-sector has been very favoured, especially in the late 1970s. By 1979, more than half of the total external aid to education had gone to this sub-sector.

9.7 Total Aid

A summary of education projects financed from external aid according to World Bank estimates is given in table 9.6 below.

Table 9.7 External aid to education, 1973-1979 (US$ million)

Category	1973	1974	1975	1976	1977	1978	1979	Total
Primary education	8.5		3.0		0.1			11.6
Secondary education		1.9						1.9
University education	13.0					1.0		14.0
Technical/ vocational education	8.0	0.6			7.1		25.0	40.7
General	—	—	—	0.6	—	—	6.4	7.0
Total	29.5	2.5	3.0	0.6	7.2	1.0	31.4	75.2

Source: Bank Staff Estimates.

CHAPTER 10

VOCATIONAL TRAINING SUB-SECTOR

10.0 Introduction

In common with most developing countries, manpower planning in Bangladesh recognizesthe importance of technical and vocational training in the process of modernization and industrialization. During the 1950s and 1960s the role of technical education was increasingly emphasized in Pakistani education plans and this trend was continued in the post-1971 independence period. During the first Five year plan in Bangladesh(1[illegible]3-78) the share of technical education in overall education expenditure was 15.5 percent and it ranked third in importance behind primary and secondary education. During the ensueing Two-Year Plan(1978-80), priority was accorded technical education and the share of total education resources earmarked to this sub-sector increased to 22.8 percent of planned educational expenditure.

However, in both cases actual expenditure on the education sector in Bangladesh fell well short of that designated in the plans. In both the First Five-Year Plan and the Two-Year Plan only some 57 percent of the total allocations to education were actually spent and of these, the majority went to various forms of socially selective post secondary education, i.e. universities, colleges etc. at the expense of primary, non-formal and technical education. Moreover, during the 1970s the industrialization process was seriously retarded by the war of liberation and the demand for trained manpower declined temporarily, esoecially in the manufacturing sector of the economy. This, in turn, has been reflected in a relatively low level of utilization of existing training facilities and the production of trained manpower which is poorly suited to the present needs of both the urban and rural economies. While there is a clear need to increase output from such facilities, the immediate concern is to consolidate the existing vocational training system and to ensure that those now trained are absorbed into the labour market.

10.1 Skilled Manpower Requirements: Estimates of Demand and Supply

Although Bangladesh is a labour surplus country, it suffers from an acute shortage of skilled and semi-skilled manpower which seriously impedes the implementation of development projects, limits attempts to expand the industrial sector and results in low overall productivity in the country's work-force. While reliable information on labour market needs is scarce, recent estimates of manpower requirements up to and including 1983/84 give some idea of the magnitude of the problem. In terms of annual domestic demand, it is estimated that Bangladesh will require some 30,400 skilled workers and an additional 164,000 semi-skilled workers in order to meed the economic development targets laid down in the Second Five Year Plan (SFYP)[1/]. While the majority of these requirements are earmarked for the agricultural sector, an estimated 40,000 skilled and semi-skilled workers will be needed annually to develop the country's manufacturing, construction, utilities and transport sectors. In addition to these domestic requirements, a further 10-12000 skilled and semi-skilled workers will be needed each year to off-set the emigration of trained manpower to the oil-based economies of the Middle-East and Gulf states (Appendix 8).

Against the projected requirements for skilled and semi-skilled labour in the non-agricultural sector alone, i.e. about 40,000 a year, Bangladesh was only able to produce some 4,800 graduates from existing technical and vocational training institutions in 1980. Not only does this figure reflect an enormous gap between present supply and estimated demand, but it represents only about a third of the total number of skilled and semi-skilled workers who leave the country for overseas employment annually.

10.2 Major Issues in Vocational Training

Attempts to increase the output of skilled and semi-skilled labour to meet both domestic and international requirements in Bangladesh are constrained by a number of factors. In the first place, the existing capacity of vocational and technical training institutes, while low when viewed against manpower requirements, is not efficiently utilized at present so that productivity remains low and costs are high. Secondly, existing training programs are not based on assessments of the existing labour market situation nor on the employment opportunities in various sectors. Much of the training is, therefore, irrelevant to the economic needs fo the country and has resulted in an imbalance between the supply of and demand for the numbers and types of trained workers. Thirdly, there has been an over-emphasis on institutionalized and formalized skills training at the expense of on-the-job and non-formal skill development programs. The

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1/ Government of Bangladesh, Second Five-Year Plan, Dacca, 1980

latter are not only cheaper to provide, but are also more closely related to work opportunities in the rural sector and to increased worker productivity and income in industry. Fourthly, the quality of the output from formal technical and vocational training institutions has been low, largely because of the poor quality of the teaching staff and, until recently, the absence of uniform standards of instruction and skill-testing. Finally, both the quantitative and qualitative aspects of vocational training have suffered from the lack or coordination between ministries and departments responsible for various types of vocational and technical training in Bangladesh. In part, this has led to a duplication of programs in different ministries and to the waste of vocational training resources. However, it has also impeded the development of programs which rely on different ministries for different inputs. Before looking more closely at some of the underlying causes of these constraints, we will briefly examine the various components of the vocational/technical education system in Bangladesh and the extent to which they have been able to produce skilled manpower during the 1970s.

10.3 Technical and Vocational Training in Bangladesh: The Formal System

Responsibility for the formal vocational training sector in Bangladesh rests primarily with two ministries; the Ministry of Education (MOE) and the Ministry of Manpower Development and Social Welfare (MMDSW). The Ministry of Education, through the Directorate of Technical Education (DTE), operates 36 Vocational Training Institutes, 17 Polytechnics, and six Monotechnics. The MOE also supervises the provision of vocational training courses on a second shift basis at the polytechnics and runs one Technical Teacher Training College. The Ministry of Manpower Development and Social Welfare, through the Bureau of Manpower Employment and Training (BMET) is responsible for 5 Technical Training Centres (TTCs) and runs a national apprenticeship program in cooperation with state enterprises.

The structure of the vocational training system in Bangladesh, as it existed in 1979 is presented in Figure 10.1 below.

10.3.1 Polytechnics

The major responsibility for training middle-level technicians for the industrial sector in Bangladesh lies with 17 polytechnics and six Monotechnics. Each of the country's 19 districts, except Tangail and Patuakhali had, in 1979, a polytechnic institute which provided 3 year diploma courses in various engineering and commerce fields. In addition, some of the polytechnics offered trade courses as well. Minimum requirements for admission to a polytechnic are 10 years of formal education and a satisfactory grade on the polytechnic entrance examination. In 1979, just over 12000 students were enrolled in polytechnic institutes, with nearly a third of the total in the common first year engineering course. A total of 1374 students were enrolled in the two year trade courses offered at the polytechnics. (See Appendix 20).

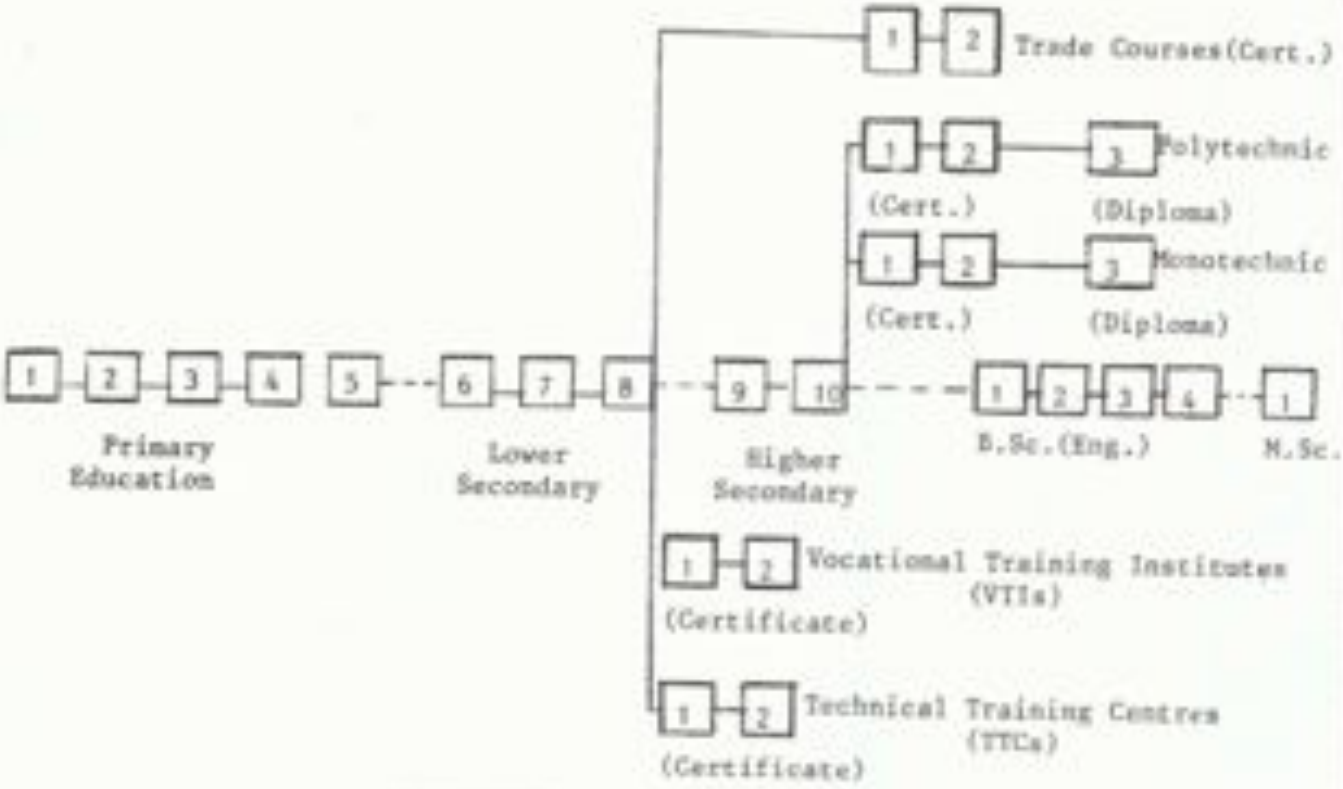

Figure 10.1 The Structure of Vocational Training (Formal) in Bangladesh

During the period 1969 to 1977, the Bangladesh polytechnics produced a total of 11,357 diploma holders and an additional 807 trade certificate holders, for an average annual output of 80 diploma and certificate holders per polytechnic. More importantly, however, the total output from the 17 institutes has steadily declined during the past decade. In 1969, the polytechnics produced a total 1271 diploma and certificate holders, whereas by 1977 this had declined to 505.

Table 10.1 Total graduates from polytechnics 1969-77 (N = 17)

Year	Graduates
1969	1271
1970	2038
1971	2312
1972	2051
1973	1087
1974	969
1975	861
1976	1070
1977	505
Total	12164

Source: Technical Education in Bangladesh: Capacity and Utilization. Dacca 1978

Decreasing productivity in polytechnics is reflected in low overall levels of capacity utilization of existing facilities. In a 1979 evaluation of capacity utilization in technical education in Bangladesh[1], it was found that, on the basis of a composite measure including enrollments, teacher availability and physical facilities, most polytechnics were only utilizing about 50 per cent of their available training capacity.

10.3.2 Monotechnics

In order to meet the skilled manpower needs associated with specialized industries in Bangladesh, 6 monotechnics exist which offer 3 year diploma courses in the fields of survey, textiles, printing, commerce, leather and ceramic technology. The entrance requirements for the monotechnics are the same as those for the polytechnics, i.e. completed Grade 10 plus pass on entrance examination.

During the period 1969 to 1977 just under 2000 diploma and certificate holders were produced by the six monotechnics. Over 80 per cent of these were from the commerce, survey and textile fields. In 1978 total enrollment in the six institutes was 1324 students and the total first year intake capacity was 525 students. At the same time, total first year enrollment in all courses in the six institutes was reported to be 821 students, or almost 300 more than the existing intake capacity.

Table 10.2 Graduate output from monotechnics: 1969-77

Monotechnic	Total output
Commercial	626
Glass and Ceramics	82
Graphic Arts	82
Leather Technology	93
Survey Institute	656
Textile Institute	428
Total	1967

Source: Technical Education in Bangladesh, Dacca, 1979

In terms of capacity utilization rates, those for the monotechnics appear to be substantially higher than for the polytechnics. Partly because of over-enrollments in first year in the commercial and survey institutes, utilization rates in 1979 were greater than 100 per cent, while in the ceramics and graphic arts institutes they were over 75 per cent. However, with an average output figure of only about 140 per year from all monotechnics since 1970, it would appear that a large proportion of those who begin courses drop out before completing the three year training period. In part, however, low output figures are a result of low or non-existent intake during the

1/ "Technical Education in Bangladesh", National Foundation for Research on Human Resource Development, Dacca, 1979

war period and immediately after liberation. Thus, no students were admitted to the Leather Institute in 1970, 1971 and 1972, so that output during 1973 and 1974 was small. This was also the case with the Textile Institute in 1975.

10.3.3 Vocational Training Institutes (VTIs)

Much of the attention given to vocational training in Bangladesh during the past decade had centered on the development of Vocational Training Institutes (VTIs). While the exact number of functioning VTIs tends to vary from time to time, 36 such institutes are planned for the program and, as of April 1981, 32 of these were reported to be operating.

Until recently, VTIs provided two year certificate courses to Grade 8 graduates (minimum) in eight different skill categories (see Appendix 11). Each VTI provided a maximum of two courses and intake to all courses was limited to 40 students. However, by 1979/80 it was realized that the length of the courses and the limited number of courses offered in each institute restricted productivity and contributed to high drop-out rates among trainees. This, in turn, resulted in low utilization rates in most VTIs, particularly in the second year courses. Indeed, while overall capacity utilization rates in the VTIs during 1978 were, on average, approximately 60 per cent, only about 40 per cent of second year capacity in the institutes was being used.

Since 1979/80, the VTIs have begun to offer short-cycle skill-development programs, i.e. 6 months duration, in addition to the regular two year courses. This has resulted in some confusion, however, as the shorter courses are supported by the Ministry of Youth, not the Ministry of Education, and they are directed to a different target group than the two year courses, i.e. they are mainly for unemployed school leavers. Thus, as of early 1981, when an evaluation of the VTIs was launched, parallel programs were being offered in most VTIs, with different courses and course duration, different types of training and different target groups. Table 10.3 below provides information on the recent status of the VTI program.

Table 10.3 Vocational Training Institutes - 1980

Type of program	Number of institutes	Number of trades	Total enrollment
2 year	25	7	1404
6 month	32	13	2638

Source: "Evaluation of Vocational Training Institutes in Bangladesh", Foundation for Research in Educational Planning and Development (FREPD), Dacca, 1981.

While a considerable amount of effort has been taken to examine the socio-economic characteristics of VTI participants and to

investigate their situation within the training program, e.g. the number who are in courses which were their first choice, the employment aspirations of different course participants, the rural-urban composition of VTI students, etc., very little information is presently available on the key issue at stake namely, the extent to which VTI training results in or facilitates wage- or self-employment for graduates. It would appear, however, as if something in excess of 70 per cent of VTI graduates (in early 1981) were unemployed and of those who had found a job, less than one per cent had gone into self-employment. 1/

In terms of output duri-g the period 1969-77, the record of the VTI program in Bangladesh was a particularly poor one. From a total of 22 institutes, the combined output of certificate holders during this period was only 1122 and the number of annual graduates declined from a high of 207 in 1970 to only 88 in 1977 (Table 10.4).

Table 10.4 Total VTI graduates: 1969-1977 (N=22)

Year	Graduates
1969	171
1970	207
1971	145
1972	181
1973	68
1974	85
1975	92
1976	85
1977	88
Total	1122

Source: Technical Education in Bangladesh, Dacca, 1979.

On the basis of 22 operating VTIs during the nine year period 1969-1977, the average annual output of certificate holders per institute was only six. Moreover, in 1978, the total number of VTI students in the two year program was only 988 compared to a total training capacity in the 22 VTIs of 1,760 places.

10.3.4 Technical Training Centres (TTCs)

Since the early 1960s, five Technical Training Centres have been in operation in and around the major urban areas of Bangladesh. Three TTCs are located in Dacca, one in Rajshahi and one in Chittagong. An additional 8 TTCs, funded by an IDA credit, are in the process of becoming operational at Khulna, Barisal, Faridpur, Bogra , Sylhet, Mymensingh, Comilla and Rangamati .

As with the VTIs, the TTCs originally offered two year certificate courses in various machine-shops and industrial trades,

1/ FREPD, Evaluation of Vocational Training Institutes in Bangladesh, Dacca, 1981

with one TTC (Narayanganj) specializing in Marine diesel training courses. In 1977 the combined capacity of the five TTCs was 1427 students and this was later expanded to 3,000 in 1980. At the time it was estimated that the completion of the new TTCs would result in a total capacity of just over 5000 students in 13 centres. In the event, however, the TTCs are presently being reorganized to provide short-cycle modular training programs which, it is hoped, will not only increase the output of skilled workers from the training centres, but also enable different levels of skill development to be achieved to meet different levles of skill requirements, i.e. specialized for the industrial sector and more general levels for rural employment. Thus, for example, trainees will, depending on their background and previous skill experience, be able to take a basic six-month training course in an identified skill area, e.g. mechanical/metal, electrical, or construction trades, and either seek employment on the basis of this general training, or continue on and specialize by taking additional six month up-grading courses.

Previous experience with Technical Training Centres indicates that there is a considerable demand for the types of trainees produced in these institutions, mainly as a result of their industrial orientation and because they have tended to be located in or near urban areas with industrial employment opportunities. In addition, individual TTCs have received considerable foreign assistance from both bilateral and multilateral aid agenices, e.g. German Development Agency, UNDP and ILO.

In 1978, a total of 1925 students were enrolled in the then two year certificate program in the five TTCs and first year enrollment was about 80 per cent of the programs intake capacity. In the second year, however, only 50 per cent of the available places were filled, suggesting a significant drop-out problem between years 1 and 2.

During the period 1969-77, a total of 2896 certificate holders were produced from the five TTCs representing an average annual output per TTC of 64 graduates. Thus, compared to the VTIs during the same period, TTC output was, on average, ten times as great as the Vocational Training Institutes, although there was a great deal of similarity in the two programs both as regards the length and nature of the training offered and as regards the educational level of the clientele which the two programs catered to. Significantly, the output from TTCs during the late 1970s was increasing, while that of the VTIs was declining:

Table 10.5 TTC graduates: 1969-1977 (N=5)

Year	Graduates
1969	392
1970	594
1971	20
1972	322
1973	214
1974	309
1975	210
1976	285
1977	559
Total	2896

Source: Technical Education in Bangladesh, Dacca, 1979.

Table 10.6 below summarises the information on graduate output from the various technical and vocational training institutions in Bangladesh during the period 1969-1977 and includes an estimate of capacity utilization for each type of training facility in 1978.

Table 10.6 Output and capacity utilization in vocational training: 1969-78

Type of institute	Total output	Average output/year	Utilisation rate(1979)
Polytechnic	12164	1352	68%
Monotechnic	1967	219	83%
Vocational Training Institutes	1122	125	56%
Technical Training Centres	2896	322	64%
Total	18149	Ave./Year 2016	Ave. 68%

Source: Appendix 10

10.4 Underlying Causes of Low Productivity and Capacity Utilization

Low rates of productivity and capacity utilisation in vocational and technical training institutions in Bangladesh is the result of a number of factors, some of which are related directly to the training process and training facilities in the various programmes, and some of which derive from the environment in which training takes place.

10.4.1 Teachers

The available information on teachers in the various levels of the vocational training system in Bangladesh (in 1978) indicates that, in quantitative terms, the supply of teaching staff has not been a major problem. The number of teachers and the existing student-teacher ratios for polytechnics, monotechnics, VTIs and TTCs is presented below in Table 10.7.

Table 10.7 Pupil-teacher ratios in vocational training programs: 1978

Type of institute	Total enrollment	Total number of teachers	Pupil/teacher ratio
Polytechnic	12050	777	16:1
Monotechnic	1324	86	15:1
VTIs	998	126	8:1
TTCs	1925	187	10:1

According to these figures, pupil-teacher ratios in all the formal training institutes were low in 1978 and this was particularly the case in the VTIs and TTCs where ratios of 8:1 and 10:1 must be considered as clearly uneconomic. With regard to the quality of instructors and teachers in the various institutes, the overall picture is one of a teaching staff with relatively high formal qualifications, rather long experience in the teaching profession and a considerable amount of professional training. However, the available information on industrial experience in the vocational training teaching corps shows that very few instructors have worked in industry prior to their taking up positions at vocational and technical institutions . Consequently, there would appear to be little appreciation or understanding on the part of vocational training teachers for the practical requirements associated with work-oriented training programs.

The problem of obtaining and retaining qualified teaching staff with the requisite industrial experience is particularly acute in the VTI and TTC programs, both of which are expanding and under-going major changes in their curricula. In both cases, the existing pay scales for instructors and the attractions of an overseas job market for experienced skill trainers are the major issues conditioning the instructor problem. As teacher salaries are set by the Government and are part of the overall pay scale for civil service employees, prevailing low levels of between 800 and 1200 Tk/month for instructors cannot be raised without corresponding increases being made in other staff categoreis. Where qualified instructors with 3-5 years experience can easily make 3-4 times this amount in the private sector (and up to 10 times as much in the Gulf), it is extremely difficult to attract suitable staff to government run training institutions and to retain them after they have obtained a few years experience.

In such a situation, the training of suitable staff in institutes such as the Vocational Teacher Training Institute in Bogra may not represent a real solution to the problem. Indeed, there is reason to fear that the better the quality of the instructor produced in such institutes, the more likely the probability that these individuals will leave the VTI program for more lucrative employment after having graduated and gained a few years of instructor experience.

While top grade instructors are essential to the effective operation of the vocational and technical training programmes in the long run, they are especially important in the context of starting up new training institutes equipped with modern facilities. To get the various programs off the ground and functioning requires special knowledge and experience which new instructors, regardless of the quality of the training received, do not possess. This problem has been met in the TTC program and an attempt has been made to deal with it by seconding experienced instructors from the private sector to the TTCs for a limited period of time under the so-called National Skill Instructor program. Essentially, this is a new instructor category set up to get around the constraints posed by existing civil service pay scales. NSCs receive around Tk 4000 per month while at TTCs for a limited period of time in connection with the starting-up of new facilities and programs. Thereafter, they return to their normal jobs. The problem with this approach, however, is not only that it is expensive, but it results in friction between instructors brought in for start-up purposes and those which are regular employees of the program.

Table 10.8 Teacher characteristics in training institutes: 1978

Type of institute	Per cent with			
	High general education	Professional qualifications	5 years + experience	Industrial Experience
Polytechnic	25	27	50	2
Monotechnic	79	24	72	n.a.
VTIs	47	33	80	n.a.
TTCs	30	28	50	2

10.4.2 Physical Facilities

Until the late 1970s, the number of Polytechnics, Monotechnics, VTIs and TTCs remained largely unchanged, although some attempts were made to increase training capacity by increasing the intake into the TTCs and by providing second shift trade courses at the Polytechnics. From 1978, the number of VTIs increased to the present figure of 32, but many of these remained inoperable because of the lack of training equipment. In addition, of course, a number of vocational and training institutes had been either damaged or taken over by the military during and immediately after the war and it was only in the late 1970s that external assistance began to be channeled to the vocational training sector in order to rehabilitate existing facilities and construct new ones. Thus, from 1977 SIDA has undertaken to equip 35 VTIs and to construct a Vocational Teacher Training Institute at Bogra, UNDP has renovated existing TTCs and the World Bank has provided assistance for both the Polytechincs and five new TTCs.

Under existing conditions in Bangladesh, the maintenance and repair of physical facilities poses difficult problems, particularly where such facilities are located in remote areas where

transport, spare parts and construction materials are in short supply. Thus, as regards the Vocational Training Institutes and, to a certain extent the Polytechnics as well, the standard of physical facilities has been allowed to deteriorate and many institutions are inadequately maintained. This, in turn, hampers attempts to re-equip institutes with up-to-date machinery and expand existing programs. In many VTIs, for example, existing structures cannot support the heavy lathe and drilling machines which are being provided under the SIDA project. Floors are weak, electrical supplies are inadequate and frequently re-wiring is required. In addition, there is an acute shortage of floor space in many institutes with the result that training is often carried out in very crowded conditions.

Attempts to increase the output from existing programs by shortening courses and attaching non-formal training schemes to VTIs, TTCs and Polytechnics must consider the limitations posed by available facilities and the potentially detrimental effects of over-loading existing training structures. The six month program sponsored by the Ministry of Youth, though popular with rural youth, cannot be adequately equipped and incorporated into the present VTI infrastructure without expanding the latter substantially. At the very least, such an integration would require the building of additional workshops at most VTIs and probably additional hostels as well. Since the six month program encompasses a much wider range of courses than those offered by the VTIs proper, additional amounts and types of equipment will also be required, although much of this will be of a simpler nature than that associated with the VTI courses.

Finally, a pre-requisite to improved maintenance and upkeep of physical facilities in all vocational training programs is a system of program supervision which includes regular information on the condition of buildings and physical infrastructure. Ideally, this should be carried out by personnel familiar with building standards and maintenance procedures. However, for reasons mentioned earlier, there is little likelihood that such personnel would be available on a regular basis in Bangladesh. Rather, such a task would probably be more feasible if it was incorporated in the routine of the various program inspectors who are meant to visit institutes regularly and who could, on the basis of a standardized check-list, indicate to central authorities the condition of existing facilities.

10.4.3 The Costs of Vocational and Technical Training

As indicated above, low levels of productivity and efficiency in vocational and technical education in Bangladesh result in high per student costs and this, in turn, inhibits the further expansion of such facilities. While the capital costs of such facilities are often borne by external donor agencies, the responsibility for annual recurrent expenditure lies with the government. Thus, unless efficiency is improved, the burden of recurrent expenditure becomes increasingly heavier for local authorities and continued expansion can ultimately lead to a total breakdown in the vocational training system. A reduction of per student recurrent costs is, therefore, the *sine qua non* of attempts to increase the size and scope of the vocational/technical training sub-sector in Bangladesh.

In looking at the available cost data for vocational and technical training in Bangladesh we will be primarily concerned with three factors: first, the annual recurrent cost per student in the various programs, secondly, the cost (recurrent) per graduate from the different programs, and thirdly, the estimated cost per student of expanding existing facilities. Data relating to the first two of these factors is presented below in Table 10.9.

Table 10.9 Cost per student and per graduate in vocational and technical training (Taka, 1977)

Institution	Cost/student	Cost/graduate
VTIs	2,080	23,350
TTCs	1,609	4,068
Polytechnics	1,732	18,043
Monotechnics	3,976	13,799
Engineering Colleges	2,792	11,608
Engineering University	7,227	39,313

Source: Technical Education in Bangladesh: Capacity and Utilization, Dacca, 1979.

Expenditure per student in VTIs has been significantly greater than that in TTCs and Polytechnics and only slightly less than that in Engineering colleges. In terms of expenditure per graduate, costs in the VTI program have been exceedingly high compared to all other types of technical and vocational training except the Engineering University. The high drop out rates and relatively large allocations of space per VTI student and land per Vocational Training Institute (Table 10.9.1) have resulted in per graduate costs in this program which are 10 times per student costs and five times greater than corresponding per graduate costs in similar TTC programs. The cost of producing a graduate from the VTIs in 1977 was also considerably higher than that in Polytechnics, Monotechnics and Engineering Colleges, despite the fact that many of the latter were three year diploma courses, whereas VTI program was a two year certificate program.

Table 10.9.1 Physical facilities per enrolled student in institutions of technical education, 1978/79 (sq. ft. per enrolled student)

	Class room and workshop space	Total floor space	Land area
VTI:			
Average	167	375	5,046
Minimum	-	161	1,966
TTC:			
Average	140	128	1,205
Minimum	-	87	822

(Continued)

Table 10.9.1 (continued)

	Class room and workshop space	Total floor space	Land area
Polytechnic:			
Average	62	168	1,769
Minimum	-	140	1,015
Engineering College	194	519	11,651
Engineering University	95	752	2,141

Source: ILO, Manpower Planning in Bangladesh, Dacca,1981

Space allocations per enrolled student in the VTI program have been, on average, twice that of TTC and Polytechnics. In large measure this is a result of low enrolment in the VTI program and the fact that space requirments for equipment in such trades as machine shop and auto-mechanics are the same in all three programs. With only 40 students per course/year, per capita costs for physical facilities in the VTI program are unavoidably high, and this is even more the case in second year courses where, as we have seen, only about 40 per cent of available capacity has been utilized.

The third cost factor to be considered is that pertaining to the required per student expenditure in connection with the expansion of existing facilities. Here we are concerned with estimating the capital outlay necessary for providing new places in the various types of vocational and technical training institutions in Bangladesh. Again, our information is limited to data from 1977 and, in this case, applies only to capital costs in the middle-level training institutions, i.e. VTIs, TTCs and Polytechnics. The three main categories of capital expenditure are Land, Construction and Equipment. In addition, of course, capital costs include imputed rent costs as well as market value costs of land construction and equipment. Table 10.9.2 presents the total cost picture per student with regard to Polytechnics, VTIs and TTCs.

Table 10.9.1 shows that, once again, VTIs have been the most expensive type of vocational training to provide in Bangladesh, with capital costs in this program per enrolled student, 2 to 4 times that of Polytechnics and TTCs respectively. Total institutional costs per student are also 2-3 times that of the TTC and Polytechnics.

These relatively high costs for VTI training suggest that alternative skill development programs should be investigated. In particular, non-institutionalized approaches may represent a cost-effective substitute to some types of vocational training. In fact the recently published World Bank study on Labour Migration from Bangladesh contains information on the costs of

Table 10.9.2 Total capital and institutional costs in Polytechnics, VTIs and TTCs (per student)

Type of Cost	Poly-technic	VTI	TTC
1. Recurring Expenditure	1,732	2,080	1,609
2. Market Value of Assets			
Land	7,121	10,315	4,851
Construction	20,160	45,000	15,384
Equipments, etc.	6,820	13,500	4,615
3. Imputed Rent			
Land	285	813	194
Construction	1,613	3,600	1,231
Equipments, etc.	818	1,620	554
Total Rent	2,716	6,033	1,979
4. Total Institutional Cost (1) + (3)	,448	8,113	3,588

Source: ILO, Manpower Planning in Bangladesh, Dacca, 1981

on-the-job training in the modern sector which appear to support increased emphasis on this ytpe of training. According to this information the "social" cost for on-the-job training for skilled workers would be significantly less than that associated with similar trades-training in VTIs (Table 10.9.3).

Table 10.9.3 Comparative costs of institutionalized and on-the-job training of skilled workers (in Taka)

			Training Costs		
			On-the-job		
Poly.	TTC	VTI	1st Yr.	2nd Yr.	3rd Yr.
4,448	3,588	8,113	5,100	4,080	3,060

Source: World Bank, Labour Migration from Bangladesh to the Middle East, Staff Working Paper No.454, Wash. D.C., 1981

Thus, where the social cost of the on-the-job training is represented by the value of the output foregone as the apprenticeship is is trained (which is equivalent to the difference between the normal wage for the job and the wage which the apprentice receives) and the cost of institutionalized training is that shown in Table 10.9.2, it is seen in Table 10.9.3 that a three year apprenticeship program is considerably less expensive than either a two year VTI program or a three year polytechnic program.

10.4.4 Course Content and Length

As regards the Polytechnics and Monotechnics, the content and length of training courses has remained unchanged. Three year diploma courses in industrial trades, engineering, commerce and special technology fields reflect the skill requirements of the industrial sector in urban areas and it has been shown that such courses are a cost-effective alternative to increased investment in higher education. However, when it comes to skill development at the VTI and TTC level, both the selection of available courses and the length of instruction has been inappropriate for a number of reasons. In the first place, both the VTIs and the TTCs have, in effect, been attempting to provide similar types of training to those available in the Polytechnics. Thus, for example, air conditioning, auto mechanics, machine shop, woodworking, and other trade courses have been provided in both programs. However, there is little call for many of these trades in the rural areas where VTIs are located, and in urban areas TTC graduates with a certificate are often forced to compete for jobs with polytechnic graduates who have a diploma. Secondly, while polytechnics, in general, have established links with the industrial sector in many areas, the VTIs have remained isolated from the rural labour market and only recently have attempts been made to identify current skill requirements in these areas. Indeed, the curriculum of the VTIs remained unchanged from 1965 to 1978. Finally, the length of courses at both the VTIs and the TTCs has contributed to high drop-out rates and low levels of graduate productivity. Particularly in the rural areas, where many students are unable to regularly attend courses for more than a few months at a time, the two year programs in both VTIs and TTCs has resulted in low participation rates, especially in the second year of the program.

Attempts are now underway to alleviate some of these problems. Thus, for example, efforts are being made to reduce the theoretical component in VTI and TTC programs, whereas in the Polytechnics a six week period of employment in industry has been instituted following the first year of studies. Courses in the TTCs have also been shortened to six months and a modular approach to training is being adopted. Similar moves are underway in the VTIs and here too, increasing emphasis is being placed on the practical or "applied" aspects of vocational training. Clearly, there is a close connection between this type of curriculum reform and instructor requirements and in the short run efforts to increase output and reorient training content along practical lines will be hampered by the already limited availability of suitable teaching staff. Success will also be very much dependent on detailed investigations of the various skill components found in the workplace and on incorporation of such components into new training programs and training materials At the Vocational Teacher training institute in Bogra a start has been made in this area and it is hoped that training courses presently being developed for the VTIs will better reflect the actual skill requirements of the prevailing economic sector. In the TTCs, on the other hand, curriculum development for the six month trade courses will increasing be based on the ILO-developed Modules of Employable Skills (MES), which are currently being adapted by TTC personnel to meet program and course requirements.

While it has been demonstrated in other LDCs[1/] that properly designed and supported skill development programs can be provided on the basis of six month intensive courses, there is a certain danger that attempts to increase program output by shortening the length of courses alone, will create more problems than it solves. In particular, improving the internal efficiency of vocational training programs through better utilization of existing facilities and personnel does not always lead to improved external efficiency with regard to the placement of graduates in employment. In the context of VTIs and TTCs, shorter courses may lead to a reduction of drop outs compared to the previous two year courses, but it should not be taken for granted that increased output will be accompanied by increased employment prospects after graduation. For one thing, there is a certain amount of evidence which indicates that formal qualifications and the amount of education possessed by an individual are still the main factors considered by potential employers in Bangladesh. In such circumstances, shorter courses may increase employer resistance with regard to hiring the graduates of such programs.

A second factor to consider when re-structuring courses such as those provided in VTIs and TTCs is the ability of the existing administrative system in the vocational training sub-sector to manage a rapid increase in participation rates which is implied in the provision of six-month courses. As indicated earlier, there are already major problems of supervision and administrative support in the country's vocational training programs - something which is reflected in the general lack of up-to-date information on various training activities in the different institutes and in the lack of regular contact between the latter and the Directorate of Technical education. Here again, altering the length of programs so as to increase participation rates will result in increased strain on existing managerial and administrative facilities and personnel.

10.4.3 Labour Market Links

While both polytechnic graduates and those from monotechnics have increasingly felt the effects of low levels of economic growth in the industrial sector, the links between these institutions and business and industry are much stronger than those which exist between the latter and the VTIs and TTCs. In particular, the establishment of new VTIs recently has not been accompanied by any economic survey of the area in which the institutes are to function, in order to ascertain the demand for specific types of skills and skilled manpower. Nor has there existed any local employment assistance agency which could channel VTI graduates to available job opportunities.

The importance of these types of pre-training and post-training services has, however, been recognized in connection with the establishment of the new TTCs financed by the Bank. The BMET

1/ For examples see, SIDA/ILO Regional Seminar on the Vocational Preparation of Rural Youth. Working Papers, Gaborone, 1979.

within the Ministry of Manpower Development and Social Welfare has conducted detailed studies of the districts in which the new TTCs are to be located[1] and has gathered important information not only on the relevant skills which should be provided in each area, but also on prospective employers of TTC graduates as well. This has, in turn, facilitated the selection of modules on which different skills training is to be based and resulted in formal links being established between the BMET and local business and industry in the districts where TTCs are to operate. Such an approach is also necessary in regard to the VTI program where the number of courses to be offered is greater than that in the TTCs and where there is, at present, a dearth of information on employment opportunities for most of them.

10.4.6 Coordination

Current attempts to alter the structure and content of vocational training in Bangladesh and to improve efficiency at all levels will require improved coordination mechanisms at both the Ministerial and local levels. The present system, whereby different ministries (and sometimes different departments within ministries, are responsible for similar programs but are often dependent on each other for various input factors with which to run the program, is inadequate and wasteful. Thus, for example, the Ministry of Youth is officially in charge of the six month program in the VTIs, but this ministry is dependent on the MOE for training facilities and services. Similarly, trade courses offered in the polytechnics under the supervision of the MOE are often similar to those provided by BMET in the Ministry of Manpower Development and Social Welfares.

At the local level, the absence of coordination between different field level authorities responsible for skills training has precluded a pooling of training resources and an effective division of labour with regard to the organization and implementation of different types of training programs. There has, for example, been little attempt made thus far to utilize existing educational facilities and equipment, i.e. schools, teachers, etc., for skills training or to share transport facilities in order to facilitate the delivery of equipment from central stores to local institutions. Moreover, the lack of coordination has also constrained attempts to fourmlate district level training policies and to promote local participation in the identification of training requirements and the design of training programs.

In order to correct these deficiencies, a National Council for Skill Development and Training is in the process of being set up. The purpose of the NCSDT, which is composed of Ministers of Permanent Secretaries from the Ministries of Manpower Development and Social Welfare, Education, Industries, Finance and Planning, together with representatives of Employer Associations and Trade Unions, will be to prepare draft legislation and resolutions pertaining to training, to formulate training policies, to approve training plans and to allocate resources necessary to

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1/ Report of the Training Needs Assessment Survey, BMET/UNDP/ILO BGD/73/016/ Bureau of Manpower Employment and Training, Dacca, 1978.

implement plans and execute training programs. In effect, the NCSDT represents an attempt to set up a national skills training program in Bangladesh, but at the same time maintain a division of responsibility for training programs between different ministries and departments. The proposed organizational set up for the NCSDT and its relationship to other ministries responsible for vocational and technical training is presented below.

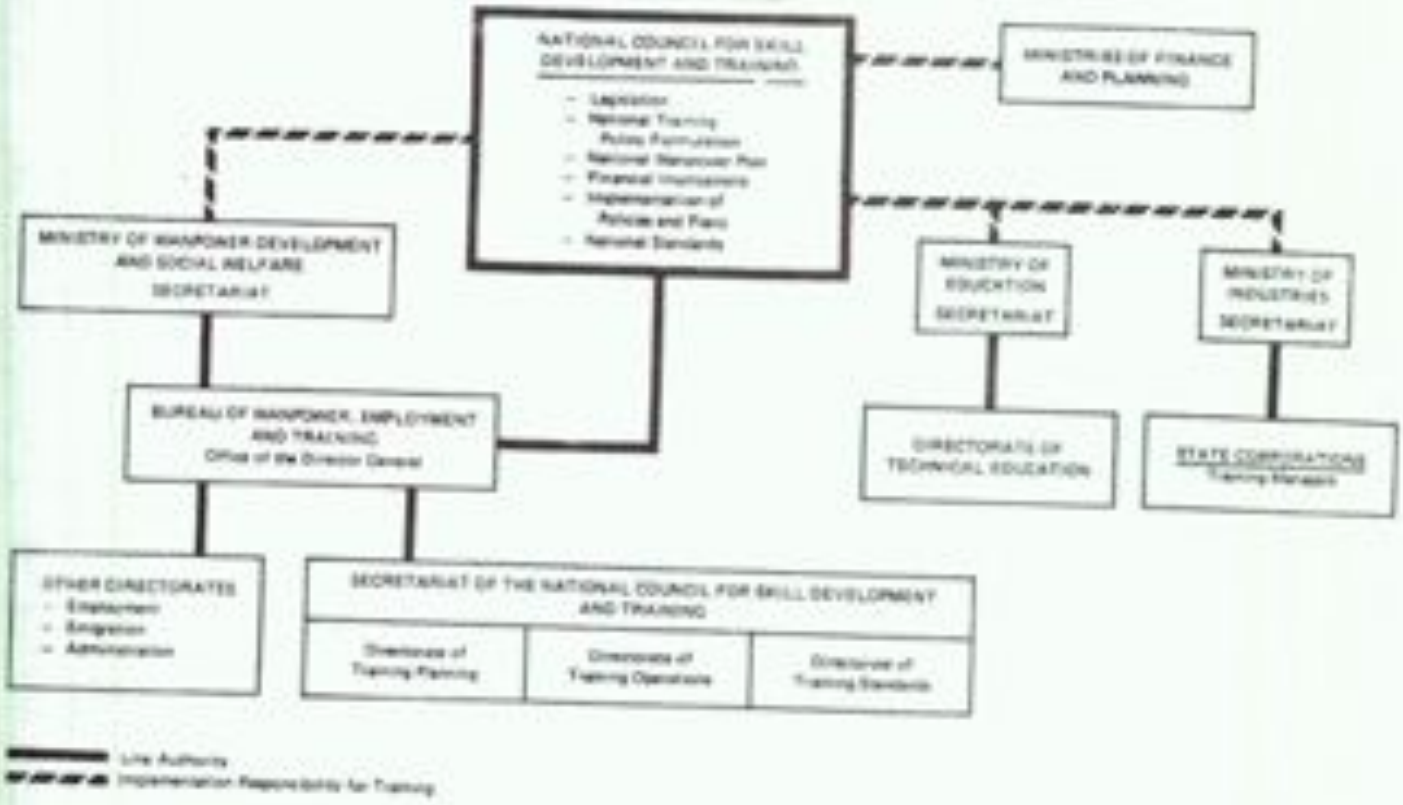

Figure 10.2 National Committee for Skill Development and Training (NCSDT): Organizational Set-Up and Proposed Functions

As indicated in the above organizational chart, the NCSDT envisages a re-organization of training functions at the ministerial level and a management structure which includes separate bodies for the planning and operation of skill development programs in different ministries, and a directorate for the establishment of skill standards for such programs. The Planning Directorate would carry out labour market analysis, training needs assessments and additional data collection in connection with the setting up of programs and the monitoring of program performance, while the Directorate of Standards would be responsible for curriculum development, the setting up of skill standards, trade testing and the production of teaching materials.

However, while the NCSDT represents an important step in the right direction with regard to the coordination and planning of vocational training programs in Bangladesh at the central and divisional levels, it does not provide for direct links with

training authorities at the district and sub-district levels. This is likely to be a problem when it comes to ascertaining the local relevance of various types of training courses and monitoring the progress of individual training centres. Moreover, the staffing requirements associated with the NCSDT Secretariat are considerable, i.e. 276 including 100 professionals, and on the basis of previous experience with staff recruitment for the technical ministries in Bangladesh, it will be some time before the Committee is properly functioning.

10.5 Non-Formal Skill Development

In addition to the formal system of vocational training and skill development in Bangladesh, increasing attention has begun to be directed towards the potential for non-formal training programs, particularly in the rural areas, but also in the form of on-the-job and in-plant training in the industrial sector. As regards the former, very little emphasis has thus far been placed on extending skill development opportunities to the mass of the rural population and most of these people have been prevented from participating in existing training schemes by the academic requirements associated with the Polytechnics, Monotechnics, VTIs and TTCs, and by the opportunity costs implicit in such participation. However, the recognition that very little in the way of economic development can be expected unless the potential of rural populations is harnessed, has lead to an increased allocation of resources for rural training programs in both the Two Year Development Plan (1978-80) and in the current Second Five Year Plan (1980-85).

10.5.1 Existing Non-Formal Programs

The Ministries of Youth Development (MYD), Local Government, Rural Development and Cooperatives (MLGRDC), Manpower Development and Social Welfare (MMDSW) and Women's Affairs (MWA) all have on-going pilot training schemes for various types of non-formal skill development. Here again, responsibility for training is fragmented and each ministry tends to concentrate on a particular area of skill development and, often, on a particular target group. MYD is responsible for developing the skills of the youth population, MLGRDC provides rural training courses as part of its integrated rural development program, MMDSW trains illiterates and individuals whose income is less than US$ 80 per year, and the MWA provides training courses for women at the village level.

The MYD, established in 1978, organized training programs for about 36,000 literate and semi-literate youth in 1979. In addition to agriculture, six month courses were offered in farm equipment maintenance, basic electricity, and diesel and gasoline engine maintenance. For these pilot programs, MYD relied on existing facilities supplied by other ministries and did not provide new or additional facilities. The training programs were arranged in cooperation with the Ministry of Education (MOE), the Ministry of Agriculture and Forests (MAF) and MMDSW. The MOE provided some non-formal courses at the VTIs, Polytechnics and other institutions, the MAF provided courses

at its model farms and utilized its own extension staff to teach some courses at MOE institutions, and similar arrangements were made in respect of non-formal courses provided at five TTCs. Thus, in contrast to the lack of coordination between different institutes in the formal vocational training sector, non-formal programs (largely because they have difficulty in obtaining separate budgetary allocations) have relied heavily on existing training facilities and personnel.

The MYD pilot project scheme in the non-formal sector is regarded as having been successful mainly on the basis of the low drop-out rate achieved, i.e. about 5 per cent, and because of the many requests which it generated for similar programs in the future[1/]. At present, however, Bangladesh lacks the necessary organizational facilities to follow-up the trained output from programs such as those provided by MYD in order to determine their success rate in finding jobs. It is to be hoped that the proposed NCSDT will, through its Directorate of Planning, meet this monitoring function. Nevertheless, a good indication that training has had some success in this respect is the low rate of default on loans taken out by MYD program participants to buy subsidized tool kits provided by the Social Welfare Department of the MMDSW.

One important contribution made by the MYD in the field of non-formal training has been the registration of a large proportion of the literate out-of-school (and out-of-work) youth in the country. This information has been made available to the MOE in order to facilitate the design of training programs which MYD is presently planning (with MOE assistance) for automobile driving, livestock and poultry farming, agricultural activities and technical trades.

The Ministry of Women's Affairs (MWA), also established in 1978, concentrates on developing training programs for women at the village level. Here the emphasis is less on skill development for wage or self-employment, and more on improving the basic needs situation in the home. Training is carried out in the homes of the women and focuses on helping them acquire some simple skills in cooking, gardening and sewing. In some cases, however, the skills learned do enable trainees to earn a modest income and the MWA estimates that average income from the program has been about 3 to 4 takas a day ($0.20 to $0.30 per day). One innovative feature of the program has been the employment of women trainees to prepare school meals from food provided by the World Food Program.

Experience with these pilot projects has shown that most persons seeking basic skills training cannot afford to participate in lengthly training programs which would disrupt their ability to earn a living. This, in turn, has lead to the setting-up of four basic principles which are meant to govern the provision of non-formal training in Bangladesh in the future:

1/ The provision of a Tk 150/month stipend to all participants in the MYD six-month program has also been a major contributing factor to its popularity.

(a) courses must be of short duration, preferably 3-4 months but definitely less than one year;

(b) the timing of the courses should be flexible so as not to conflict with existing responsibilities and chores of the participants;

(c) some stipend or remuneration must be provided to participants in order to provide them with an incentive for attending and to cover living costs in connection with regular attendance over several months of full-time instruction;

(d) skills programs must be based on an appreciation of community needs and opportunities with regard to employment in the local area where participants live.

10.5.2 Community Schools and Non-Formal Training

As part of its Second Five Year Plan (SFYP) Bangladesh intends to establish a system of community schools at the secondary level which will provide vocational training in the formal curriculum, and be a centre for wider vocational training programs for the out-of-school population. MOE, in cooperation with the Integrated Rural Development Program (which is located within the MLGRDC Ministry) has had a pilot community school project running at Meher Union in Comilla since 1980. This project has provided a general education program, rural skills training programs and a small production centre. During the period of the SFYP, the Community Schools program will be extended across the country and additional non-formal training facilities and workshops will be provided by the Asian Development Bank (ADB).

The idea behind the community schools project is reflected in experience in other countries where attempts are currently underway to link up non-formal skill development in rural areas with the existing formal school system and thereby not only utilize existing training facilities, equipment and personnel, but also re-orient the formal school system away from academic goals and towards the occupational and developmental needs of the local environment. Thus, in Sri Lanka, Ethiopia, Tanzania, Lesotho and a number of other LDCs, the community school concept has existed for some years and attempts to implement the concept are well underway[17]. In general, the idea is based on a terminal approach to education provision in rural areas after about ten years of formal schooling, coupled with short-cycle skill development programs with built-in production processes.

In Bangladesh the non-formal component of the Community School program will be linked with 473 small production units which

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[17] For a discussion of Community School concept in various contexts and its relationship to rural employment, see King, K., "Education and Self-Employment", IIEP Working Paper, Paris, 1978.

already exist at the Thana level and which are run by the Department of Social Welfare within the Ministry of Manpower Development and Social Welfare. These Rural Social Service Centres (RSSCs) fabricate simple furniture, household items and rural building components and provide useful services to the rural community. It is estimated that about 20 per cent of graduates from the non-formal program of the Community School project will find employment in building, mechanical and sewing activities of the RSSCs. The government intends to assist this process by providing contracts to manufacture such items as school uniforms, furniture, teaching aids and work benches. These production centres will be expanded under the SFYP and thus it is hoped that they will provide additional employment opportunities for the trained output from the community schools. The RSSCs will also increase the range of products being produced and include items specifically required by the agricultural economy. Thus, for example, typical products could include simple agricultural equipment such as rice weeders, bellows-type irrigation pumps, rice dryers and sericulture equipment. These items have already been develop.' by the Bangladesh Rice Research Institute (BRRI) using locally available materials and the BRRI has indicated its willingness to provide drawings of these items to the RSSCs wishing to produce them.

10.5.3 Organization of Non-Formal Training at Community Schools

Each of the initial 200 community schools covered by the ADB non-formal project will offer five programs of practical skills, three for men and two for women. The five programs are: Agriculture-related skills, Buildings skills, Mechanical skills, Food preparation courses, and Sewing/Weaving courses. Each training group will consist of 12 persons and the duration of each course will depend on the level and type of skill being developed. For most activities it is expected that a maximum of six months training will be required. Training courses will be based on a modular concept and each training module will be a self-contained training course, sufficient to provide a trainee with a particular skill. The amount of skill acquired by the trainees from a particular module may be quite small but it will enable them to earn a modest living from practicing such skills. Persons who have acquired basic skills through this form of "limited-function training" can return at some later date and take additional modules of training.

Since the level of skills training to be provided under the proposed project is that needed by rural and agricultural workers and for participants of rural development programs, it is recognized that the target population is completely different from that being considered under existing skills training programs such as those being offered in VTIs and similar institutes. VTI-type training programs concentrate on formal skills training for factory, urban, and in many cases, overseas employment. Literacy may or may not be a requirement for training under the proposed project, whereas under the VTI project it is generally a prerequisite. The training courses will be carried out in workshops or in a rural work setting without formal lectures. The theoretical content of the courses will be limited to that which can be derived or demonstrated from practical work and that which is required to perform the particular

operation effectively. For whatever trade is being taught, a certain number of identificable and demonstrable skills will have to be learned to achieve a minimum competency. Once a trainee has demonstrated that he can perform to a specified level of competence, he has completed his training. Thus, the duration of the courses to be offered will only be long enough to enable the trainee to reach a predetermined standard. Similarly, the necessary changes in trainee attitudes, say, for example, in the care of tools, cleanliness and orderliness will not be measured by any test but by observation of the trainee performing his tasks.

10.3.4 The Modular Approach

All the rural-oriented craft skills courses will be established on a modular basis. Modular training techniques are well established and can easily be applied to the training courses offered at the community schools. For example, a basic course in carpentry could be arranged in four modules comprising: (i) construction of form work for concreting; (ii) installation of frames and doors; (iii) maintenance and repair of rural structures; and (iv) construction of simple building components. A person taking such a course would not necessarily need to be trained in all four modules before he would develop employable skills. Thus, such a modular system is flexible enough to allow course participants to gradually build up employable skills. If a participant must withdraw from a course after completing a few modules, that person may still be able to engage in gainful employment. It is emphasized that subsequent modules taken within a particular course will not elevate the level of skills development but will simply broaden the scope and application of a particular level of skill thus increasing an individual's employability.

It is expected that the annual output from the first 200 community schools will be about 33,600 persons in 1984/85, of whom about 14,400 will be females. The projected output from the non-formal vocational training courses is given in Table 10.9.4.

Table 10.9.4 Projected output from non-formal programs

Course	Number of schools	Number of Trainees per course	Minimum Number of courses per year	Number of trainees per year
Agriculture	200	12	3	7,200
Building	200	12	3	7,200
Mechanical	200	12	2	4,800
Sewing	200	12	3	7,200
Food	200	12	3	7,200
Total	200	12	14	33,600

Source: ADB, Appraisal of a Community Schools Project in Bangladesh, Manila, 1981.

10.5.5 The Proposed ILO Non-Formal Program in Bangladesh

Many of the present and planned non-formal training programs in Bangladesh are directed to the rural poor and are coordinated by the Department of Social Welfare located in the Ministry of Manpower Development and Social Welfare. In 1982 the rural training division of ILO will begin to promote a systems approach to rural vocational training in Bangladesh whereby a particular training methodology developed by ILO will be applied to existing training programs in four Thanas of the country. The so-called TRUGA[1] approach to rural non-formal training is based on an assessment of training requirements and employment opportunities at the local level in LDCs, and on the provision of appropriate training programs, in modular form, to meet these needs.

Among the existing training programs which the ILO will encompass is the Rural Family and Child Welfare Project which provides technical assistance for the implementation of Rural Social Service projects in Bangladesh, and financial assistance for income generating schemes for the poorest of the rural poor in the country. Thus, for example, funds are made available for the construction of buildings used for training purposes, for handicraft programs to stimulate rural production, and for loans to prospective entrepreneurs wishing to go into self-employment. The ILO intention is to build into existing RSS programs and to extend them to cover a wide range of different training situations. Training opportunities will be identified at the local level, relevant skill modules and training methodologies will be designed and implemented using local materials, and the products of training will be provided with employment opportunities in such production units as the Rural Social Service Centres and those associated with Integrated Rural Development projects. Provision will also be made for credit facilities for those seeking to go into self-employment in the rural sector.

10.6 Conclusions

As this review of the vocational training sector in Bangladesh suggests, the country faces considerable problems in the production of skilled and semi-skilled manpower to meet development targets. Given past performance during the First Five Year Plan (FFYP) and the Two Year Plan (TYP), there is little likelihood that the vocational training requirements outlined in the Second Five Year Plan (SFYP) will be reached. Not only are the quantitative targets unreasonable in terms of current capacity in vocational and technical training institutes, but the proposed emphasis on vocationalization at the secondary level and in non-formal training programs - though in line with identified needs, present special difficulties with regard to curriculum reform, appropriate teaching staff, additional physical resources in the form of workshops and equipment, an adequate supply of teaching materials and higher-than-normal provision for maintenance. Furthermore, if such programs are to

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[1] For a detailed description of the TRUGA approach, see "Training for Rural Gainful Activities (TRUGA) - A Systems Approach", ILO, Rural Training Division, Geneva, 1980.

meet the manpower needs of the local economy, they must be based on a sound knowledge of the local labour market and on strong links with local employers - two factors which have generally been lacking in previous vocational training programs.

Were these problems confined to a particular type of vocational training or a particular vocational training project, one could perhaps consider drastic measures, such as redesigning the program from the ground up or scrapping it altogether and starting again. However, as we've seen, the problems which constrain the development of skilled manpower in Bangladesh exist at all levels of the vocational training sub-sector and, to a large extent, they are shared problems. On the one hand there are the training problems per se: the lack of suitable instructors, insufficient or inappropriate equipment, poor physical facilites, inadequate supervision, irrelevant curricula, and a shortage of good teaching and learning materials. On the other hand there are the external factors which preclude the application of acquired skills to the socio-economic environment outside the training institutes: the lack of labour market information linking trainees to employment possibilities, the virtual non-involvement of the industrial and commercial sectors in the planning of training priorities, the absence of credit and other facilities necessary for the promotion of self-employment among graduates, poor co-ordination between government sponsored training programs and government sponsored employment schemes, and the inability of training authorities to incorporate skill development into a broader strategy for rural development, especially as regards the service requirements of the local community.

Given the rather fundamental nature of these constraints and the fact that they condition, to a greater or lesser extent, the effectiveness of all types of vocational and technical training in Bangladesh, decisions to inaugurate new skill development programs, or even to expand existing ones, should be deferred until a better balance is achieved between present levels of output from various institutes and the absorbtive capacity of the economy. Here it should be emphasized that skilled manpower projections reflect the perceived needs of the economic sector for different types and amounts of trained personnel. They should not merely be regarded as quantitative targets to be met by the respective training institutions. As such, priority should be given to efforts which strengthen existing training programs and improve the fit between trained output and labour market requirements. Without this strong institutional base for vocational training, attempts to establish a national system of skill development and to link it with non-formal programs to meet the needs of specific groups who cannot (or are unable to) participate in the formal training system, are unlikely to be successful.

Such startegy implies that existing training programs be re-examined and their specific weaknesses documented. It also requires that one look more closely at the linkages between such programs and the economic environment in which they operate to determine what types of intervention are required to improve external efficiency. Thirdly, it requires that one investigate

possibilities for a wider application of training facilities and training methodologies in rural areas by involving them in local production processes and non-formal training activities. With special reference to the middle level skill development programs in Bangladesh, i.e. the VTIs and TTCs, we will now suggest a number of concrete measures for improving both the training and post-training effectiveness of such programs.

10.6.1 Recommendations

1. Present efforts to improve the quality of the teaching staff in VTIs through specialized training at the Bogra VTTI should also include provision for in-service training of the existing staff at regular intervals. Participation in such training should also be regarded as contributing to professional qualifications and rewarded accordingly.

2. As the recruitment and training of vocational teachers represent a sizable investment in financial and other resources, efforts should be made to ensure that they remain in the VTI system long enough to warrant the expense. Such an assurance could take the form of a contract between trainees and vocational training authorities, whereby graduates are required to remain in the VTI system for a minimum of three years following graduation. In order to facilitate recruitment under such conditions, teacher trainees would receive a regular salary during the training period.

3. Given the lack of co-ordination at the central level between various types of vocational training and vocational training components, attempts should be made within the VTI program to carry out such functions. The teacher training institute is already developing new curricula for the program, but they could also play an important co-ordinating role by collecting regular information on individual VTIs, by arranging discussions and seminars at the local level, and by testing various training approaches and methodologies in different courses and institutes. The results of these activities could then be forwarded to central authorities and form the basis of suggestions for changes in current training practices, as well as planning for future activities.

4. The development of appropriate learning materials in Bengali should be given priority in order to complement and strengthen the development of new VTI curricula presently taking place. Where possible, those responsible for producing learning materials should be encouraged to draw on previous efforts in this field, particularly as regards learning materials developed for modular courses.

5. In order to ensure the effective utilization of training equipment in all VTIs, special provisions for maintenance and repair are required. A central workshop with qualified personnel should be established as soon as possible and facilities provided for the collection and delivery of machinery. Such a workshop could also include a central store for spare parts and training materials required at individual VTIs.

6. The provision of training equipment to the VTIs must be accompanied by a program to improve the physical infrastructure of training institutes where necessary. This is an urgent priority. In some cases it implies strengthening workshop floors so that they can bear the new equipment load. In others it will mean re-wiring individual institutes and perhaps even the provision of generator-based power sources. Improved ventilation is one of the more common problems which such a program will have to deal with.

7. The present informal relationship between MOE and MYD skill development programs in the VTIs must be clarified and redefined. At present, the six-month courses are merely attached to VTIs, they are not integrated with them. Among other things, this means that there is no clear division of responsibility between programs, no coherent plan for sharing equipment, and no basis for planning future development. This situation must be rectified as soon as possible in order that the requirements of the six-month courses can be identified and provision made for their special needs, i.e. physical facilities, course curricula, training equipment, etc.

8. The work presently being carried out to identify the various skill components of VTI training should be continued. However, it should also include surveys of the employment potential associated with various skills. The VTTI at Bogra could collect such information at the regional and national level. At the same time, individual VTIs could perform this function at the local level, through periodic surveys of employers and work-places at the village or Thana level. Labour market information from national, regional and local levels should be periodically reviewed and analysed within the DTE and used as a basis for revising course content and re-allocating training resources within the VTI program. Employment information should also be provided to students within the individual VTIs.

9. There is a need to involve local interest groups in the workings of the VTIs and in the determination of training objectives. Local employers, representatives of other training institutes, village level entrepreneurs, and local policicians are some of the people who should meed regularly to discuss the progress and direction of existing skill development programs. It may also be necessary to remunerate such individuals for their time in connection with their participation in such meetings.

10. The decision to go over to a modular approach to skills training in the VTI program must be accompanied by the development of standardized skills-testing procedures and a formal certification system. Without such components, the value of different types and amounts of training received will not be acknowledged in the labor market or among students. It must be stressed that there is nothing wrong with formal certification, provided it is a true reflection of learned competencies.

11. The basis of recruitment to VTI training should be reviewed and revised so as to better reflect the specific pre-training requirements associated with different courses. Minimum formal education qualifications and a general entrance examination do not always conform to individual course requirements and they often have the effect of excluding individuals from the lower social classes from training which they may be quite capable of participating in. In most cases, basic literacy will be a necessary pre-requisite, but this cannot always be translated into a certain number of years of formal schooling. Mechanical aptitude, motivation and an ability to learn quickly are also factors which should be considered when selecting trainees for different courses. Simple mechanical aptitude tests and short interviews are probably a better means of determining the suitability of candidates than nominal levels of formal schooling and a theoretically-oriented common exam.

12. The provision of stipends to vocational training pupils applies in most programs in Bangladesh and represents a realistic approach to the problem of encouraging and enabling individuals to participate in such programs. There are, however, differences in the amount of remuneration received by students in different programs and, sometimes, within programs. It is recommended, therefore, that VTI trainees receive the same amount of financial support during the training period as that presently provided by the Ministry of Youth Affairs for participants in the six-month courses, i.e. Tk. 150/month.

13. In addition to financial support, each VTI should be able to provide adequate hostel facilities to students living outside a given radius covered by the Vocational Training Institute.

14. In order to promote self-employment in the rural sector, surveys should be carried out which identify service needs at the local level. Pump maintenance, insecticide application, tube-well repair, water purification facilities and fertilizer services are only some of the felt needs in rural areas that individual farmers are unable to meet themselves. Rural entrepreneurs, trained in the relevant techniques and provided with the necessary equipment, could fulfill a variety of service needs at the local level at a cost which is within the means of individual or groups of farmers.

15. However, if self-employment is to become a viable employment avenue in such areas, investment capital will be required for prospective entrepreneurs, together with information on how to utilize such capital in the most appropriate manner. Several possibilities for providing start-capital for VTI trained entrepreneurs can be suggested. As in Sri Lanka, an agreement could be reached between VTI central authorities and Commercial banks operating in rural areas whereby VTI graduates could apply for Government secured loans and low interest rates. A second alternative, however, would be to finance these requirements externally.

within the context of wider VTI support from an aid agency. For example, such an agency could agree to deposit a sum of money on account in a national Bank in Bangladesh. The interest accruing to this account could then be used to finance worthwhile self-employment ventures within the VTI program. Such an initiative could take the form of a two year trial period. Depending on the results, the capital could either be withdrawn or re-allocated after this period, or it could remain as a source of investment funds for selected graduates. In either case, the allocated capital itself would not be a risk and could be withdrawn at any time.

16. Special provision within the VTI program should be made to train women instructors and to provide suitable courses for female participants. However, before drawing up specific plans for such provision, a study should be commissioned which clarifies the nature of the problems faced in providing vocational training opportunities for women in Bangladesh. We are of the opinion that there are a lot of myths and half-truths which condition the training of women, particularly in rural areas. Are, for example, low female participation rates in rural training institutions a reflection of socio-cultural factors in moslem countries, or are they more a function of practical constraints, such as the lack of day care facilities for children, or the need to take care of members of the extended family? What are the employment areas which women are most interested in and which are able to employ women? Can training be provided which is oriented towards home-based production, and if so, what are some of the products which could be considered? These are some of the fundamental questions which have to be investigated if one is serious about providing training programs for women and involving the latter in rural production processes.

17. At the moment, VTIs should concentrate fully on implementing existing training programs and on improving the quality of instruction. In a longer perspective, however, increased attention should be given to the production potential of such institutes and to the possibilities of utilizing VTIs as rural service centres. In part, such funcitons could serve to lower training costs by providing a source of earned income in the institutes. More important, however, is the need to complement instruction in skills training with practical demonstration and application of such skills in the real world. There are, of course, a number of rather thorny problems associated with both the production and service central proposals. The training component could suffer from an over-emphasis on commercial production, i.e. the division of labour would reflect productive efficiency rather than training priorities, important legal questions regarding responsibility for profits and losses would have to be resolved, the supply of raw material would have to be financed etc. For these reasons it is probably too early at the moment to implement innovative ideas which go beyond training in the VTIs. Nevertheless, such ideas could be considered and tried out on a trial basis in individual VTIs and the results used to determine whether such an approach is valid program-wide and what the important factors to be considered are.

18. The link between formal vocational training programs such as the VTIs and non-formal training efforts (mainly in the rural sector) is presently very weak in Bangladesh. Some old equipment from VTIs finds its way down to the several Thana-level skill centres which were started with ADB support a couple of years ago (but then were discontinued because of the recurrent cost implications of a nation-wide Thana level program) and the Ministry of Youth Development programs are officially designated as non-formal, although such courses are now becoming the model for middle-level skill development efforts. As indicated earlier, however, most of the existing formal training programs have their own problems and attempts to increase their training role or training functions is not feasible. Rather, initiatives in non-formal skill-development must build on more stable institutional structures, such as the existing formal school system, and seek to utilize existing resources in these institutions. The Asian Development Bank project to promote this approach in Community Schools should be examined in the next year or two, as well as the ILO TRUCA program at the Thana level to see if these attempts represent viable programs which could be expanded. At the moment, however, we cannot recommend the initiation of new non-formal programs, until the existing vocational training infrastructure is strengthened and the newly started ADB and ILO sponsored programs have been evaluated. One exception is the training of women mentioned earlier, but here too a pre-project investigation is required.

19. A number of problems associated with the VTI program stem from the fact that the objectives of the program have not been clearly spelled out from the beginning. Are VTIs to cater to the training needs of the rural or urban sector in Bangladesh? Are courses meant to reflect essentially local skill requirements or should they also be based on regional and national manpower needs? Should the program focus on a particular target group or seek to provide skills training to as many individuals and groups as possible? Should the aims of such a program be confined to the economic requirements associated with manpower development or should social goals also be considered in the provision of training? Without a clear definition of the objectives of the program, misunderstandings occur among those most closely involved in the program and efforts to develop and implement a coherent training strategy are impeded. The above report and recommendations reflect, to a certain extent, our feelings regarding many of these central issues. While it is up to the respective authorities to decide the validity of these proposals, it is also incumbent on them - even at this late date - to base such decisions on a clear definition of the goals of the VTI program over the next few critical years.

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APPENDICES

Consultants' Programme in Bangladesh

Week 1 (15/2-20/2)

Institute of Educational Research, Dacca University
Thana Education Officer in Dholairpar
Kakrail Primary School in Moghbazar

Mymensingh: Pre-cadet Primary School
Mym. Collegiate Secondary School
Kotwali Thana Education Officer/Primary Education Officer
Academy for Fundamental Education

UNICEF, Dacca
National Foundation for Research on Human Resource Development, Dacca
SIDA, DCO

Week 2 (22/2-27/2)

Education Planning Division, Ministry of Planning
Institute of Educational Research, Dacca University
SIDA, DCO
Bogra:VTI, VTTI, TTC, PTI, Academy of Rural Development
Bureau of Statistics, Ministry of Education
National Institute of Educational Administration, Management and Research
FREPD
Women for Women
Project Implementation Bureau, Ministry of Planning
Bangladesh Small Cottage Industry Corporation
Directorate of Technical Education, Ministry of Education
Meeting with T. Snead, Senior Vocational Training Advisor, ILO, J. Svoboda, Chief Technical Advisor, TTC Programme, and V.C. Mayer, Vocational Training Branch, ILO geneva.

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Week 3 (1/3-6/3)

Ministry of Womens' Affairs

Planning Commission, Ministry of Planning

Mirpur TTC

S:t Joseph High School, Dacca

Ministry of Youth Development

Ministry of Manpower and Social Welfare

Dacca University Seminar on Higher Education in Bangladesh

Industrial Relations Institute, Tongi

Titumir Government College

Sideeshwari (Catholic) College

Comilla: Visit to Brahmanbaria VTI and discussions with VTI personnel and DTE inspector

Meeting with World Bank Project Staff and Evaluation Team (TTCs)

Ministry of Education, The Secretary

Directorate of Primary Education, Ministry of Education

Directorate of Secondary and College Education, Ministry of Education

11. APPENDICES

Population Statistics

Table 1

Major findings of the 1981 population census

	1981	1974
Total population	87,052,000	71,479,000
Sex ratio (males per 100 females)	106	108
Number of households	15,135,000	12,679,000
Average size of household	5.75	5.64
Per capita land (acres)	0.38	0.47
Annual population growth rate	2.36%[1)]	2.70%

1) On the basis of adjusted population figures for 1961, 1974 and 1981, the compounded growth rates are:

from 1961 to 1974: 2.70%

from 1961 to 1981: 2.59%

from 1974 to 1981: 2.46%.

Source: The Preliminary Report on Bangladesh Population Census 1981, Bangladesh Bureau of Statistics.

Table 2

Basic data on the population in 1973

	1973
Married general fertility rate per 1000	240
Total fertility rate per woman	6
Total female complete (in millions)	13
Life expectation at birth (years)	48
Infant mortality rate per 1000	140
Maternal mortality rate per 1000	30
Percentage of population in age	94
Percentage of population below 15 years	45
Unemployment (% of labour force)	30
Labour force engaged in agriculture (%)	78
Adult literacy rate (%) (1961)	23
Primary school enrolment (%)	56
Percent of population with adequate calorie intake (1962-4)	54
Percent of population with adequate per capita provision (1962-4)	40
Population per physician	10,090
Population per staff nurse	80,000
Doctor/nurse ratio	8:1

Source: Bangladesh Planning Commission, 1974.

Basic Statistics on Population and Education for Bangladesh in the 1970s

BANGLADESH	1970	1975	1976	1977
1. TOTAL POPULATION (000)	68 278	76 982	78 790	81 159
2. POPULATION 6-17 (000)	21 103	24 233	24 972	25 884
% FEMALE	46	46	46	46
3. ENROLMENT, ALL LEVELS	...	...	11 829 107	...
% FEMALE	...	...	...	...
FIRST LEVEL	9 283 787	8 349 834	9 483 090	9 822 633
% FEMALE	32	34	26	27
SECOND LEVEL (1)	...	2 442 942	2 183 413	2 222 139
% FEMALE		21		21
THIRD LEVEL	117 803	...	158 804	181 738
% FEMALE	10	...	13	14
4. TEACHERS, ALL LEVELS	...	...	...	...
% FEMALE	...	...	...	...
FIRST LEVEL	...	...	172 448	...
% FEMALE	...	...	5	...
SECOND LEVEL	...	...	98 985	...
% FEMALE	...	...	6	...
THIRD LEVEL	7 201	...	13 503	13 116
% FEMALE	8	...	10	10
5. PUBLIC EXPENDITURE ON EDUC.				
TOTAL (000) TAKA	...	1 378 862	*1 493 002	...
AS % OF GNP	...	1 4	*1 5	...
6. % ENROLMENT (MF) BY LEVEL	...	...	100	...
FIRST LEVEL	...	...	80	...
SECOND LEVEL	...	...	18	...
THIRD LEVEL	...	...	1	...
% ENROLMENT (F) BY LEVEL	...	...	...	...
FIRST LEVEL	...	...	...	...
SECOND LEVEL	...	...	...	...
THIRD LEVEL	...	...	...	...
7. ENTRANCE AGE FIRST LEVEL	6	6	6	6
SECOND LEVEL	10	10	10	10
DURATION: FIRST LEVEL	5	5	5	5
SECOND LEVEL GEN.	5	5	5	5
8. GROSS ENROLMENT RATIOS (MF)				
FIRST LEVEL	62	71	79	72
SECOND LEVEL			21	
THIRD LEVEL	2 10	...	2 31	2 54
GROSS ENROLMENT RATIOS (F)				
FIRST LEVEL	34	50	57	40
SECOND LEVEL				
THIRD LEVEL	0 43	...	0 59	0 72

Bangladesh
(1) For 1977, data refer to public education only.

Source: International Yearbook of Education, UNESCO 1981

Participation of the 15-22 Age Group in Technical and Vocational Education in the 1970s - a Comparative Perspective

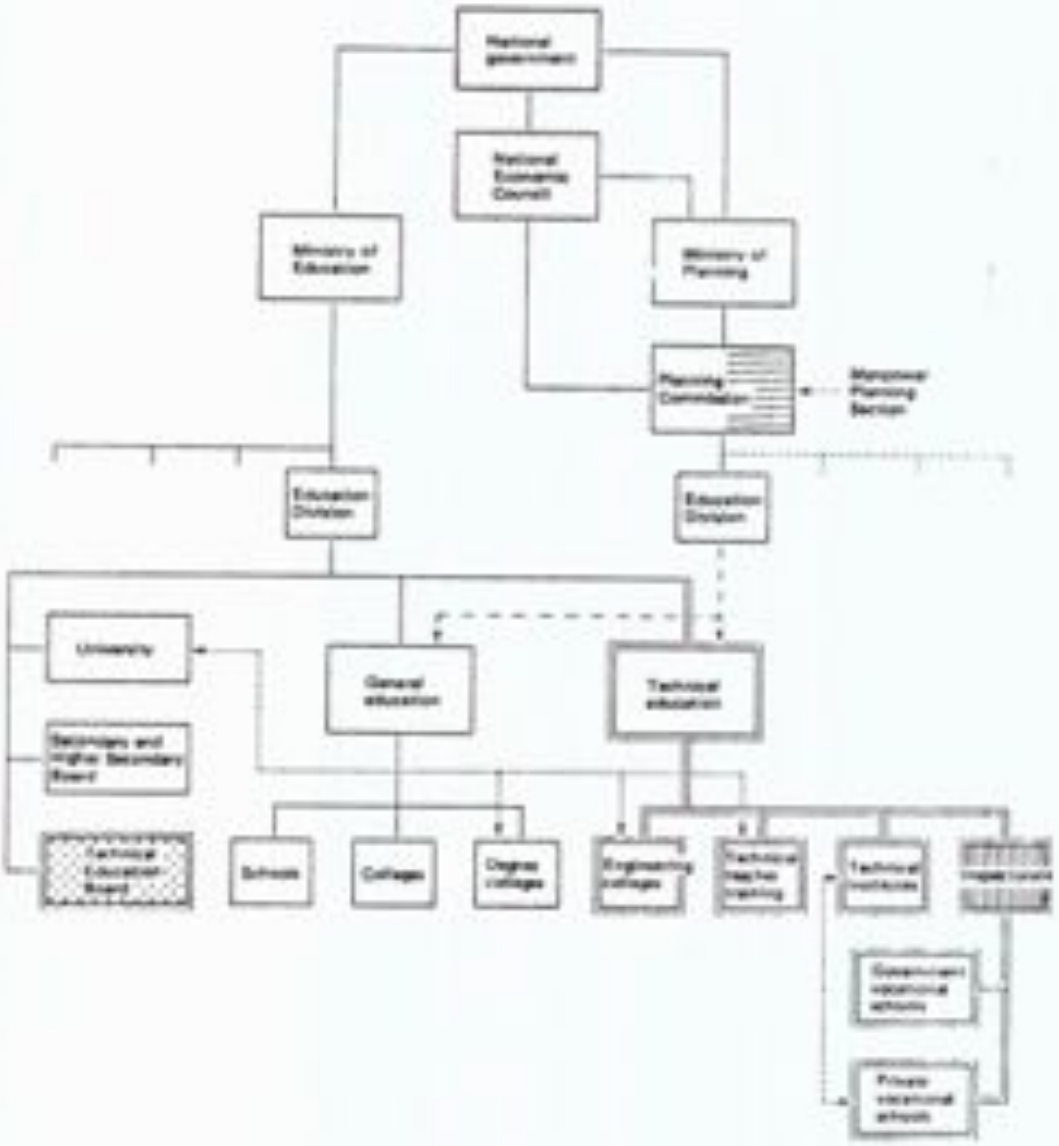
Country	Percentage of total 15-22-year-olds in TVE	TVE enrolments as percentage of total school enrolments	Percentage of girls and women in TVE	Part-time enrolments as percentage of total TVE enrolments	Enrolments by field (%)				Percentage of unemployed among 15-22 year-olds	Percentage of unemployed among TVE graduates
					Industrial	Agricultural	Commercial	Other		
Afghanistan		5.6								
Bangladesh	0.25	2	0.5	1.5	80	5	15		60	15
Burma		1.4								
Chile		5.9	42	0	43.6	1.9	38.5	16		
Costa Rica		18.3								
Ethiopia	2	25	26							
Ivory Coast										13.80
Jordan										
Boys		17			65	8	20			tending to
Girls		12					65	35		0[2]
Kenya		2[2]								
Republic of Korea	11.5	50.2	33.3[3] 36.7[4] 14.6[5]	34[3] 9.4[4] 5.8[5]	30	9	35	21	44	39
Liberia		10	16						35	2
Malaysia	1.7	10.6	32.5	9	60.5	7	22	10.5		
Nepal		25[3] 32.3[4]	15[3,6] 2.6[4]							
Nigeria		?	30[7]							
Panama		15.8	48		21.2	4.3	70.5	4.1		
Sierra Leone	12	25	33.5	2	20	36.7	31.7	11.6		
Thailand	2.8	26		92.3						
Upper Volta		15	37							
Uruguay		19.1								

1. A certain percentage not employed in field of specialization.
2. Very approximate figure, arrived at taking enrolments in first and fourth years of general, vocational and technical secondary schools. Does not include enrolments in business and industrial programmes in secondary general schools.
3. Secondary.
4. Post-secondary.
5. University.
6. This figure includes those enrolled in primary teacher training programmes.
7. This figure refers only to commercial education.

Source: Developments in Technical and Vocational Education, UNESCO 1978.

Appendix 5

The Administrative Structure of Technical and Vocational Training in Bangladesh



Key:

Responsibility for general administration and institutional management of technical and vocational education

Planning function

Co-ordination function with manpower planning and employment

Research and evaluation function

Supervisory function

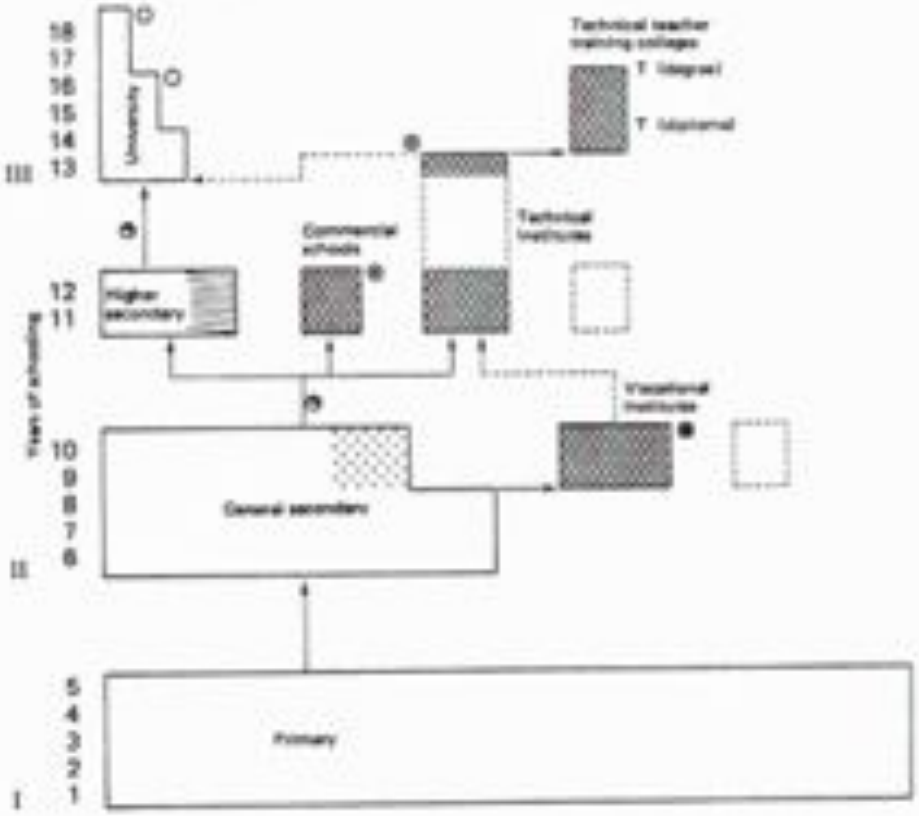
Lines of co-ordination:
(a) within educational structures

(b) between education and manpower planning and employment

Lines of attachment between administrative bodies and semi-autonomous or advisory bodies

Source: Development in Technical and Vocational Education, UNESCO 1978.

Technical and Vocational Education in the Bangladesh System of Education in the 1970s



Key:

- Separate categories of institutions within the educational system
- Presence of technical and vocational subjects within the general education curriculum
- Comprehensive institutions
- Institutions exclusively for technical and vocational education
- Institutions for technical and vocational education outside the formal education system
- Normal routes through the system
- Second or unusual routes through the system
- Examinations required to obtain recognition of successful completion of one level of education before proceeding to the next level
- ○ Engineering qualification
- ● Skilled worker or craftsmen qualification
- ◉ Technician qualification
- T Technical teacher qualification

Source: Development in Technical and Vocational Education, UNESCO 1978.

Some Voluntary Organizations Involved in Non-Formal Education Programmes and Receiving Financial Assistance from Abroad

(Source: S. Khan et al.: Inventory for Women's Organizations in Bangladesh, UNICEF, 1981)

No.	Name of the Organizations	Yr. of Estd.	Major Function
1.	HEED Bangladesh 19A, Road No. 6, Dhanmandi, Dacca	-	Health, Agriculture education, Economics
2.	PROSHIKA 74, Tejkunipara, Dacca	1975	Training, Matchin Loan
3.	CONCERN 63, Road No. 15Q, Dhanmandi, Dacca	1975	Training, Health, Education
4.	KADDA BARSEN 72, Road No. 11A, Dhanmandi, Dacca	1971	MCC Clinic, Mothers Education, Training
5.	FOOD FOR HUNGRY 10/B, Green Square, Dacca		Seed distribution, Feeding Centre, Sewing, Gardening, F.P., Adult Education
6.	OXFAM 700, Road No. 11A, Dhanmandi, Dacca	1950	Medical, Agriculture, Training Welfare, Relief
7.	TERREDES HOMES (SWIT) 66/A, West Rajabazar, Dacca	1975	Rehabilitation, Medical, Vocational Training, Community Development
8.	SWEDISH FREE MISSION House No. 45(A), Road No. 16, Dhanmandi, Dacca	1970	Social Welfare, Education, Community Development
9.	WORLD VISION 27-D, Road No. 16, Dhanmandi, Dacca	1970	Feeding, Medical Education, Jute Work, Weaving
10.	CARITAS 2, Outer Circular Road, Shanti Bagh, Dacca		Jute Work, Cottage Industry, Leather, Health
11.	SWEDISH FREE CHURCH AID 36, Road No. 7, Dhanmandi, Dacca	1972	Health Care, School Building, Teacher Training, Rural Development
12.	RDRS (RANGPUR DINAJPUR REHABILITATION SERVICES) 16, Road No. 16, Dhanmandi, Dacca	1972	Agriculture, Medical, Women's Activities, Small Scale Industries
13.	CHRISTIAN HEALTH CARE PROJECT 1, New Eskaton, Dacca		Maternal Child Health Centre, Nutrition, Education Training
14.	CHURCH OF BANGLADESH 54, Johnson Road, Dacca		Education, Vocational Training, Housing
15.	SONTOLA REGIONAL F.P. & VILLAGE DEVELOPMENT COMMITTEE Bara Sontola, Santhia, Pabna	1972	F.P., Health, Agriculture, Functional Education
16.	SAVE THE CHILDREN FEDERATION AND COMMUNITY DEVELOPMENT FOUNDATION 256, Road No. 21, Dhanmandi, Dacca	1972	Agriculture, Education, Nutrition, Health and Family Planning, Jute Handicrafts

17.	BANGLADESH WOMEN'S HEALTH 666, Road No. 33, Dhanmandi, Dacca	1980	Family Planning, MCH, Health Education, Income-Generation, Functional Literacy
18.	IVS (INTERNATIONAL VOLUNTARY SERVICES, INC.), H/No. 15, Road No. 16, Dhanmandi R.A., Dacca	1972	Agriculture, Health, Sanitation, Duck Raising, Literacy
19.	BACE (BANGLADESH ASSOCIATION FOR COMMUNITY DEVELOPMENT) House No. 20, Road No. 7, Dacca	1977	Education Development, Vocational Training
20.	BRAC (BANGLADESH RURAL ADVANCEMENT COMMITTEE) 66, Mohakhali C.A., Dacca	1972	Agriculture, Horticulture, Fisheries, Co-operatives, Health Care, Functional Education, Vocational Training and Family Planning
21.	GONOSSASTHYA KENDRA Nayarhat, Savar, Dacca	1971	Health, Paramedics, Education, Agriculture, Carpentry, Shoe Making, Blacksmithy, White Washing, Technical Training
22.	JUTE WORKS 74, Indira Road, Farm Gate, Dacca		Jute Handicrafts, Cane & Bamboo Work, Coconut Shell Work, Craft Dev. Training Programme
23.	PATH FINDERS FUND Dhanmandi, Dacca	1978	Family Planning Services
24.	FAMILIES FOR CHILDREN INTERNATIONAL 75, Indira Road, Dacca-15	1975	Children Home & School, Vocational Training Centre for Abandoned and Destitute Children and Women

a) Labour Migration from Bangladesh to the Middle East.1976-1979

Year	No. Migrants
1976	6,087
1977	15,725
1978	22,809
1979*	13,452
Total	58,073

*To April 1979.

b) Classification of Migrants by Skill Qualifications

Qualifications	% of Total
Professional	5.4
Technical	2.6
Skilled	48.9
Semi-skilled	10.5
Unskilled	28.1
Unknown	4.5
Total	100.0

c) Age Distribution of Migrants

Age Group	% of Total
15-19	2.5
20-35	82.6
36-40	10.4
41-above	4.5
Total	100.0

Source: "Labour Migration from Bangladesh to the Middle East", World Bank Staff Working Paper No. 434, Wash. D.C., 1981

Population and Labour Force in Bangladesh 1979-1985

	1979-80	1984-85
Population	90.25	100.79m
Labour force	28.43	32.25
Female population	43.72	48.90
Female labour force	2.58	2.87
Rural population	79.86	86.50
Rural labour force	24.96	27.44
Urban population	10.39	14.28
Urban labour force	3.47	4.81

Estimated New Enrants to Labour Market 1980-85

	Urban	Rural	Total
Male	1.26	2.26	3.52
Female	0.08	0.22	0.30
Total	1.34	2.48	3.82

Source: Bangladesh Manpower Planning Centre, Dacca, 1981

Capacity Utilisation of Technical Training Institutions in Bangladesh: 1979

Name/Type of institutions	Total number of places available	Total current enrolment	Yearly average output	First year intake capacity	(2) as % of (1)	(3) as % of (4)
	(1)	(2)	(3)	(4)		
Vocational Training Institutes	1,760	988	125	880	56.14	14.20
Technical Training Centres	2,990	1,925	1,322	1,495	64.38	21.54
Polytechnic Institutes	15,420	10,544	1,262	5,540	68.38	22.78
Bangladesh Glass & Ceramics Institute	40	26	9	40	65.00	22.50
Bangladesh Leather Technology Institute	100	112	10	60	112.00	16.67
Bangladesh Survey Institute	240	313	73	160	130.42	45.63
Bangladesh Textile Institute	360	348	48	120	96.67	40.00
Commercial Institute	600	433	70	200	108.25	35.00
Institute of Graphic Arts	75	92	14	25	122.67	56.00
Engineering Colleges	2,480	1,668	504	620	67.26	29.68
Bangladesh University of Engineering & Technology	1,846	1,893	343	458	102.55	74.89

Source: Technical Education in Bangladesh: Capacity and Utilisation, NFBSBD, Dacca, 1979

Intake Capacity and Trade Courses Offered at Vocational Training Institutes

Name of Institute	Courses Available								Intake Capacity
	Auto Diesel	Building Mech	Electrician	Farm Mech	Foundry	Machinist	Radio Mech	Welding	
1 VTI Rajurbat, Khulna	-	-	-	x	x	-	-	-	40
2 VTI Satkhira, Khulna	x	-	-	x	-	-	-	-	40
3 VTI Magura, Jessore	x	-	-	x	-	-	-	-	40
4 VTI Jhinaidah, Jessore	-	-	x	x	-	-	-	-	40
5 VTI Barisal, Jessore	x	-	-	x	-	-	-	-	40
6 VTI Chuadanga, Kushtia	-	-	-	x	-	x	-	-	40
7 VTI Meherpur, Kushtia	-	-	x	x	-	-	-	-	40
8 VTI Bhola, Barisal	x	-	-	x	-	-	-	-	40
9 VTI Perojpur, Barisal	-	-	x	x	-	-	-	-	40
10 VTI Patuakhali, Patuakhali	x	-	-	x	-	-	-	-	40
11 VTI Noagaon, Rajshahi	-	-	-	x	-	x	-	-	40
12 VTI Nowabganj	x	-	-	x	-	-	-	-	40
13 VTI Natore, Rajshahi	-	-	-	x	-	x	-	-	40
14 VTI Nilphamari, Rangpur	x	-	-	x	-	-	-	-	40
15 VTI Kurigram, Rangpur	-	-	x	x	-	-	-	-	40
16 VTI Gaibanda, Rangpur	-	-	-	x	-	x	-	-	40
17 VTI Thakorgaon, Dinajpur	-	-	-	x	-	x	-	-	40

Name of Institute	Courses Available								Intake Capacity
	Auto Diesel	Building Tech.	Electrician	Farm Mech	Foundry	Machinist	Radio Mech	Welding	
18 VTI Sirajganj, Pabna	-	-	-	x	-	-	-	x	40
19 VTI Gopalganj, Faridpur	x	-	-	x	-	-	-	-	40
20 VTI Rajbari, Faridpur	-	-	x	x	-	-	-	-	40
21 VTI Tangail	x	-	-	x	-	-	-	-	40
22 VTI Netrokona, Mymensingh	-	x	x	x	-	-	-	-	40
23 VTI Kishoreganj, Mymensingh	x	-	-	x	-	-	-	-	40
24 VTI Jamalpur Mymensingh	-	-	-	x	-	x	-	-	40
25 VTI B Baria, Comilla	-	-	-	x	-	x	-	-	40
26 VTI Chandpur, Comilla	-	-	-	x	-	-	x	-	40
27 VTI Laksam, Noakhali	x	-	-	x	-	-	-	-	40
28 VTI Moulvibazar, Sylhet	-	-	-	x	-	x	-	-	40
29 VTI Sunamganj, Sylhet	-	-	x	x	-	-	-	-	40
30 VTI Habiganj, Sylhet	-	-	x	x	-	-	-	-	40

Source: ILO, Project of Human Resource Development and Employment Generation, Bangladesh, BDG/79/028, Dacca, 1981

Allocation of Trades to VTIs

Name of Institute	Future Trades
Dacca Division	
1. Munsiganj	Refrigeration and Air Conditioning, Welding
2. Manikganj	Refrigeration and Air Conditioning, Welding
3. Narayanganj	Refrigeration and Air Conditioning, Welding
4. Kishoreganj	Farm Mechanics, Machinist
5. Tangail	Auto-Diesel, Refrigeration and Air Conditioning
6. Netrakona	Farm Mechanics, Electrical
7. Jamalpur	Farm Mechanics, Machinist
8. Madaripur	Farm Mechanics, Auto-Diesel
9. Rajbari	Farm Mechanics, Electrical
10. Gopalganj	Farm Mechanics, Electrical
Khulna Division	
11. Patuakhali	Farm Mechanics, Auto-Diesel/ Electrical
12. Pirojpur	Farm Mechanics, Electrical/Auto-Diesel
13. Satkhira	Farm Mechanics, Auto-Diesel
14. Bhola	Farm Mechanics, Electrical
15. Dagerhat	Welding, Electrical
16. Narail	Farm Mechanics, Electrical
17. Meherpur	Farm Mechanics, Electrical
18. Chuadanga	Farm Mechanics, Refrigeration & Air Conditioning
19. Magura	Farm Mechanics, Auto-Diesel
20. Jhenaida	Farm Mechanics, Electrical

Rajshahi Division	
21. Natore	Farm Mechanics, Electrical
22. Nowgaon	Farm Mechanics, Machinist
23. Nawbganj	Farm Mechanics & Electrical
24. Kurigram	Farm Mechanics, Electrical
25. Gaibanda	Farm Mechanics, Machinist
26. Nilphamari	Farm Mechanics, Machinist
27. Thakurgaon	Farm Mechanics, Refrigeration and Air Conditioning
28. Sirajgonj	Farm Mechanics, Electrical
Chittagong Division	
29. Brahmanbaria	Machinist, Electrical
30. Chandpur	Auto-Diesel, Refrigeration and Air Conditioning
31. Maijdi	Auto-Diesel, Machinist
32. Moulavi Bazar	Machinist, Auto-Diesel
33. Sunamganj	Farm Mechanics, Electrical
34. Habiganj	Farm Mechanics, Welding
35. Cox's Bazar	Farm Mechanics, Auto-Diesel
36. Kagrechari	Farm Mechanics, Electrical

Source: Directorate of Technical Education(DTE), Dacca

SIDA-Supported VTI Equipment Scheme:
Summary of Project Components and Costs

A	Vehicles	I Quant	II Quant	Total	Cost (lakh taka)
	Machinery	-	-	-	-
	Spares	-	-	-	-
	Vehicles:				
	a) Truck	2	2	4	7
	b) " with crane	-	1	1	2,5
	c) Microbus/van	3	-	3	4,5
	d) Jeep	4	-	4	6
	e) Car	2	1	3	3
		11	4	15	23
				(Approx. SKr 0.7 million)	

B	Equipment for VTTI at Bogra	I Cost (lakh taka)	II Cost (lakh taka)	Total (lakh taka)
	a) Basic equipment	26.00	-	26.00
	b) Farm Mechanics trade	18.00	-	18.00
	c) Auto-diesel trade	17.00	-	17.00
	d) Machinist trade	52.00	-	52.00
	e) Electrical trade	10.00	-	10.00
	f) Radio/TV trade	10.00	-	10.00
	g) Refrig/Air cond trade	11.00	-	11.00
	h) Welding trade	18.00	-	18.00
	i) Wood working trade	18.00	-	18.00
	j) Other equipment (audio-visual, office etc)	8.00	-	8.00
	k) Vehicles (1 bus, 1 microbus, 1 car)	8.00	-	8.00
		196.00		196.00
				(Approx. SKr 5.5 million)

C

Equipment for 36 VTIs	No of trades	Total (lakh taka)	Delivered or ordered before 30.6.1981	To be purchased 81/82	82/83	83/84
a) Basic equipment	36	200	200	-	-	-
b) Farm Mechanics	28	394	-	230	100	64
c) Auto-diesel	11	120	-	70	50	-
d) Machinist	8	394	394	-	-	-
e) Electrical	17	190	-	100	90	-
f) Radio/TV	8	20	-	-	-	20
g) Refrig/Air cond	7	36	-	-	-	36
h) Welding	5	44	44	-	-	-
i) Tool kits (35 units)		30	30	-	-	-
		1428	668	400	240	120

(Approx. SKr 42.6 million)

Rate of Exchange : up to 1979/80 : 100 taka = 31.25 SKr
as from 1980/81 : 100 taka = 28.60 SKr

Source: SIDA, Plan of Operation. Support to the Vocational Training Sector: Co-operation between Bangladesh and Sweden, june 15,1981

SIDA-Supported VTI Programme:
Summary of Capital Costs

Taka in lakhs

	Total cost	Spent upto June,1980	To be spent 1980-81	1981-82	1982-83	1983-84
A. SIDA CONTRIBUTION						
a. Cost of building for V.T.T.I., Bogra.	299	150	103	46	-	-
b. Cost of building for central store.	19	-	-	19	-	-
c. Cost of equipment to V.T.T.I., Bogra	196	-	196	-	-	-
d. Cost of equipment to 36 V.T.Is.	660	545	115	-	-	-
e. Cost of additional equipment to 23 V.T.Is.	768	-	-	400	250	118
f. Cost of clearance transportation & installation of equipment.	71	10	01	35	15	10
g. Cost of transport (Vehicles).	23	14	-	05	04	-
h. Cost of furniture.	20	-	10	10	-	-
i. Cost of books.	20	-	-	10	05	05
j. Cost of expertise services.	115	42	8	35	20	10
h. Cost of fellowships.	95	11	39	20	15	10
i. Provision for unforeseen expenditure/inflation.	50	-	-	-	25	25
Taka in lakhs	2336	772	472	580	334	178
SKr million	70	24*	14*	17*	10*	5*

*Adjusted figure

Rate of Exchange: up to 1979/80 100 taka = 31.25 SKr
as from 1980/81:100 taka = 28.60 SKr

Appendix 16(

B. BANGLADESH GOVERNMENT CONTRIBUTION

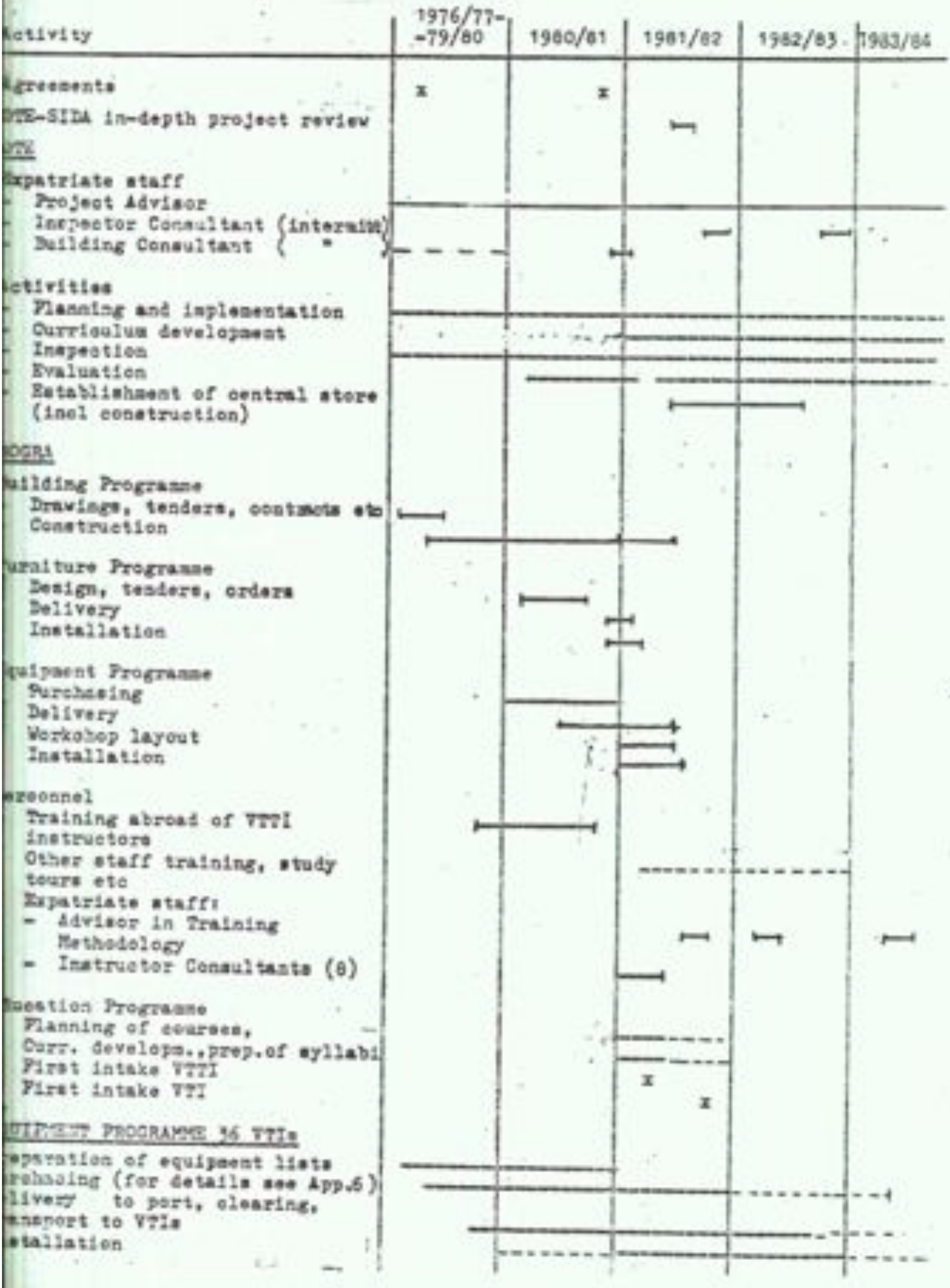
Taka in lakhs

	Total cost	Spent upto June,1980	To be spent			
			1980-81	1981-82	1982-83	1983-84
a. Cost of land & site development.	10	-	-	10	-	-
b. Duties & taxes for imported goods.	470	160	80	120	75	35
c. Salaries staff.	17	05	05	02	02	03
d. Contingent expenditure.	93	15	25	20	18	15
Taka in lakhs	590	180	110	152	95	53

* Source: SIDA, Plan of Operation, Support to the Vocational Training Sector, Co-operation Between Bangladesh and Sweden, Dacca, 1981

Appendix 15

SIDA-supported VTI Equipment Scheme:
Time Schedule for Project Implementation



Training Statistics from 5 TTCs

		Seating Capacity	No on roll 31.12. 1978	No admit-ted during year	No drop-ped out during year	No passed out during year	No on roll on 31.12.79
1	2	3	4	5	6	7	8
A. Regular Courses:							
1	Draftsman - Civil	176	177	75	16	55	181
2	Draftsman - Mech/Shipbuilding	196	195	77	29	55	188
3	Refrigeration & Aircond.	30	82	38	1	38	81
4	Electricity	176	178	84	8	76	178
5	Radio Electronics	32	53	25	8	17	53
6	Machineshop Practice	206	256	127	20	93	270
7	General Mechanics/Fitter	158	173	41	15	81	118
8	Auto Diesel/Auto Mech/ Automotive	124	200	62	32	61	169
9	Wood Working & Pattern Making	115	139	76	13	64	138
10	Welding & Sheet Metal/ Shipbuilding Welding	141	178	87	10	57	198
11	Foundry & Forging/ Moulding	50	62	16	6	17	55
12	Marine Diesel artificer	90	81	25	22	21	63
13	Shipwright/Plater	30	28	-	2	-	26
14	Shipwright/Machinist	20	20	-	3	17	-
15	Refresher course	20	3	45	1	47	-
16	Marine Diesel Operator	30	-	27	1	-	26
17	Plumbing & Sanitation	24	-	-	-	-	-
18	Marine Technology Diploma	50	-	41	4	-	37
19	Staff Training	25	-	-	-	-	-
	TOTAL =	1693	1825	846	191	699	1781
B. Part-time Courses:							
1	Electricity	-	88	110	13	86	99
2	Auto Mechanics	-	68	106	19	66	89
3	Airconditioning & Ref.	-	23	-	-	23	-
4	Machineshop Practice	-	46	172	29	118	71
5	Drafting-Mechanical	-	19	49	28	9	31
6	Drafting-Civil	-	-	68	15	-	53
7	Related Theory for Apprentices	-	40	36	6	26	44
8	General Mech/ Fitter	-	7	219	3	146	77
9	Welding & Sheet Metal	-	59	158	28	158	31
10	Plumbing (Pipe fitting)	-	87	270	6	351	-
11	Diesel Mechanic	-	16	-	-	16	-
12	Diesel Operator & Mechanic	-	-	29	-	-	29
	TOTAL =	-	453	1217	147	999	524

Source : BMIT Annual Report 1979

Appendix 17

Intake Capacity of Full-Time Courses Offered at 5 Technical Training Centres

Name of Institute	Trade Courses Available	Intake Capacity
1 Hirpur T T C (Dacca)	1 Draftsman Civil	40
	2 Draftsman Mech/Shipbuilding Draftsmanship	40
	3 Refrigeration & Airconditioning	30
	4 Electricity	40
	5 Radio Electronics	32
	6 Machineshop Practice	80
	7 General Mech/Fitter	40
	8 Auto Diesel/Auto Mech/Automotive	40
	9 Woodwork & Pattern Making	50
	10 Welding & Sheet Metal/Shipbuilding Welding	30
	11 Foundry & Forging/Moulding	30
	12 Staff Training	25
2 Chittagong T T C (Nasirabad)	1 Draftsman Civil	50
	2 Draftsman Mech/Shipbuilding Draftsmanship	50
	3 Electricity	50
	4 Machineshop Practice	50
	5 Auto Diesel/Auto Mech/Automotive	48
	6 Wood working & Pattern Making	40
	7 Welding & Sheet Metal/Shipbuilding Welding	42
	8 Foundry & Forging/Moulding	20
3 Rajshahi T T C (Shapura)	1 Draftsman Civil	50
	2 Draftsman Mech/Shipbuilding Draftsman/ship	50
	3 Electricity	50
	4 Machineshop Practice	40
	5 General Mech/Fitter	20
	6 Wood Working & Pattern Making	25
	7 Welding & Sheet Metal/Shipbuilding Welding	25
4 Bangla-German T T C (Hirpur Dacca)	1 Draftsman Civil	36
	2 Draftsman Mech/Shipbuilding Drafts/manship	36
	3 Electricity	36
	4 Machineshop Practice	36
	5 General Mech/Fitter	48
	6 Auto Diesel/Auto Mech/Automotive	36
	7 Welding & Sheet Metal/Shipbuilding Welding	24
	8 Plumbing & Sanitation	24
5 Bangladesh Institute of Marine Technology (Narayan Ganj)	1 Draftsman Mech/Shipbuilding Draftsman/ship	20
	2 Welding & Sheet Metal/Shipbuilding Welding	20
	3 Marine Diesel Artificer	90
	4 Shipwright/Plater	30
	5 Shipwright/Machinist	20
	6 Refresher Course	20
	7 Marine Diesel Operator	30

Source: BMET, Dacca

Part-Time Trade Courses Offered at TTCs.

Name of Institute	Part-time Courses
1 Mirpur T T C (Dacca)	1 Electricity 2 Auto Mechanic 3 Air Conditioning & Refrigeration
2 Chittagong T T C (Nasirabad)	1 Electricity 2 Auto Mechanic 3 Related Theory for Apprentices
3 Rajshahi T T C (Shopura)	1 Electricity 2 Machineshop Practice 3 Drafting Mechanical
4 Bangla-German T T C (Mirpur Dacca)	1 Electricity 2 Auto Mechanic 3 Machineshop Practice 4 General Mech/Fitter 5 Welding & Sheet Metal 6 Plumbing (Pipe Fitting)
5 Bangladesh Institute of Marine Technology (Patenga Cong)	1 Welding & Sheet Metal 2 Diesel Mechanic

Source: BMET, Dacca

Dacca Polytechnic:

Rates(%) of Dropouts, Passes and Output, 1974-79

Year of Admission (1)	No Admitted (2)	Year of Completion (3)	No Completed (4)	No Dropped Out (5) (2) - (4)	Drop-out Rate (%) (6) (5) ÷ (2)	No Passed Examination (7)	Pass Rate (%) (8) (7) ÷ (4)	Effective Output (%) (9) (7) ÷ (2)
1972	n.a.	1975	357	n.a.	n.a.	126	35	n.a.
1973	n.a.	1976	308	n.a.	n.a.	169	61	n.a.
1974	521	1977	346	175	34	187	54	36
1975	540	1978	269	271	50	114	42	21
1976	360 (?)	1979	399	(?)	n.a.	n.a.	n.a.	n.a.
1977	520	1980	468	52	10	n.a.	n.a.	n.a.
1978	531	1981	-	-	-	-	-	-
1979	508	1982	-	-	-	-	-	-

Source: ILO, Project of Human Resource Development and Employment Generation, Dacca, 1981

Intake Capacity of Trade Courses
Offered in Bangladesh Polytechnics

Polytechnic	Trade Courses Available																			Intake Capacity
	Auto Diesel	Auto Engg	Blacksmithy	Drafting	Electrician	Farm Mech	Fitting	Fitting and Blacksmithy	Fitting & Welding	Fitting, Welding & Blacksmithy	Foundry	Foundry and Welding	Machinist	Machinery & Plumbing	Masonry	Radio Electronics	Welding	Welding & Fitting	Welding, Fitting & Forging	Woodwork	
1 Polytechnic Inst Dacca	x	x	-	x	x	-	-	-	-	-	x	-	x	-	x	x	x	-	-	x	2400
2 Polytechnic Inst Chittagong	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3 Polytechnic Inst Khulna	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4 Polytechnic Inst Comilla	-	-	-	x	x	x	-	-	-	x	-	-	x	-	-	-	-	-	-	x	50
5 Polytechnic Inst Dinajpur	x	-	-	-	x	-	-	-	-	-	-	-	x	-	-	-	-	-	x	x	50
6 Polytechnic Inst Barisal	-	-	-	x	x	-	x	-	-	-	x	-	-	-	-	x	-	-	-	x	60
7 Polytechnic Inst Rajshahi	x	-	-	x	-	-	-	-	-	-	-	-	x	x	-	-	-	x	-	x	70
8 Polytechnic Inst Pabna	x	-	-	x	x	x	-	-	x	-	-	x	-	-	-	x	-	-	-	x	80

Appendix 20 (1)

	Polytechnic	Trade Courses available																				Intake Capacity
		Auto Diesel	Auto Tech	Electricity	Drafting	Electrician	Pump Tech	Fitting	Fitting and Blacksmithy	Fitting & Welding	Fitting, Welding & Blacksmithy	Foundry	Foundry and Moulding	Machinist	Machinery & Plumbing	Masonry	Radio Electronics	Welding	Welding & Fitting	Welding, Fitting & Forging	Woodwork	
9	Polytechnic Inst Rangpur	x	-	x	x	x	x	-	-	-	-	-	-	x	-	x	x	-	-	-	x	90
10	Polytechnic Inst Sylhet	x	-	x	x	x	-	-	-	-	-	-	-	x	-	-	x	-	-	-	x	70
11	Polytechnic Inst Dinajpur	x	-	-	x	x	x	-	x	-	-	-	-	x	-	-	-	x	-	-	-	70
12	Polytechnic Inst Faridpur	x	-	-	-	x	-	-	-	-	x	-	x	x	-	-	-		-	-	x	70
13	Polytechnic Inst Feni	x	-	-	x	x	-	-	-	-	-	-	-	x	-	-	-		-	-	x	70
14	Polytechnic Inst Jessore	x	-	-	-	x	-	-	-	-	-	-	-	x	-	-	-	x	-	-	-	30
15	Polytechnic Inst Lumitia	x	-	-	x	x	-	-	-	-	-	-	-	x	-	-	-	x	-	-	x	70
16	Polytechnic Inst Rajshahi	-	-	-	x	x	-	-	-	x	-	-	-	x	-	-	-	-	-	-	x	70

Source: ILO, Project of Human Resource Development and Employment Generation, Dacca, 1981

Entrance Qualifications and Intake Capacity of Trade Courses at Monotechnics

(1979-80)

Name of Institute	Trade Courses Available	Entry qualifications Course Duration	Intake Capacity
1 Institute of Graphic Arts, Dacca	Certificate Courses i) Monotype Composition ii) Linotype Composition iii) Offset printing iv) Offset plate making v) Binding vi) Hand Composition	Minimum Eight years of schooling 1-2 years	40
2 Bangladesh Leather Technology Institute, Dacca	a) Certificate Courses in Leather Technology	Secondary School Certificate, 2 yr	20
	b) Artisan course in Footwear & Leather Goods Manufacturing	Minimum Eight years of schooling 1 year	
3 Commercial Institute, Dacca	i) Certificate Courses in Typing (both English & Bengali) ii) Shorthand (both English & Bengali) iii) Fitting (?) iv) Office practice v) Record management vi) Language	Minimum Secondary School Certificate, 1 year	200 including for Dip in Com
4 Bangladesh Glass & Ceramics Institute, Dacca	a) Artisan course in Ceramics Technology	Minimum Secondary School Certificate, (Standard) 1 year	25
	b) Artisan course in Glass Technology	Minimum Eight years of schooling 1 year	15
5 Bangladesh Survey Institute, Comilla	a) Amineshop Course b) Survey final Course	Minimum Secondary School Certificate, 1-2 years	80

Source: MOE, Dacca

Ministry of Youth Development:

Enrolment in Modular Courses (6 months) at VTIs-1980-81

COURSE

Name of Institute	Arto	Lare	Pump	Mill	Turn	Wel ding	Foun dry	Ele ct	Ra dio	Dra ft (C)	Dra ft (M)	Carp	Pat tern	Ma son	Plum bing	Amin	Dre ss	Weav	Total	Date started
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
VTIs																				
1 Kishorgonj	—	—	—	—	20	20	—	20	—	—	—	—	—	—	—	—	—	—	60	1.10.80
2 Tangail	—	—	—	—	—	30	—	30	—	—	—	—	—	—	—	—	—	—	60	10.11.80
3 Netrokona	—	—	—	—	—	30	—	30	—	—	—	—	—	—	—	—	—	—	60	1.11.80
4 Jamalpur	—	—	—	—	20	30	—	30	—	30	—	—	—	—	—	—	20	—	130	1.10.80
5 Rajbari	—	—	15	—	—	21	—	20	—	—	—	32	—	—	—	—	—	—	88	10.10.80
6 Gopalgonj	—	—	15	—	—	15	—	—	—	—	—	15	—	—	—	—	10	—	55	1.10.80
7 B Baria	—	—	—	10	10	15	—	20	—	—	—	—	—	—	—	—	—	—	55	1.10.80
8 Chandpur	30	—	—	—	—	16	—	32	—	—	—	—	—	—	—	—	—	—	78	1.10.80
9 Naikhi	20	—	—	—	20	15	—	20	—	—	—	—	—	—	—	—	—	—	75	13.10.80
10 Cox's Bazar	15	—	—	—	—	—	—	15	—	—	—	15	—	—	—	—	—	—	45	1.10.80
11 Sonamgonj	—	15	—	—	—	15	—	15	—	—	—	—	—	—	—	—	—	—	45	1.10.80
12 N Bazar	—	—	—	10	10	—	—	15	—	—	—	20	—	—	—	—	—	—	55	1.10.80
13 Habigonj	—	—	—	—	—	30	—	20	—	20	—	—	—	—	—	—	—	—	70	1.10.80
14 Nawabgonj	15	—	15	—	—	15	—	15	—	—	—	20	—	—	—	—	—	—	80	1.10.80
15 Natore	—	—	—	—	15	20	—	20	20	20	—	20	—	—	—	—	20	—	135	1.10.80
16 Nangpur	—	—	—	10	10	15	—	15	—	—	—	15	—	—	—	—	—	—	65	15.10.80

Contd.... P/2

Appendix 22 (1)

VTI	COURSE 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	Total	Date started
17 Sirajgonj	20	20	--	--	--	20	--	20	--	--	--	20	--	--	--	--	--	--	100	13.10.80
18 Gaibandha	--	--	--	10	10	--	--	60	--	--	--	30	--	--	--	--	--	--	110	1.11.80
19 Kurigram	--	--	--	--	--	--	--	20	--	15	--	20	--	--	--	--	--	--	55	1.10.80
20 Nilphamari	15	--	10	--	--	10	--	20	--	15	--	20	--	--	--	--	--	--	90	1.10.80
21 Thakurgaon	15	--	15	--	--	--	--	30	--	--	--	15	--	--	--	--	--	--	75	1.10.80
22.Rajshahi	--	--	15	--	--	15	--	15	--	--	--	16	--	--	--	--	--	--	61	1.10.80
23 Jhinaidaha	15	--	15	--	--	20	--	30	--	--	--	--	--	--	--	--	--	--	80	6.10.80
24 Kushtia	15	--	--	--	--	15	--	15	15	--	--	15	--	--	--	--	--	--	75	1.10.80
25 Chuadanga	15	15	15	--	-	15	--	30	--	--	--	15	--	--	--	--	15	--	12[illegible]	1.10.80
26 Meherpur	--	--	15	--	--	15	--	15	--	--	--	15	--	--	--	--	--	--	6	6.10.80
27 Satkhira	--	--	--	--	--	30	--	30	--	--	--	--	--	--	--	--	--	--	6	1.10.80
28 Bagerhat	--	--	--	--	--	30	--	35	--	--	--	30	--	--	--	--	--	--	9	1.10.80
29 Bhola	20	--	--	--	--	10	--	20	--	--	--	--	--	--	--	--	--	--	5[illegible]	1.10.80
30 Pirojpur	30	--	--	--	--	30	--	60	--	--	--	--	--	--	--	--	30	--	15[illegible]	1.10.80
31 Patuakhali	--	--	--	--	--	20	--	20	--	20	--	--	--	--	--	--	10	--	7[illegible]	1.10.80
32 Khagrachari	--	--	--	--	--	--	--	15	--	--	--	--	--	--	--	--	--	15	30	1.10.80
total =	325	50	130	40	115	517	--	752	35	120	--	333	--	--	--	--	105	15	2437	

Source: ILO, Project of Human Resource Development and Employment Generation, Dacca, 1981

Ministry of Manpower Development and Social Welfare:
Apprenticeship and In-Plant Training Programmes

Table 1 - On-the- Job Training Programme during 1978-79

	Agency	Amount spent to create physical facilities and to meet day-to-day expenditure of training (Tk in lakh)	Number of craftsmen trained
1	Bangladesh Jute Mills Corporation	5.04	510
2	Bangladesh Textile Mills Corporation	30.16	3,440
3	Directorate of Technical Education	33.16	1,400
4	Bangladesh Steel and Engineering Corporation	30.72	1,200
5	Bangladesh Chemical Industries Corporation	15.14	700
6	Bangladesh Sugar and Food Industries Corporation	14.30	640
7	Power Development Board	36.06	250
	Total	172.50	8,140

Table 2 - Crash Training Programme for 1979-80

	Agency	Amount to be spent on physical facilities and training materials (Tk in lakh)	Number of craftsmen to be trained
1	Power Development Board	29.00	450
2	Bangladesh Chemical Industries Corporation	25.00	100
3	Bangladesh Steel and Engineering Corporation	21.00	710
	Total	75.00	1,260

Source: SFYP, 1980-85.

Table 3 - Short-term In-plant Training Programme, 1978
(courses of 3 to 12 months' duration)

	Name of the Organisation	Number enrolled	No of trainees passed out
1	Bangladesh Power Development Board, Tongi, Dacca	130	22
2	T & T Board, Dacca	25	18
3	Bangladesh Water Development Board, H.R.O. Tejgaon, Dacca	100	18
4	Airport Development Agency, Kurmitola, Dacca	100	25
5	Bangladesh Steel & Engineering Corporation Dockyard & Engineering Works Ltd., Narayangonj	100	49
6	Bangladesh Parjaton Corporation	100	28
7	Bangladesh Road Transport Corporation	50	-
	Total :	685	160

Source: BMET Annual Report, 1978.

ADB Community Schools Project:
Summary of Project Costs

Cost Component	Project Costs			Proposed Bank Financing
	Local Currency	Foreign Currency	Total	
Civil Works/Office Accommodation				
1.1 Workshop Construction	2,440	980	3,420	3,200
1.2 PIU Office Rental	100	-	100	-
Sub-total	2,540	980	3,520	3,200
Furniture and Equipment				
2.1 Schools	1,500	3,330	4,830	4,420
2.2 PIU	110	10	120	100
2.3 Teacher Training	125	-	125	100
Sub-total	1,735	3,340	5,075	4,620
Consumables	1,000	1,000	2,000	2,000
Tool Kits	50	600	650	600
Staff Salaries (Four years)				
5.1 Teaching Staff	1,250	-	1,250	-
5.2 PIU Staff	100	-	100	-
Sub-total	1,350	-	1,350	-
Consultants (Including BANBEIS)	100	820	920	820
Study Visits/Seminars	20	40	60	40
Total Excluding Contingencies	6,795	6,780	13,275	11,280
Physical Contingency	440	550	990	550
Sub-total	7,235	7,330	14,265	11,830
Cost Escalation	765	1,670	2,435	1,670
Grand Total	8,000	9,000	17,000	13,500

Source: Asian Development Bank, Appraisal of Community Schools Project in Bangladesh, March 1981, Dacca

ADB Community Schools Project:
Equipment Cost Estimates

(US$ '000)

Trade	Unit Cost per School	Cost for 200 Schools
Agriculture	4.5	900
Building	6.8	1,360
Mechanical	7.5	1,500
Food courses	2.45	490
Tailoring	2.9	580
	Total	4,830

Source: Asian Development Bank, Appraisal of Community Schools Project in Bangladesh ., March, 1981, Dacca

ADB Community Schools Project:
Instructor Training Requirements

Subject Specialist	1980/82	1982/83	1983/84	1984/85	Total
Agriculture	50	50	30	30	160
Building	50	50	30	30	160
Mechanical	50	50	30	30	160
Sub-Total	150	150	90	90	480
Sewing/Food	50	50	50	50	200
Grand Total	200	200	140	140	680

Source: Asian Development Bank, Appraisal of Community Schools Project in Bangladesh, March, 1981, Dacca

Repayment Performance on Rural Loan Schemes: The Grameen Bank Project

Particulars		Amount (Taka)
1. Amount Disbursed		
Landless	(Male)	1,19,24,699
Landless	(Female)	29,28,100
Total disbursement		1,48,52,799
2. Amount Repaid		
Landless	(Male)	39,63,517
Landless	(Female)	11,71,015
Total Repaid		51,34,532
3. Amount overdue		Less than one Percent
4. Savings in Group Fund (b)		
Landless	(Male)	8,76,874
Landless	(Female)	2,70,259
Total Savings in Group Fund		11,47,133
5. Savings in Emergency Fund (c)		
Landless	(Male)	17,434
Landless	(Female)	4,700
Total Savings in Emergency Fund		22,134
6. Loan from Group Fund		
Landless	(Male)	70,221
Landless	(Female)	14,240
Total Loan from Group Fund		84,641
7. Number of Groups		
Landless	(Male)	1,647
Landless	(Female)	572
Total number of Groups		2,219
8. Number of members		
Landless	(Male)	8,360
Landless	(Female)	2,983
Total number of members		11,343
9. Number of Loanees		
Landless	(Male)	6,876
Landless	(Female)	2,596
Total number of loanees		9,472

REPAYMENT PERFORMANCE ON RURAL LOAN SCHEMES: THE RURAL FAMILY AND CHILD WELFARE PROJECT

Scheme/Programme	Total No. of families assisted	Total loans in Taka	Average input per family	Total repayment realized upto June 1981	Average income per family estimated
Rice-husking	3 083	1 132 387.01	367.00	810 214.35	125/200
Muri-chira	281	102 337.00	364.00	73 475.00	150/250
Grocery shop	655	273 200.00	417.00	162 469.25	150/250
Petty business	5 872	2 536 699.00	432.00	1 673 529.82	150/250
Handicrafts	2 083	231 744.50	111.00	153 982.15	100/250
Goat & cow Rreeding	2 002	868 651.00	434.00	445 577.00	45/200
Fishing	553	185 599.00	336.00	502 923.50	125/250
Horse carriage & push cart	59	42 850.00	726.00	28 561.00	250/750
Rickshaw	127	129 050.00	1 016.00	71 268.30	450/450
Weaving	185	83 355.00	451.00	57 247.00	150/250
Blacksmith	16	7 900.00	494.00	5 417.00	200/350
Irrigation/Agriculture	553	228 650.00	413.00	115 409.00	125/250
Country boat	115	61 879.00	538.00	45 430.00	300/450
Sawing	19	11 050.00	582.00	10 365.00	200/350
Wood-cutting	24	9 650.00	402.00	5 780.00	150/250
Barber shop	24	7 450.00	310.00	6 535.00	150/250
Sewing	42	17 450.00	415.00	12 365.00	200/300
Carpentry	57	23 300.00	409.00	16 010.00	250/400
Duckling	73	13 250.00	182.00	6 019.00	40/100
Oil-making	28	9 050.00	323.00	4 000.00	200/350
Bicycle repair	38	16 250.00	428.00	9 395.00	250/350
Pottery	44	16 450.00	374.00	10 175.00	350/450
Community Investment*	11	50 525.61	4 593.00	6 852.85	500/650
Ornament-making	6	2 300.00	383.00	1 500.00	150/250
Shoe-making	8	3 150.00	394.00	1 800.00	150/250
Tolly scheme	24	12 000.00	500.00	-	125/200
Total	15 978	6 076 377.11	380.00	3 836 810.22	

Source: SKS: A Booster for the Rural Poor, Dept of Social Welfare, Ministry of Manpower Development and Social Welfare, Dacca, 1981

10 Number of loanees who have fully repaid the first loan

Landless (Male)	315
Landless (Female)	207
Total number of loanees who have fully repaid the first loan	522

11 Number of villages covered 309

12 Number of branches in operation 25

a) First GBP field Operation started in Jangail in November 1979

b) A group member can borrow from the Group fund with the consent of the remaining group members. Loan from this fund can be used for both consumption and investment purposes

c) It is a sort of insurance fund. This will cover the members from accident, death and disaster

Source: Muhammad, Y., "Grameen Bank Project: Towards Self-Reliance for the Poor", Dept of Economics, Chittagong University, (Mimeo) no date