

Education for Human Resources Development in Bangladesh: Policies, Plans, and Issues

KHONDAKER Mizanur Rahaman^{*}

Mohammad A. BHUIYAN^{**}

Mahbulul Alam CHOWDHURY^{***}

Abstract

Human resources development (HRD) through education is a long term endeavor in Bangladesh, and this article brings out the need to invest more heavily in this area. If the target level of 7.3 percent GDP growth in the Fifth Five Year Plan is to be achieved, hard issues of priorities will need to be faced in deciding on inter-and intrasectoral allocation of public funds. The purpose of this article is to give a broad outlook of what is currently happening at various levels and structures of HRD in this country as well as of developments over the past 30 years or so. The authors describe the whole process with three objectives in mind: (a) To examine the current situation of HRD; (b) to examine policies and plans so far made for HRD; and (c) to critically pinpoint obstacles to HRD and bring forth some issues and policy recommendations for discussion and implementation. The discussion emphasizes the point that a better education system bridges HRD and economic development.

FEATURES OF BANGLADESH ECONOMY

Bangladesh, an independent nation since 1971, is predominantly an agricultural economy. This sector alone accounted for about 33 percent of Gross Domestic Product (GDP) and about 62 percent of total domestic employment in 1994/95, the terminal year of the Fourth Five Year Plan. The industrial sector is still at the precarious stage of development and accounts for about 11 percent of GDP (table 1). Within a period of ten years from 1984/85 to 1994/95, the share of the agriculture sector in GDP has declined from 41.8 percent to 32.8 percent, the share of services sector has increased from 42.2 percent to 47.7 percent, and the share of the industry sector has increased from 9.9 percent to 11.4 percent. This shows how

* Professor, Faculty of Economics, Nihon Fukushi University

** Professor, School of Business, Clark Atlanta University, USA

*** Professor, Department of International Studies, Hagi International University

Table 1: Structure of GDP in the Terminal Years of Second, Third, and Fifth Five Year Plans

Sectors	Composition of GDP (in %) at 1984/85 Prices		
	1984/85	1989/90	1994/95
Agriculture	41.8	38.3	32.8
Industry	9.9	9.9	11.4
Electricity, Gas and Natural Resources	0.6	1.1	1.8
Construction	5.5	5.0	6.3
Transport and Communication	11.2	11.9	12.1
Trade and Other Services	19.8	21.1	23.0
Housing Services	8.0	7.6	7.5
Public Services	3.2	4.1	5.1
Total	100.0	100.0	100.0

Source: Government of The People's Republic of Bangladesh (1997): *The Fifth Five Year Plan 1997-2002*, Dhaka: Planning Commission/Ministry of Planning, June, p. 1-4.

fragile the economic backbone of this country is.

Although the agriculture sector is the mainstay of the country, agriculture is not mechanized and depends mainly on traditional ways of ploughing, sowing, and harvesting. Natural calamities such as flood, drought, tornado, cyclone, pests, etc. also do severe harm to agriculture. Seventy-seven percent of the population lives in the farming villages, 45.3 per cent of whom live below poverty level. The country as a whole is plagued with the problem of unemployment and underemployment. About 40 percent of the active labor force always remain unemployed (table 2). This rate will be much higher if under-employment and disguised unemployment are taken into account. While the economic growth rate is very low (table 3), the annual per capita income is only about US\$270. The population growth rate as well as the crude death rate is very high. The country has very few natural resource endowments, which means it also has very low potentials for quick economic development like other resource rich countries in Asia. It is one of the most densely populated countries of the world with a population of 122.8 million in an area of 56,997 sq. miles. In 1995, the overall literacy rate was 44.3 percent, the female literacy being 28.5 percent, male 50.4 percent, rural areas 36.6 percent, and urban areas 63.0 percent. The low rate of female literacy is a matter of grave concern for the development of the nation. For lack of education, not only the participation of women in the economic activities is low, it also affects the household economy and rearing of children, the future labor force of the country. Especially, the illiteracy of the rural population is an insurmountable obstacle to the mechanization of agriculture and improvement of productivity in this sector. It also affects industrial development, since 80 percent of the industrial labor force comes from the rural families.

In view of the above situation, the policymakers at national level have realized that quick economic development cannot be achieved, unless attention is diverted to the use of hitherto overlooked and untapped natural bounty, human resources. Consequent upon such a realization, various policies and plans are made so far to develop and utilize this resources in every possible manner, e.g., development of human resources with multifarious capacity and skills,

Table 2: Labor Force, Employment and Unemployment during 1972 to 1995 (million persons)

Year	Labor Force	Employment			Unemployment	Unemployment Rate (%)
		Domestic	Foreign	Total		
1972-73	22.55	13.09	-	13.09	9.46	41.95
1977-78	26.48	16.04	0.05	16.09	10.39	39.24
1979-80	28.43	16.09	0.05	16.14	12.29	43.23
1984-85	31.10	18.97	0.32	19.29	11.81	37.97
1989-90	37.13	22.82	0.43	23.25	13.88	37.41
1994-95	43.80	26.88	0.95	27.83	15.97	36.46

Note: In Bangladesh, the fiscal year is from July to June.

Source: Same as table 1, p. 1-15.

Table 3: GDP Growth Rates During Various Five Plans

Plans	Target (%)	Actual (%)
First Five Year Plan (1973-78)	5.5	4.0
Two Year Plan (1978-80)	5.6	3.5
Second Five Year Plan (1980-85)	5.4	3.8
Third Five Year Plan (1985-90)	5.4	3.8
Fourth Five Year Plan (1990-95)	5.0	4.15
Two Years Plan Holiday (1995-97)	n.a.	n.a.
Fifth Five Year Plans (1997-2002)	7.3	n.a.

Sources: Government of The People's Republic of Bangladesh, various five year plans.

creation of gainful productive avenues for self employment, export of excess human resources to other countries, etc. The objective of this paper is threefold: (a) To examine the current situation of human resources development (HRD); (b) to examine policies and plans so far made for HRD; and (c) to critically pinpoint obstacles to HRD and bring forth some issues and policy recommendations for discussion and implementation.

THE GENERAL SITUATION OF HRD IN BANGLADESH

Policymakers in Bangladesh have traditionally viewed the huge population as a problem rather than as a resource that could be tapped for economic development like other natural and non-natural resources. Its importance as an exportable resource was realized for the first time in the late 1970s when the oil-rich countries of the middle-east started employing Bangladeshi people with technical education in industries, health, and education sectors, and semi- and unskilled labors in building and construction and some low-technology industries sectors. Even women workers were employed as household helpers. Their remittance had had a very remarkable impact on title balance of payments position as well as foreign exchange coffer of the country. The social impact of this sort of foreign employment was that those who took jobs in foreign countries could afford a luxurious and secured life compared to those who were employed in similar jobs within the domestic sector. This had extended psychological pressure on the general mass as well as the educated segment of population for

foreign employment. For the government it was also a means to solving acute unemployment problem in the country, in addition to the benefits in terms of foreign exchange earning and easing balance of payments position.

Consequently, in the late 1970s and the 1980s there was a tremendous exodus of skilled human force from the country under manpower export program of the government. From 1977 to 1982 manpower export increased at an annual rate of 30 percent, 85 percent of which was said to be unskilled, and the rest 15 percent skilled and semi-skilled. However, a majority of them were technical hands, which had (has) an acute shortage in the country. The government urged on the export of semi- and unskilled manpower, activating manpower development programs in different sectors to increase the acceptability of Bangladeshi workers abroad and filling up the domestic vacuum created by such export. But it could not plan and monitor manpower development and export programs skillfully. There were cases where engineers and medical doctors had gone out on foreign employment by showing fake credentials as unskilled and semi-skilled workers. This had tremendous impact on some domestic sectors of the economy. In the early 1980s, the Power Development Board that generates and supplies electricity, was seriously affected by the loss of experienced engineers; the Department of Public Health was almost crippled due to exodus of nurses, medical attendants, doctors, and sanitary operators; and some medical and engineering colleges could not even resume their classes due to the shortage of teachers.

The need for HRD was accentuated further due to high population growth and consequent pressure of acute unemployment and underemployment. The existing HRD institutions and machinery were insufficient in view of the need of the country. There was the acute problem of illiteracy of both adult and youth. The low capacity of the existing educational institutions was another hindrance to increase the supply of qualified technical and non-technical human force. The economic growth was almost stagnant for many years. This had further curtailed government capacity to divert resources for education and HRD.

As shown in table 4, during the last twenty-seven years of independence of the country, the government by different economic development plans has allocated as low as 3.6 percent (Third Five Year Plan) and as high as 7.1 percent (First Five Year Plan) of the national development budget for the education sector. Given the enormous size of population, very high

Table 4: Allocation for the Education Sector in Different Development Plans (in million Taka)

Plans	Total	Percent
First Five Year Plan (1973-78)*	3,160.0	7.10
Two Year Plan (1978-80)*	1,800.0	5.00
Second Five Year Plan (1980-85)	7,720.0	5.20
Third Five Year Plan (1985-90)	13,700.0	3.55
Fourth Five Year Plan (1990-95)	32,890.0	4.89
Two Years Plan Holiday (1995-97)	n.a.	n.a.
Fifth Five Year Plans (1997-2002)*	128,681.5	1,2.98

Note:* indicates the public sector only.

Source: Same as table 3.

rate of general illiteracy, lack of accessibility of the major segment of population to education, high rate of population growth, and consequent demand for new educational institutions and logistic supports, this sort of budget allocation was extremely unjustifiable. As a result, neither could the problem of illiteracy be solved nor could sufficient human resources be reared up to fulfill domestic and foreign demand. From many quarters, the failure of the government in the education sector has been pointed out to be one of the main causes of all economic development problems in the country.

POLICIES AND PLANS FOR HRD THROUGH EDUCATION

For Bangladesh, HRD is essentially a process of qualitative improvement of human forces to understand the meaning of life and existence. In a deeper sense, it connotes skill formation and elevation of technical capacity of people through education and training, practical application of acquired skill and capacity, and creation of means for the sustainable development, retention, application, and extension of such skill and capacity. Although it encompasses many things, education is the prime and primary medium of HRD.

(1) Programs to Eradicate Illiteracy

In Bangladesh, efforts were made in various ways to get rid of the curse of illiteracy since the British Period. In the 1940s, night schools were opened to educate illiterate adults. In 1954, the village cooperatives were used as bases for imparting education to this group. After nine years in 1963 the Government of the then East Pakistan created a separate adult education division within the Directorate of Education to look after adult education program. The slogan of illiteracy eradication gained further momentum when it was included in the package of Village Aid Program. A pilot project for adult education was launched in 1964 and that continued in some selected areas until 1980.

Independence in 1972 brought about a new aspiration for nation building. Through various national documents, the government upheld its views toward education. The national constitution launched in 1972 declared the fundamental outlook of the government as follows:

The state shall adopt effective measures for the purpose of :

-establishing a uniform mass-oriented and universal system of education and extending free and compulsory education to all children of such stage as may be determined by law;

-relating education to the needs of society and producing properly trained and motivated citizens to serve these needs; and

-removing illiteracy within such times as may be determined by law.

Thus the national constitution made it obligatory for the government to adopt effective measures for establishing uniform, mass oriented, universal system of education and extend free and compulsory education for all children. In order to examine the problems of education system and develop a comprehensive education program, the government established an Education Commission. The vision of the government was to create trained human resources

who will work at all avenues of the nation to eradicate poverty and thereby emancipate the fate of the nation. Education was by all means recognized as the prime ingredient of nation building. Programs which were undertaken to raise literacy by the government since 1972 are as follows:

(a) Mass Education Program (MEP)

This program was launched in 1980 with a view to making 40 million people in the age group of 11-45 literate in two phases until 1985. During the first phase from January to June of 1980, about 10 million illiterates from all over the country were to be enrolled and given literacy training. Each of them was to be provided with a primer free of cost. During the second phase, which was to coincide with the Second Five Year Plan (July 1980 - June 1985), the target was to make 40 million people literate.

To implement this program, the government attempted to expand administrative networks from top to the grass-roots levels. The Directorate of Primary Education, established under the Ministry of Education to look after primary education program, was expanded as Directorate of Primary and Mass Education in 1981. It had a separate wing to implement literacy programs at various levels in Head Office, District, *Thana*, and Union. A post of Additional Deputy Commissioner was created at the district level to coordinate the mass education program in every district. Students of secondary and higher secondary classes (from class IX to class XII) all over the country were required to take part in the literacy program as compulsory co-curricular activity. In addition to the government programs, a number of voluntary organizations also took part in adult education activities. But their activities were largely uncoordinated and did not produce any noticeable impact. Due to administrative weakness, lack of facilities and logistics, lack of encouragement from general citizens, and inertia of the target group, the program failed to generate any spectacular result. The move to involve students of secondary and higher secondary classes in the program failed to create any enthusiasm among students and their parents. Although the target was 40 million, only 0.7 million could be made literate. Eventually the program was abandoned in 1982.

As it will be seen later, the government launched a Universal Primary Education (UPE) program in 1985. Soon it was realized that UPE alone could not increase the rate of literacy. Consequently a Mass Education Program (MEP) was launched in January of 1988 at a cost of Tk. 262.2 million. This was launched as a joint program of the government and non-governmental organizations (NGOs). The government's responsibility was to make literate 1.3 million illiterates through 27,600 centers by June 1990. The NGOs were called upon to activate programs to literate 1.1 million adults through their "Mass Education Through Small Local Organizations" (METSLO) activities.

The MEP was carried forward to the following plans and was made a project under non-formal education programs. Its objective was to increase the literacy rate of 11-45 age group from 30 percent to 60 percent by the year 2000 in the projected areas. However, during the Fourth Plan period, only 367,660 illiterates were made literate. A new project entitled "Expansion of Integrated Non-Formal Education Program" was initiated in this plan with

the objective of institutionalizing a comprehensive informal education system in the country. This program was implemented in 69 *thanas*. This program was formally called Integrated Non-formal Education Program (INFEP), and at its apex a ministry-level officer was assigned as coordinator. A post of district coordinator was created to monitor and supervise field programs at each district. 192 NGOs took part in this program and they altogether implemented about two-thirds of it. One-third of the program was implemented under direct supervision of the district coordinators. The district administration in Lalmonirhat and Bhola further initiated a cost-effective program named "Total Literacy Movement (TLM)". Other important activities included development of primary teachers' guide, teachers' training manual, supervisors' training manual, etc. and training of supervisors, teachers, and librarians.

Although the above programs have reduced the intensity of illiteracy to some extent, according to the government statistics there still exist about 30 million illiterates in the country. The government, in the Fifth Five Year Plan, has adopted a lofty action plan "Education for All" to raise the literacy rate to 100 percent by 2005 with the mid-term goal of achieving 75 percent literacy by 2000. The objectives of MEP in this plan are as follows:

- (a) To increase literacy rate of adults (15 years and above) to 80 percent by 2002.
- (b) To empower learners with technological skills, entrepreneurial traits, and leadership skills together with skills related to literacy, mathematics, and communication.
- (c) To reduce gender gap in literacy rate in both rural and urban areas.
- (d) To develop continuing education program for the neo-literates, i.e., those who pass through the MEP.
- (e) To reduce disparity in literacy rate between different areas.

With a view to achieving the objectives of MEP effectively, the plan has pointed out a number of strategies as follows:¹

- (a) Establishment of literacy centers in each village.
- (b) Massive social mobilization program to involve all categories of people in MEP.
- (c) Activation of area-based TLM approach by involving people from all walks of life and also local government bodies.
- (d) Encouraging participation of NGOS, local community, and voluntary organizations.
- (e) Wide publicity and extensive use of mass media to create a proper atmosphere.
- (f) Integration of literacy programs with income generating activities and micro-credit programs of other ministries and departments of the government.
- (g) Creation of a National Council of Mass Education to review the progress of MEP.
- (h) Creation of funds for non-formal education by mobilizing local financial resources.
- (i) Strengthening of monitoring, inspection, and evaluation systems.
- (j) Allocation of a target illiterate population to the local government authorities and institutions to be literated as a part of their annual development activities.
- (k) Introduction of performance audit to ensure accountability of the field level MEP officials.
- (l) Incorporation of MEP related responsibilities of the district and thana level civil servants in their official charter of duties.

(b) Universal Primary Education Program

Before independence, there was no system of compulsory education in Bangladesh. Although education was regarded as the fourth basic need after food, cloth, and shelter, it was in fact a need for those who could afford it. To a vast majority of population in rural areas and slums, it was nothing more than a luxury. The community used to run most of the primary schools with less than minimum facilities required for schooling. Of the 10.3 million primary school-going population, only 58 percent were enrolled in schools. The number of primary schools was 30,446 in 1972-73.² Not only the enrolment was so low, the rate of drop-out was also tremendously high. Lack of facilities, unscientific instructional materials, inadequate number of teachers, non-availability of training for teachers, irrelevant curriculum, and absence of community participation were at the root of this situation.

In order to remedy this situation within the shortest possible time, the government nationalized almost all primary schools in 1973 and undertook the responsibility of their management and administration. A separate directorate was established under the Ministry of Education in 1981 to carry out responsibilities in connection with primary education. A Universal Primary Education (UPE) project was launched in 1985, and about 49 percent of the total budget allocation for the education sector were earmarked for this project. Four international agencies, namely IDA, SIDA, UNICEF, and UNDP also participated in financing this project. The planned tenure of the project was five years and that coincided with the Third Five Year Plan (1985-90). The main objective of this project was to increase primary school enrolment from 60 percent to over 70 percent of the 6-10 year-age group with an ultimate goal to achieve "Education for All" by 2000. It was envisaged that a great majority of those who enrolled in 1985-90 would complete the five-year cycle of primary education.³

UPE in Bangladesh in true sense means that primary education is open to the relevant age-group population without any hindrance. The government maintains about 86 percent of the schools in the nationalized sector. The tuition, textbooks, and stationery materials are provided to the pupils free of cost. Even then the expected results — full enrolment of primary age-group population, elimination of drop-out, and retention throughout the primary education cycle — could not be achieved. As such the government adopted the policy of compulsory primary education (CPE) in phases starting from January 1991. It was further envisaged that the entire country will come under UPLC by 2000. A separate Primary and Mass Education Division (PMED) was set up under the direct control of the Prime Minister to guarantee effective administrative and policy support. An experimental satellite school program was launched during the Fourth Five Year Plan (1990-95) to ensure school attendance of minor children in grades I and II at their door-steps.⁴ In order to ensure enrolment and arrest the drop-out of the poor children, a "Food for Education Program" was also launched.

Consequent upon all these, the enrolment in primary schools increased from 12.1 million in 1990 to 17.3 million in 1995. Especially enrolment of girls increased from 5.4 million to 7.93 million during the same period. The completion rate also rose from 41 percent in 1990 to 60 percent in 1995.⁵ As of 1995, there were 61,550 primary schools in the country out of which 59,894 were fully functioning. The government has made an ambitious target to achieve 100

percent literacy rate within the year 2005 and 100 percent enrolment in the primary school by the year 2000. To this end a total of 26,144 new primary schools will have to be established. This government has articulated the current problems of primary education as follows: (a) Shortage of schools within accessible distance; (b) shortage of class rooms and over crowding of pupils; (c) lack of proper teaching aids; (d) shortage of furniture and other fixtures; (e) lack of equipments, books, and stationery supplies for students; (f) inadequate professional skills of teachers; (g) shortage of teachers; (h) unattractive teaching/learning environment; (i) lack of awareness and interest among parents; and (j) weak community involvement.⁶

In order to achieve these planned objectives, a number of new strategies have been adopted. These include setting up of one primary school or at least "Black- Board Approach" of teaching in every village; assistance to community schools and their registration with the government; introduction of double shifts; establishment of "Resource Centers" at *thana* level for cost effective and sustainable teacher training; use of mass media for social mobilization; inclusion of local government bodies in each district through setting up a primary education board headed by the chairman of *Zila Parishad*; undertaking of policy research on primary education through a National Academy for Primary Education (NAPE); development of distance education program; and encouraging the involvement of NGOs and private sector.

Activating the above strategies, some nationwide and regionwide programs are now in the process of implementation. These are: (a) establishment of 26,144 new schools and building of 47,00 new classrooms; (b) establishment of 20,000 satellite schools and developing some of them into full-fledged primary schools; (c) inclusion of 5,00 community-based non-government primary schools into government's salary subvention scheme where government support will cover up to 80 percent of presumptive salary receivable in salary scales fixed for the teachers of government primary schools; (d) reconstruction/renovation of 15,00 government primary schools; (e) institution of information system at each *thana*, district, and division; (f) expedient recruitment of required teachers and setting up of a Primary Teachers Institute (PTI) in every district for training of teachers; (g) setting up of a distance education unit within the Directorate of Primary Education (DPE) ; and (h) setting up of resource centers for primary education at Thana Training and Development Center (TTDC). All these programs have been undertaken under an umbrella project named Primary Education Development Program (PEDP). In addition to the government budget allocation, further finances have been arranged from the World Bank and some other sources.⁷ Had all these programs been fully actualized, 100 literacy could be achieved within the planned time.

(2) Secondary and Higher Secondary Education

The education system of Bangladesh was developed during the colonial period and had main emphasis on liberal education rather than technical and vocational education. The then regimes wanted to develop a group of technocrats to assist them in running civil and military administrations. This purpose was highly served by the liberal education system they established in the country.

The present system of education can be defined as a 5-5-2-4 system, which means five years

of primary education, five years of secondary education, two years of higher secondary education,⁸ and four years of undergraduate (honors) studies at colleges and universities. The primary education, as mentioned earlier, is the benchmark of literacy and has been recognized as the fundamental rights of all citizens. Among the existing tiers of education, secondary and higher secondary are performing the vital role in developing human resources. Although no authentic statistics is available on the percentage of primary school graduates who go for secondary education, in 1995 4.10 million students were enrolled in government and non-government secondary schools. This number will increase day by day due to increase in graduation rate of primary school students and their advancement to higher level education.

In secondary schools, during the first three years all students study the same subjects, namely vernacular, English, mathematics, general science, social studies, history, geography, and religion. During the last two years, in addition to common subjects such as Bengali, English, mathematics, and religion, students are required to study some elective subjects on the basis of their choice of a major academic discipline from science, humanities, commerce, agriculture, and industrial arts. Similar is the case in higher secondary level also.

(3) University Education

Universities — general, engineering, and agriculture — are the highest educational institutions in the country and provide tertiary education for developing quality human resources. At present there are only seven general universities, one open university, one agriculture university, and one university of engineering and technology in the public sector with an enrolment of 141,603 students. Open University, in fact, provides distance education and has an enrolment of 70,000 alone. On the other hand, the National University supervises and conducts examinations of about 933 degree colleges in the country but does not offer any on campus education program of its own. Currently the enrolment of this university at undergraduate and post-graduate levels is about 500,000.⁹ The general universities provide undergraduate, graduate, and post-graduate education in the fields of literature, law, social science, economics, business, biological science, and natural science, almost all designed and developed in lines with the British universities.

The government has planned to set up 12 more science and technology universities in the country during the next five years. These universities will start functioning with five schools, namely school of physical science, school of life science, school of agriculture and mineral science, school of social science, and school of applied science and technology. For achieving regionally balanced development of higher educational institutions in the country, these universities will be established in the lagging regions. At the same time, to hasten their timely completion, attempts will be made to finance these institutions through the mobilization of both domestic and external resources as well as seeking technical collaboration from foreign universities.

As the existing public universities are unable to satisfy the increasing human resources need of the country and also incapable of providing sufficient enrolment space to the increasing number of higher secondary school graduates, the government has started encouraging

establishment of universities in the private sector since 1991. According to the current policy of the government, experienced academicians and citizens interested in promoting higher education in parallel with the public sector can obtain government permission to establish universities if they can show a fund of 50 million taka in bank deposit. The first private university of the country has started functioning from 1992. At present, there are 18 private universities with an enrolment of about 4,500. Although the government strongly advocates the establishment of universities in the private sector and emphasizes teaching and research in science and technology, the existing universities are mostly profit oriented. Their tuition fees are so high that children of even upper middle class cannot go to such institutions. They offer programs mainly in medical science, economics, computer engineering, and business administration. But their intakes are very small; they have few full time faculties; and they operate by renting privately owned houses like private coaching/tutorial centers.

With few exceptions, the general university education in Bangladesh is highly theoretical and has little relationship with the practical life of the graduates. The cost of education is highly subsidized by the government, in that students pay only TK. 500 for a year whereas the actual cost is about Tk. 35,000 per student. The benefit of such state subsidy goes mainly to the better-off section of the nation. Moreover, the universities could hardly accommodate their educational activities with the changing need of the society and in particular economic and industrial development. The main problems can be enumerated as inflexibility of approach, lack of interaction between universities and users of their products, outdated course curriculum, and absence of adequate research facilities and genuine researchers. The politically enticed student movement and consequent campus unrest and administrative lethargy to foster decent academic environment have deterred the universities to achieve their expected missions. Apart from this, faculties' involvement in politics and intrusion of the government into student politics have seriously degraded the standard of education. The entire university education system is a victim of session-jam where courses cannot be completed within the scheduled time and the academic calendar is running behind several years. In many cases, syllabi and curricula have not been upgraded to reflect the changes. In addition, many members of the faculty do not have required time for the students due to their engagements in consulting and other type of business ventures. There is also a growing tendency among the faculty members to look for opportunities to immigrate to Western countries and many sent for higher training to abroad did not return to the home institution. This has posed a serious threat to the stabilization and upgrading of higher education and research in the country.

The liberal university education system has also given birth to what can be called dead wood in its structure, i.e., existence of departments/ disciplines that have lost their relevance academically and are filled by the rejects and unfits among admission seekers.¹⁰ Since public concerns about private universities have already appeared in mass media, the Ministry of Education and the University Grants Commission have activated their supervision on these mushrooming institutions.

(4) Engineering Education

Engineering education is provided in the country by one university of engineering and technology (Bangladesh University of Engineering and Technology or BUET), five institutes of technology (BIT), one textile engineering college, and one leather engineering college. BUET offers both undergraduate and graduate programs in architecture and design, civil, chemical, electrical, computer, mechanical, urban development, and irrigation and agriculture engineering subjects and has a total enrolment capacity of 5,000. However, in terms of enrolment capacity all its disciplines are already fully saturated. BITs offer undergraduate courses in civil engineering, electrical engineering, and mechanical engineering. BITs at Khulna and Rajshahi offer graduate programs. The total annual enrolment capacities of these institutes are only 1,370 whereas the number of eligible candidates are several hundred times more than their capacities. The textile engineering and leather engineering colleges have enrolment capacities of 50 and 25 respectively.

The engineering education in the country follows the American system and especially the quality of education at BUET is very commendable. However, the level of applied research is not so encouraging and most of the laboratories are ill-equipped. They can hardly fulfill the engineering human resources demand of the emerging industrial sector of the country as well as the demand for export by the manpower bureau. For this reason, the government has undertaken a policy to enlarge the capacity of BITs by opening new departments with modern equipment so that they can double their intake. They are also urged to maintain a good linkage with BUET for attaining academic excellence and training of their teachers. Furthermore plans are under consideration to set up four new institutes.

(5) Technical and Vocational Education

There is a serious shortage of technically educated and trained human resources in the country particularly at worker and supervisor levels. This has become a chronic problem with the constant export of skilled and semi-skilled workers to different countries without making any feasible arrangement to produce such work force sufficiently for the replenishment of vacuum in the domestic sector. The Directorate of Technical Education (DTE) is responsible for planning, development, and implementation of technical and vocational education in the country. It organizes technical and vocational education training at different levels. At present there are 20 polytechnic institutes, one graphic arts institute, one institute of glass and ceramics, 52 vocational training institutes (VTIs), one vocational teacher training institute (VTTI), one technical teacher college, and 51 basic trade training centers. Considering the future and current needs of the country, the DTE has undertaken a robust step to increase the number of technical and vocational institutions (table 5) in the country so that skilled human resources can be developed adequately. In pursuance with the policy of "collective responsibility" for national development as envisaged in the Fourth Five Year Plan, it has planned to involve the private sector in the expansion of technical and vocational education in the country.

In addition to the DTE, certain other agencies and institutions are also engaged in technical manpower development in the country. The Bureau of Manpower, Employment, and

Training (BMET) was established in 1976 for the management, coordination, and monitoring of craftsman skill training and employment promotion. Its main activities are creation of job opportunity at both domestic and foreign labor markets, rearing up of skills at urban and regional levels for self employment, planning and development of technical training program, and maintaining liaison with various government agencies and training institutes involved in HRD. At present, it operates 12 regional offices. Furthermore, 12 Technical Training Centers are engaged in promotion and implementation of various general, vocational, apprenticeship, shop-level, and on-the-job training and education programs throughout the country. Bangladesh Institute of Marine Technology (BIMT) offers a three-year diploma course on marine technology. There are also three apprenticeship-training offices in Dhaka, Chittagong, and Khulna which organize training on 390 different types of industries. The erstwhile Ministry of Youth Development had also offered some training programs in collaboration with the BMET focusing on self-employment of the unemployed youths.

In addition, skill training are also available from different other HRD institutes, namely Bangladesh Management Development Center (BMDC) and its three sub-centers, four Industrial Relations Institutes (IRIs), four Vocational Guidance and Youth Employment Units, 21 Regional Employment Promotion Offices, one Islamic Institute of Technology (IIT), and twenty-five Labor Welfare Centers. During the Third Five Year Plan, under an IDA assisted vocational training project, the National Council for Skill Development and Training (NCSDT) was set up to formulate unified skill development policy, develop training curriculum, develop and implement skill examination and certification system, and coordinate skill development activities on a nation-wide scale. Although the number of such institutes is quite big, there are serious doubts about their efficient operation and maintenance, and they can rarely achieve the goals set for them.¹¹

There are some technical training centers in the country, namely Mirpur Bangladesh-German Technical Training Center and Kaptai Swedish Technology, which were established under foreign technical collaboration assistance schemes. Japan External Trading Organization (JETRO), Association of Overseas Training and Scholarship (AOTS), and Japanese companies operating in Bangladesh organize some skill training programs on quality control. Arrangements must be made to offer such programs frequently and with the

Table 5: Number and Capacity of Technical and Vocational Training Institutes in Bangladesh

Institutes	1977		2002 (planned)	
	No. of Students		No. of Students	
	Institutes	Enrolled	Institutes	Enrolled
1. Polytechnic Institutes	20	4,460	68 + 7 p	20,000
2. Vocational Institutes	51	2,620	64 + 1500 p	43,800
3. Basic Trade Centers	51	12,788	64	30,000
4. Technical Teacher College	1	120	2	400
5. Vocational Teacher Training Institutes	1	120	2	400
6. HSC Business Management	-	-	200	8,000

Note: P means number of institutes expected in the private sector.

Source: Same as table 1.

collaboration of the domestic industrial groups.

In the Fifth Five Year Plan, for accelerating HRD the government has undertaken a number of programs to establish more vocational and technical training institutes, strengthen the existing institutes with qualified teachers and modern instruments, and establish linkage among local government agencies and technical and vocational education institutions. Programs to increase enrolment capacity, study experiences of Japan and Korea especially to strengthen the base of technical education, develop and modernize technologies, and conduct research on the job market for creating data-base for technical and vocational education policy formulation and strategy development are also taken. Since the ready-made garments industry has thrived significantly in the country, an institute of fashion will be set up for this industry. The government will also encourage employers to send their employees for training in vocational and technical institutes. In order to cater the need of specific industries, institution-based sandwiched trade programs will also be offered.

GENERAL OBSERVATIONS, ISSUES, IMPLITCATIONS, AND POLICY-RECOMMENDATIONS

HRD is an essential precondition to economic development in Bangladesh. This country possesses two primary resources, human beings and land. Of these two, land is limited and has no scope for enlargement, while the other, the human being is increasing constantly. Given the unequal distribution of land in the country and the limitation to increasing land productivity after a certain point, the only meaningful alternative available for national development is the development of human resources.

In the context of rural Bangladesh, the ability to read and write is a great asset and possesses multiplier effect, in that, it helps in better understanding of life, efficient use of modern methods of cultivation, effective family Planning, raising of children, and preserving of universal and democratic rights. For this reason UPE and MEP are essential preconditions to the modernization and development of rural areas.

Along with UPE and MEP drives, plans are needed for continuing education (CE). Literally although CE connotes education as a life-long process, for Bangladesh CE is virtually a process of post-literacy training for neoliterates and school drop-outs to promote retention of literacy skills, continuation of learning beyond primary literacy, and application of this learning for improvement of living conditions.¹² In Bangladesh, some NGOs are active in imparting education as a continuous process. At present, there are more than 15,000 NGOs operating in Bangladesh. While some of these are sponsored and managed by foreign agencies and governments, a vast majority of them are established under domestic initiative and work entirely on voluntary basis. Their objectives and programs are extremely diverse and only few are exclusively working for literacy development. Although many have set education as a part of their objectives, however, they do not follow any uniform method or syllabus. Until now neither any government agency nor any private organization does exist to coordinate and integrate their activities. As such their activities cannot achieve any meaningful and sustainable result. In view of the current situation of Bangladesh, NGOs should

integrate their educational programs with the government policies and programs for education and economic development. There seems a strong necessity to integrate the UPEs and MEP with CE.

Attaining 100 percent school enrolment or 100 literacy of adult illiterates at some point of time does not mean that all problems are solved. Retention of literacy skills and their practical applications are much more important. Otherwise the whole situation will revert back to its origin after the drives so far made are over. Under the current situation of unemployment and poverty, it seems that even if education is imparted to someone without giving any opportunity to use that, at certain point parents will lose eagerness to send children to schools. Therefore, along with plans and programs of education for all, all-out drives are essentially needed for sustainable economic development through industrialization, modernization of agriculture, and creation of self-employment opportunities. If economic development programs fail to catch up with literacy programs or the vice versa, there will remain very few rooms for being complacent.

Historically the problems of economic development and growth, namely mass illiteracy, lack of technically educated manpower, scarcity of economic resources, scarcity of appropriate technology, inefficient administration, political instability, leadership crisis, lack of community participation, and inertia of general people are rotating in a vicious cycle. Education has been pinpointed to be the root cause of all such problems. The first and foremost necessity is to arrest the spiraling illiteracy by ensuring enrolment of all school going age-children in the primary school, together with literating the aged segment of illiterates.

In view of resource-constraints, planning a priority schedule seems to be a wise step toward solving these problems. Any piece-meal drive will rather prolong the situation. Although the pace of improvement may be slow, a comprehensive program is needed to be developed and launched. It is also necessary to economize the use of resources with greater emphasis on efficient use of facilities. At the same time, it is necessary to figure out the sectors where the involvement of the public sector should be dominant and where the private sector should play greater role than the former. Whatever may be the role of the government and private sector, the involvement of community and NGOs at all phases is needed to ensure their participation and eliminate wastage of efforts and resources.

UPE and mass-education being eternal and fundamental rights, theoretically the public sector should play a greater role. At the current situation of Bangladesh, however, the participation of both public and private sectors as well as NGOs are equally important. The programs of all three parties should be well-knitted and integrated and must be coherent for quick eradication of the problem and arrest its further expansion. Tertiary education should be based on meritocracy and economic stability of the citizen. Especially, tertiary education should be at the legacy of the private sector where profit making objectives remain well in action and spending power of the client is important. This needs a revision of the current system of government subsidy for higher education where only the privileged group gets further privilege. To broaden the scope of higher education for economically disadvantaged class, a system of need based subsidy should be developed and introduced. This will make more public fund available for UPE and MEP.

The secondary and higher secondary system is not at all egalitarian. There exists tremendous qualitative gap between schools in rural areas and urban areas. Also there exist different categories of privileged schools such as residential model schools, laboratory schools, cadet colleges, cantonment public schools and colleges, English schools, and other top grade public schools. These schools/colleges possess very good physical facilities, trained teachers, and modern teaching equipment. Children of rich families only can afford to study in these schools. In rural areas, schools offering science courses are few and those offering industrial arts and agricultural are almost nil. Although these schools give students first exposure to basic science, commerce, and technical education, their curricula and course contents are extremely theoretical and unscientific and have little relationship with the socioeconomic condition of the country or job market.¹³ The performance of the students, however, at these levels are principal yardstick to decide who will go on to the higher educational institutions such as general and engineering universities/colleges, medical colleges, agricultural university/colleges, and polytechnics/monotechnics.

The secondary and higher secondary education needs special consideration. The present facilities are running at optimum capacity and have little scope for further expansion, With the gradual achievement of 100 percent enrolment and graduation at the primary level, the rate of advancement especially to secondary and higher secondary schools will definitely shoot up. Unless adequate facilities to accommodate primary school graduates are made now with a forward looking approach, there will be another shock on total HRD plan of the country. At the moment, free education for female students is available up to secondary level and this has arisen a positive response among students and their guardians. This policy can be adopted and extended to male students in selected rural areas and urban slums. Education of male children beyond primary school has two opposite implications. Firstly, it increases family expenditures and secondly, it results in sacrifice of earning capability. Therefore up to a certain point of time and for some target group of citizens in some areas, schooling up to secondary level for male students should also be made free and compulsory.

Resources available and allocated for HRD in the country is extremely inadequate compared to the commitment made for compulsory primary education and enlargement and modernization of the base of science and technical/vocational education. In order to bridge the resource gap as much as possible, current wastage of resources should be trimmed of, international assistance should be lined up, and NGOs, private sector, and local community should be involved. At the same time efforts must be made to revitalize and rejuvenate the current system of management of all related institutions. For example, a system of tripartite responsibility may be developed where local government bodies like *Union Parishad* and parents association will supervise the operation of primary schools. Likewise, management of secondary/higher secondary schools and colleges should be entrusted to the *Thana Parishad* and *Zila Parishad*. While making recruitment of primary school teachers, local candidates should be given preference. Targets should be set up to increase the number of female teachers to at least 80 percent. A good number of educational institutions are currently underutilized. Multi-shift operation and coeducation should be introduced in those institutions.

The quality of engineering education and its compatibility with the need in the country is a matter of serious question. It is alleged that curricula of engineering institutions are mostly copied from other countries and have little relevance to the domestic need. Graduates of these institutions, although demands are there, cram in the job market. Industries show utter negligence to recruit them. In fact, the productivity of engineers in Bangladesh is very disappointing, because as soon as they graduate from the engineering departments, they want to work in fancy office environment, crave for higher salary and better emoluments, and show utter dislike for work in the production areas in grease-torn apron. This makes them less attractive to industrial employers.

Engineering graduates are considered as the core of a country for industrial development. Therefore, these institutions should establish close liaison with industrial sectors to understand their skill requirements and produce such skills adequately. Also they should have relationship with the Bangladesh Council for Scientific and Industrial Research (BCSIR), the Bangladesh Industrial Technical Assistance Center (BITAC), various R&D institutes, and relevant industrial corporations. Arrangements are already underway at the government level with UNDP for technical assistance and at institutional level with various universities and research institutes for research collaboration and faculty training and development.

There still remain so many lapses and weak points in the technical and vocational education system in the country. Especially it has no understanding of the industrial development policies and plans. The government should foresee in advance the trend of industrial development and thereafter chalk out a policy of skill development so that a symbiotic relationship exists between demand for and supply of skills. At present there is no guarantee that acquisition of skill in a particular domain will create job opportunity. For this reason, the response of students towards vocational education is not at all encouraging. On the other hand, inability of graduates of vocational and technical institutions to respond to the immediate need of employers make them less attractive in the job market. The employers prefer employing unskilled people and imparting them on-the-job training which is more cost effective and safer way to secure stable and skill work force.

In general in Bangladesh, industrial employers are still old-fashioned and cannot realize that an efficient work force is an asset that can be tapped for maximizing productivity and profitability. For this reason, investment in workers skill development seems to be an unnecessary expenditure to them. On the other hand, vocational and technical education institutions are not run by far-sighted and research oriented instructors and staff. They fail to realize the need of establishing a constant linkage with industries to understand the exact nature of their skill and expertise requirements and develop their course-curricula accordingly to inculcate such skill and expertise among their graduates.

The speed of industrialization is very frustrating because of the fragile technological base of the country. For this reason, the most urgent need is to modernize the industrial structure which composes of indigenous technology-based cottage and small-scale industries. Vocational institutes should formulate schemes to develop craftsmen training to elevate skill level of work force in these industries. Since the problem of unemployment is also chronic, massive training programs should be offered to develop craftsman-cum-entrepreneurship

skills. This training program should be interwoven with various micro-credit schemes of the government as well as NGOs so that trained people can get easy access to capital for self employment.

Bangladesh Technical Education Board (BTED) controls the examination and skill certification of polytechnic institutes in the country. This body does not have any research cell to do research for upgrading the standard of technical education in the country. DTE, NSCDT, and BTED should come forward to collaborate with each other and develop course curriculum and training modules for the institutes/training centers under their control, keeping vigilant attention to current and future needs of the industrial sector. These agencies should also establish networks among themselves as well as with their affiliated institutes so that flow and feedback of information become regular and smooth.

In the Fifth Five Year Plan, the government has emphasized to follow the experience of Japan and Korea in HRD. Bangladesh can also learn the Malaysian experience of skill development as modeled in the Penang Skill Development Center (PSDC). The PSDC model of skill development has gained wide reputation and seems easily transferable to a technologically backward developing country like Bangladesh.

The base of technical and vocational education should be expanded, restructured, and made job market oriented so that the graduates can get employment easily at both home and abroad. The agencies that control external job market are indulgent to malpractice and that has caused serious dissatisfaction among foreign employers/governments as well as job seekers. The government should adopt adequate legal and institutional measures with out delay and drastically implement them to encounter all dishonest practices.

To arrest the present lawlessness in the highest academic institutions, especially universities, student union activities needed to be reformed. While a philosophy of student union activities "by the student, for the student, and the student" be cultured, intrusion from political quarters should be made illegal. A surveillance committee can be instituted with representatives of students, guardians, government, and law enforcing authorities. The current system of university administration, where politics and political interference have taken firm root through various elections of syndicate, dean, vice-chancellor, etc., has caused much of the session jam. To solve these problems, sufficient administrative reforms are needed.

Tertiary education involves significant opportunity cost in a resource poor country like Bangladesh. Therefore, two things must be ensured: the social cost of such education must be made visible, and secondly, beneficiaries of this service must be urged to shoulder the cost as far as necessary and justifiable. Instead of free-style subsidy, various schemes like loan programs, grants, and student-employment activities may be introduced to enable beneficiaries of higher education to bear relevant costs. As a policy, education should be subsidized only when it is economically feasible and socially justifiable.

There should always be a spin off between HRD policies and plans and technology acquisition and R&D policies and plans. This needs a perfect projection of the direction of economic and industrial development in the country. Technology is the ways and means to get activities done effectively and scientifically. Therefore, human forces should be molded and developed in such a way with technological changes that they can optimally fit and perfectly

adapt themselves to different stages of social and economic development. For this reason, HRD and economic development in Bangladesh should go hand in hand.

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ENDNOTES

- 1 Only the main points of the plan are cited here. For more details, see Government of the People's Republic of Bangladesh (1997): *The Fifth Five Year Plan 1997-2002*, Dhaka: Planning Commission (PC)/Ministry of Planning (MOP), June.
- 2 Education was such a neglected area that the number of primary schools declined from 29,633 in 1947-48 to 26,665 in 1960-61 and the rate of illiteracy increased from 78.90 percent to 82.39 percent during 1951-61. For more details, see Government of the People's Republic of Bangladesh (1972): *The First Five Year Plan 1973-78*, Dhaka: PC/MOP, pp. 441-448.
- 3 The targets of the project were to decrease drop-out, increase retention, increase enrollment of girls, and minimize literacy gap between rural and urban areas through providing better physical facilities such as school building and furniture, machinery and equipment, and textbooks and instructional materials. The strategies adopted were flexible schooling time, liberal inter-class promotions, increased community participation, and training of teachers and supervisors. For details, see UNESCO Principal Regional Office for Asia and the Pacific (1991): *APOEAL - National Studies: Bangladesh*, Bangkok: UNESCO.
- 4 Satellite Schools are affiliates to nearby primary schools. These schools are in fact buffer between home and school for the first and second graders of primary schools. These schools are staffed by local female teachers and managed by local school management committees.
- 5 For more details, see Government of the People's Republic of Bangladesh, *The Fifth Five Year Plan 1997-2002*, table 20.3, p. XX-4, op. cit.
- 6 *Ibid.*, p. XX-13.
- 7 *Ibid.*, pp. XX-15-16.
- 8 Higher secondary education is mainly offered by intermediate colleges and degree colleges (also called university colleges in some cases). These institutions are different from secondary schools. But cadet colleges, residential model schools, and cantonment public schools and colleges offer both secondary and higher secondary-level education. In other words, these institutions combine secondary and higher secondary education together.
- 9 Two different categories of undergraduate programs are offered by the colleges under this university. The first category is called "pass course" which is given for two years. The students of this category can go for Master's program, but they need to study two years at a level called "master preliminary". After that one can pursue one year master degree program. The second category of degree is called "honors" degree and requires four years of education on a specific subject/discipline. This degree is exactly of the same level as those given by universities. Honors graduates can pursue masters degree in one year and do not need to go through "master preliminary" program.
- 10 The author is a leading scholar of the country and had been Vice-Chancellor of Jahangir Nagar

- University for a long time. For details, see Siddiqui, Zillur Rahman (1997): *Visions and Revisions-Higher Education in Bangladesh 1947-1992*, Dhaka: The University Press, Chapter, 13.
- 11 Osada, Mitsue (ed.) (1995): *Overseas Vocation Training Handbook Bangladesh* (in Japanese), Chiba: Overseas Vocational Training Association.
 - 12 UNESCO Principal Regional Office for Asia and the Pacific, Bangkok: UNESCO, op. cit.
 - 13 In fact, educations offered at various levels have little compatibility with economic development plans and policies of the country. For details see, Khondaker, Mizanur Rahman (1990): "Fundamental Problems of Low Productivity in the Jute Industry of Bangladesh and Their Solutions through the Adoption of Japanese-style Management Practices", Unpublished Ph.D. Thesis, Graduate School of Commerce, Tokyo: Chuo University, March, p. 243.