

CHAPTER XVII

TRANSPORT

17.1 Introduction

17.1.1 An adequate and efficient transport system is a pre-requisite for both initiating and sustaining economic development. Investment in improving transport efficiency is the key to expansion and integration of markets - sub-national, national and international. It also helps the generation of economies of scale, increased competition, reduced cost, systematic urbanisation, export-led faster growth and a larger share of international trade.

17.1.2 The transport system of Bangladesh consists of roads, railways, inland waterways, two sea ports, maritime shipping and civil aviation catering for both domestic and international traffic. Presently there are about 21,000 km of paved roads; 2,706 route-kilometres of railways (BG-884 km and MG -1,822 km); 3,800 km of perennial waterways which increases to 6,000 km during the monsoon, 2 seaports and 2 international (Dhaka and Chittagong) and 8 domestic airports.

17.1.3 In Bangladesh, development and maintenance of transport infrastructure is essentially the responsibilities of the public sector as are the provision of railways transportation services and air transport. The public sector is involved in transport operations in road, inland water transport (IWT) and ocean shipping alongside the private sector. In the road transport and IWT sub-sectors, the private sector is dominant. In ocean shipping, however, public sector still predominates, although the private sector has considerably increased its role in this sector in recent years. Recently private sector has also been involved in domestic air transport and railway in a very limited scale.

17.2 Growth of Different Modes of Transportation

17.2.1 Bangladesh witnessed rapid growth of transport since Independence. The overall annual growth rate was nearly 8.2 per cent for freight transport and 8.4 per cent for passenger transport. Even then the transport intensity of the Bangladesh economy is considerably lower than that of many developing countries.

17.2.2 The relative roles of transport modes are evolving with road transport expanding at the expense of railways and inland water transport because of its inherent technical and cost advantages. According to Bangladesh Transport Sector Study (1994), the volume of road transport increased by 88 per cent from 1985 through 1993, whereas the volume of transport by water as well as rail declined in almost equal proportion.

17.2.3 With the commissioning of the Bangabandhu Bridge, the volume of road transport for both passenger and freight is expected to increase quite substantially. In order to enable the beneficiaries to avail of its full potentials, the bridge will generate demand for construction of by-passes and roads and bridges in different strategic parts of the country. Thus, the future expansion programme of each of the surface transport modes in providing transport services depends crucially on government policy and investment decisions keeping in view the past transport development trend and the recently changed scenario in the transport sector. Modal shares of three surface transports- road, inland water way and railway in 1997 (estimated on the basis of 1993 and 1996 data) are 72 per cent, 17 per cent and 11 per cent respectively for passengers and 65 per cent, 28 per cent and 7 per cent respectively for freight (Table 17.2).

17.3 Major Constraints

17.3.1 The development of surface transport system in Bangladesh is constrained by three distinct sets of factors. These are physical (e.g., difficult terrain, periodic flooding, poor soil condition, siltation and erosion of rivers, inherited management weaknesses of BR etc.), low investments and maintenance and inadequate institutional framework (four ministries, nine transport sector parastatals and lack of co-ordination and autonomy of transport parastatals).

17.4 Transport Sector Allocation in Past Plans

17.4.1 The public sector allocation for the transport sector during the past Plans in base-year prices of each plan period are shown in Table 17.1

Table 17.1
Allocations in Past Plans
(at base year prices in respective Plans)

(in million Taka)

Modes	First Five Year Plan (1973-78)	Two Year Plan (1978-80)	Second Five Year Plan (1980-85)	Third Five Year Plan (1985-90)	Fourth Five Year Plan (1990-95)	1995 to 1997 (in current prices)
Roads	1,496.10	1,687.90	4,090.20	11,853.00	34,650.00	18,467.10
Bangabandhu Bridge	-	-	-	*	10,000.00	20,679.20
Railways	1,261.30	1,230.80	4,133.90	2,000.00	8,350.00	3,986.70
Water Transport (including ports & shipping)	1,862.20	1,098.60	3,168.70	8,360.00	7,930.00	1,319.00
Airways	656.50	482.70	1,471.80	5,710.00	2,800.00	1,027.00
				2,100.00		
Total	5,276.10	4,500.00	12,864.60	30,023.00	63,730.00	45,479.00
Allocation as per cent of Total Public Sector Outlay	11.65	13.79	11.59	12.01	16.91	18.81

* This amount includes Tk. 2,620 million allocated by NICAR for thana connecting roads and Tk. 1,033 million allocated for the roads of Chittagong Hill Tracts from special fund.

17.5 Financial Performance of Transport Sector Parastatals

17.5.1 Public sector involvement in the transport system of Bangladesh consists of ownership and operation of nine parastatals. The parastatals have poor financial performance except the two seaports. The poor financial performance of the parastatals and their weak capital structure created a financial liability on the government of around Tk. 2,000 million annually till 1995. However, the situation has been improving in recent years. To address the problem, the government has been pursuing the two-pronged policy of privatisation and restructuring of public sector transport parastatals for achieving improved administrative, management and operational performances.

17.6 Fifth Five Year Plan

17.6.1 Objectives: To achieve an average GDP growth rate of 7 per cent per annum the transport sector growth rate is projected to increase by 7.51 per cent per annum. Keeping in view the increased volume of domestic traffic as well as the accommodation of future traffic from the Asian Highway and Trans-Asian Railway, the main objective of the Fifth Plan will be to develop a balanced and integrated transport network through adoption of strategies/programmes as described below.

17.6.2 Strategy : For transport network development strategy, an optimal mix of "market integration approach" and "poles of development approach" will be adopted. Operational significance of this mixed strategy is that development efforts will be concentrated on five main corridors: Dhaka-Chittagong, Dhaka-Northwest, Dhaka-Khulna, Dhaka-Sylhet and Khulna-Northwest with special emphasis on Dhaka-Chittagong, Dhaka-Northwest and Khulna-Northwest arterial corridors. Besides these, the road linkages passing through Khulna, Barisal, Bhola, Lakshmipur and Chittagong will be improved. This development strategy is to be reinforced by the rural transport development strategy. Rural transport system will be developed by integrating inland water transport sub-sector with the existing road transport system and within the road transport sub-sector by adding off-road internal access dimension. To this network development strategy, urban transport sector dimension will be added. The elements of this strategy to be pursued during the Fifth Five Year Plan will be as follows:

- a. The 'Arterial Corridors' will be designated as 'Strategic Corridors' and required investment will be made for the development of bridges, ferries and road upgrading works on these corridors to raise them to international standards so that these can carry the regional and inter-regional traffic;
- b. The two sea ports will be further developed and linked to Dhaka, which connects all the four major regions of the country;
- c. Railway linkages will be established between the east and west zones of the country;
- d. The development strategy for the rural transport will be reoriented for efficient external access through optimal integration of road and inland water transport and off-road internal accesses;
- e. Improvement in resource mobilisation will be made through introduction of user charges and fees by the agencies;
- f. Improvement of the management and operation of transport parastatals, including eventual privatisation of all or parts of specific transport parastatals will be aimed at;
- g. Provision of required incentive packages for the private sector for greater participation, not only in transport services, but also for infrastructure building will be made;
- h. Identification and implementation of preventive, emergency and post-disaster mitigation measures will be made. To minimise road accident, road safety administration will be adequately strengthened;
- i. Broadening the framework of transport development strategy by incorporating the vital urban transport dimension starting with improvement in transport services of greater Dhaka city will be undertaken;
- j. Assurance of deficit-free operation of Bangladesh Railway as envisaged in Railway Recovery Programme will be fulfilled;
- k. Improvement of sub-standard ferry operation on major road networks will be made;
- l. Introduction of necessary institutional reforms to address the operational constraints of the port transit system with special reference to containers and privatisation measures for port transit system will be made;
- m. Adequate care will be taken while developing transport network and service so that these do not cause environmental pollution and affect ecological balance; and
- n. Provision of duty-free or low duty import of engines and spares for mechanisation of country boat will be made.

17.6.3 Priority investment programmes/projects : In conformity with this strategy the following programmes will be undertaken and completed :

- a. Completion of the Bangabandhu Multipurpose Bridge project along with the access roads;

- b. Completion of Dhaka Eastern By-pass;
- c. Construction of five major road bridges, two in the Mongla/Khulna - Northwest corridor and one in Dhaka - Sylhet corridor and one over the Dakatia at Chandpur and another over the Laokhali at Patuakhali ;
- d. Completion of Jamuna Railway Link Project. ;
- e. Completion of the construction of ongoing arterial roads projects including their rehabilitation and maintenance;
- f. Undertaking the rehabilitation and maintenance of core network of Railway, including signalling and telecommunication systems;
- g. Construction of container terminals at Chittagong sea-port and expansion and modernisation of container handling facilities at sea-ports;
- h. Development of a new cargo-cum-general container composite port at Dhaka, and inland Railway container depots at Dhaka, Tongi and Joydevpur;
- i. Maintenance of appropriate draft of sea-ports as well as inland navigational channels through appropriate dredging;
- j. Development of a deep water sea-port at Chittagong to cater to domestic as well as regional needs;
- k. Undertaking programmes for the development of ferry links to off-shore islands between Shariatpur and Chandpur and mechanisation of country boats;
- l. Development of M.A. Hannan Airport at Chittagong and Osmani Airport at Sylhet up to the standards of international airport; encouraging private sector participation in air transport;
- m. Initiation of programmes for the addition of a second runway at the international airport at Dhaka and building another airport at Trishal;
- n. Development of the airports of Barisal, Khulna, Bogra, Rajshahi, Saidpur and Patuakhali;
- o. Improvement of the urban transport system starting with Dhaka city through construction of new infrastructure and development of mass transit system;
- p. Extension of road network in Chittagong Hill Tracts; and
- q. Planning road and railway links and ports to the end of regional and sub-regional co-operation.

17.7 Projected Transport Demand and Modal Shares in Fifth Plan

17.7.1 The overall annual rates of growth for transport demand from the estimated benchmark year of 1997 are assumed to be 7.5 per cent and 8 per cent for passenger and freight traffic respectively for the year 2002 taking into consideration the present trend and allocation projected for this sector. But, if 7 per cent GDP growth rate is considered, these will be higher. The projected transport demand and modal shares up to 2002 is presented in Table 17.2.

Table 17.2
Projected Transport Demand and Modal Shares - Passenger and Freight

SL. No	Year	Passenger				Freight			
		Total pass-km (billion)	Percentage shares			Total Ton-km (billion)	Percentage Shares		
	Road		IWT	Rail			Road	IWT	Rail
1.	1997	90	72	17	11	12	65	28	7
2.	2002	152	70	18	12	19	72	20	8

17.8 Financial Outlay in Fifth Plan

17.8.1 Public sector: An amount of Tk. 109,955.50 million has been earmarked for the transport sector in the Fifth Five Year Plan. Besides this, a sum of Tk. 11,800 million has been provided for the Bangabandhu Bridge giving a total allocation of Tk. 121,755.50 million for the transport sector as a whole. The percentage share of transport in the total public sector outlay is 14.20 compared with 16.50 in the Fourth Five Year Plan and about 19 during 1995-97. The sub-sectoral break-up of the Fifth Five Year Plan Transport Sector financial outlay of Tk. 121,755.50 million is shown in Table 17.3.

Table 17.3
Public Sector Financial Outlay for Development of Transport in Fifth Plan
(at 1996/97 prices)

(in million Taka)

Sub-Sector	Total Allocation	On-going Projects	New Projects
Road Transport	64,905.50	51,500.00	13,405.50
Bangladesh Railway	24,000.00	17,900.00	6,100.00
Water Transport	13,550.00	9,750.00	3,800.00
Air Transport	7,500.00	6,160.00	1,340.00 -
Sub-Total	109,955.50	85,310.00	24,645.50
Bangabandhu Bridge	11,800.00	11,800.00	---
Total	121,755.50	97,110.00	24,645.50

17.8.2 Of the total Plan outlay, only 20.24 per cent is available for new projects. The highest outlay is given to the road sub-sector (about 53.30 per cent) which is followed by Bangladesh Railway (19.71 per cent).

17.8.3 Private sector: There is a good prospect for the private sector to increase its participation in transport-related activities. The government is committed to create a favourable environment with regard to tariff regulation, import policy, credit facilities, training facilities, etc., to encourage the private sector to raise its involvement in this sector along with other economic activities. Private sector may be encouraged to involve itself in the management and infrastructure building activities in the transport sector using the Build, Operate and Transfer (BOT) model, apart from increased participation in transport services.

17.8.4 It is expected that about Tk. 83,876.80 million will be invested by the private sector in different modes and means of transportation including some infrastructures. A tentative sub-sector-wise breakdown of the private sector investment is given below:

a. Road infrastructures and services.....	TK. 20,500.00 million
(Construction of Dhaka eastern by-pass, toll roads and bridges at strategic points and procurement of road vehicles, construction and maintenance of machinery)	
b. Rail infrastructure and services.....	Tk. 8,876.80 ,,
(Operation of branch railway lines on lease basis, construction of ICD and marketing activities)	
c. Water transportation Infrastructures.....	Tk. 35,000.00 ,,
(Procurement of vessels/ferries and container handling machinery, construction of container terminals at sea as well as inland ports and construction of a deep sea port at Chittagong)	
d. Civil Aviation/Biman	Tk. 19,500.00 ,,
(Purchase of aircraft and cargo handling machinery, construction of cargo-shed building and STOL airports)	
Total	Tk.83,876.80 million

A. ROAD TRANSPORT

17.9 Introduction

17.9.1 Road and road transport, by virtue of their inherent advantage over other modes and means of surface transports in terms of speed, flexibility and market accessibility, have turned to be the principal mode and means of transportation system in Bangladesh. The Bangladesh Transport Sector Study (BTSS), conducted by the Planning Commission in 1994, revealed that the modal share of road transport in terms of passenger-kilometre and ton-kilometre has increased significantly from 54 and 35 per cent respectively in 1975 to 75 and 61 per cent in 1993. It is likely that this dominance of road sub-sector will further rise after the completion of the Bangabandhu Bridge, even if the other two modes of surface transport, namely, the railway and the river way are adequately developed.

17.9.2 The road networks of Bangladesh comprise national highways, regional highways, thana connecting roads (Feeder-A), growth centre connecting roads (Feeder-B), union connecting roads (RD-1) and the rural roads (RD-2 and village roads). While the first three categories of roads are constructed and maintained by the Roads and Highways Divisions, the other roads are constructed by the Local Government Engineering Department (LGED) under the Local Government Division (LGD) of the Ministry of LG, RD and Co-operatives. It is estimated that by June 1997, there were about 3,000 km of national highways, 2,000 km of regional highways, 11,500 km of Feeder-A, 14,400 km of Feeder-B and 87,000 km of other rural roads. Of these, total length of paved road is about to be 21,000 km consisting of 3,000 km of national and 1,800 km of regional highways and 16,200 km of Feeder-A and B roads. Apart from these road networks, there are about 12,000 km of paved roads in metropolitan cities, pourashavas and thanas that are constructed and maintained by local government bodies.

17.9.3 The most important development in the road sub-sector has been the construction of the Bangabandhu Bridge for which a separate Jamuna Multipurpose Bridge Authority and Jamuna Bridge Division have been created. Bangabandhu bridge, when goes into operation in mid 1998, will remove the barrier of present time-consuming and hazardous road

transportation between the east and north-west zone of the country and accelerate the development of highly potential north-west region of the country. This apart, it will provide corridor for future Asian Highway and sub-regional road network.

17.9.4 Till date, all the road infrastructures have been constructed and maintained by the government and almost the entire services (about 95 per cent) are provided by the private sector. The financing of infrastructures puts a heavy burden on the government and in some cases, causes delay in the implementation of projects because of inadequate allocation. This financial burden will significantly increase in the Fifth Plan because of much higher volume of infrastructure development activities. The government will therefore give due emphasis to involve the private sector in the construction of road infrastructures through appropriate policies and legal framework, apart from their larger involvement in services.

17.10 Review of Performance of Past Plans

17.10.1 Financial performance during 1973-95: The Plan-wise public sector financial outlay at base year prices of respective Plans and the actual utilisation in current prices are given in Table 17.4.

Table 17.4
Public Sector Financial Outlay and Actual Utilisation on Roads in Past Plans
(at base year prices of respective Plans)

(in million Taka)

Item	First Plan (1973-78)	Two Year Plan (1978-80)	Second Plan (1980-85)	Third Plan (1985-90)	Fourth Plan (1990-95)
Road	1,496.10 (1,450.50)	1,687.90 (1,553.15)	4,090.20 (6,167.72)	11,853.00 (16,167.80)	34,650.00 (43,509.00)
Bangabandhu Bridge	---	---	---	2,000.00 (460.20)	10,000.00 (9,342.20)

Note: Figures in parentheses indicate actual expenditures in current prices.

17.10.2 In addition to the allocation and utilisation of fund for roads in the Third Plan as shown in table 17.4, Tk. 2,620 million was allocated by the National Implementation Committee for Administrative Reform (NICAR) for thana connecting roads. Against this amount Tk. 2,794 million was spent . Besides, Tk. 1,033 million was allocated for the development of roads of Chittagong Hill Tracts which was fully utilised .

17.10.3 Physical performance

- a. Performance during 1973-1990:** During the First and Two Year Plans, 805 km of arterial roads comprising of national and regional highways were constructed/paved. During the Second Plan, 669 km roads were paved, 512 km roads were upgraded and 7,528 metres of bridges / culverts were constructed. Besides, some arterial roads including Feeder A-type road were added to the system. In the Third Plan 744 km of paved road was added to the road network and a total of 10,249 metres of bridges and culverts were constructed. Under thana connecting road projects, 718 km of paved roads and 570 km of brick-paved roads were constructed. Besides, 98 km of paved roads and 9,357 metres of bridges and culverts were constructed under special road projects for the hill tracts. All these have been completed by the Roads and Highways Department.

b. Performance during Fourth Plan period

i. Roads and Highways Department (RHD): During the Fourth Plan, three major bridges, namely, the Meghna - Gumti Bridge, the Mahananda Bridge and the Shambhuganj Bridge were constructed. Besides, the preparatory works for the Dhaleswari Bridges were finalised. Pavement was done on some 4,650 km of various categories of roads for different types of improvements including new construction, and over 29,000 metres of bridges and culverts were either constructed, reconstructed or rehabilitated in addition to fixing of around 28,800 metres of bailey bridges. At the end of Fourth Plan, RHD had some 15,000 km of roads under it. While the national and regional highways are almost entirely paved, around 50 per cent of the feeder -A road, known as thana connecting roads, are paved. A comparative statement showing the RHD paved roads in 1990 and 1995 and estimate for June, 1997 are given in Table 17.5.

Table 17.5
Development of Paved Roads 1995 - 1997

(in km)

Category of Roads	Target for mid-1990 as per Fourth Plan	Firmed-up Position of 1990	Position in June, 1995	Estimate for June,1997
National Highways	2,736	2,830	2,863	3,000
Regional Highways	1,219	1,359	1,573	1,800
Feeder Roads	1,739	-	-	---
Thana Connecting Roads/ (Feeder Type A Roads)	1,882	3,725	5,724 *	6,700
Special CHT Roads	386	-	-	---
Total	7,962	7,914	10,160	11,500

* 50% of total 10,508 km of roads is taken as paved road

ii. Bangladesh Road Transport Corporation (BRTC): Bangladesh Road Transport Corporation (BRTC) procured 30 double-decker buses during the Fourth Plan period. An amount of TK. 68.05 million was spent during the Plan period.

iii. Bangladesh Road Transport Authority (BRTA): BRTA undertook programme of setting up of 4 vehicle testing stations in the 5 regions of the country. Under the project, BRTA proceeded with the works for setting up of the vehicle testing stations. In addition, BRTA spent an amount of TK. 112.15 million during the Fourth Plan period.

iv. Bangabandhu Bridge: The mighty river Jamuna, which practically divides the country into two parts, is a major physical barrier standing on the way of smooth communication and social and economic integration of the two parts of the country. To remove this barrier, construction of the Bangabandhu Bridge has been undertaken. For the implementation of the bridge project, an organisation named Jamuna MultiPurpose Bridge Authority (JMBA) was created. Subsequently, a separate Division, titled Jamuna Bridge Division (JBD), was created under the Ministry of Communication for monitoring, supervision and quickening the decision-making process in respect of different activities and problems of this giant project. A brief description of the bridge, its estimated cost and mode of financing, allocation and performance during the Fourth Plan are given below :

- The bridge is a 4.8 km long and 18.5 meter wide, 4 lane multipurpose bridge; it will be a road bridge with provision to carry a power inter-connector, gas pipeline and telecommunication links. The foundation/sub-structure of the bridge will be strengthened so as to carry a rail line (both meter and broad gauges).
- Construction of the bridge started in October, 1994 and as per the schedule, the bridge is expected to be completed by mid-1998. The project is being financed jointly by IDA, ADB and the Government of Japan each with a share of US \$ 200 million . The estimated cost of the project including the resettlement component is Tk. 36,036.90 million.
- An amount of Tk. 10,000 million was allocated for the project in the Fourth Five Year Plan (at 1989/90 prices) of which Tk. 9,342.20 million was utilised .

17.10.4 Performance during 1995-97

- Financial performance:** During the period, a total of Tk. 18,467.10 and Tk. 20,679.20 million were provided for the road and the Jamuna Multipurpose Bridge projects respectively through Annual Development Programmes. The entire amount of allocation was utilised.
- Physical performance:** During the period 1995-97, road rehabilitation and maintenance project (phase-1), road overlay programme and construction of Bangabandhu Bridge comprised the main activities. By June 1997 about 60 per cent work of the Jamuna Multipurpose Bridge project was completed. Preliminary work on the Jamuna access roads have been completed . About 1,000 km of thana connecting roads and 500 km of feeder road were constructed.

17.11 Fifth Five Year Plan (1997-2002)

17.11.1 The importance of road sub-sector will significantly increase during the Fifth Plan, particularly after the opening of the Bangabandhu Bridge. In order that road can bear the load of increased passenger and cargo traffic, the existing national and regional highways will not only be widened and strengthened but also be bridged at major river crossings . Besides, the thana connecting roads will further be developed and paved so that all urban centres can be connected with the major cities as well as seaports for integration of both internal and external markets. The most important move in the Fifth Plan will, for the first time , be the involvement of private sector in infrastructure building activities through appropriate policy and incentive packages. Besides, the road services and the infrastructures will be planned and designed in proper way so that they do not pollute the environment and adversely affect the ecology. Finally, the five major arterial road corridors will be developed in such a way that they can accommodate the increased domestic traffic as well as those generated from the proposed Asian Highways that is expected to pass through Bangladesh, connecting south-east Asian countries with the middle-east and Europe.

17.11.2 Objectives: The major objectives of the road transport sector in the Fifth Five Year Plan will be:

- a. Development of an integrated and balanced road network in the country through the completion of the Bangabandhu Bridge, the Jamuna access roads and other ongoing roads and bridges;
- b. Construction of Dhaka Eastern By-pass and 3 major bridges, namely, the road-cum-railway bridge at Khulna, the Padma bridge at Paksey and the Bhairab bridge at Ashuganj;

- c. Construction of missing links in the existing road network to add to the efficiency of the arterial network;
- d. Construction of fly-overs to ease the traffic congestion of big cities, particularly Dhaka City;
- e. Development of the five arterial corridors in accordance with international standards to accommodate domestic, regional and inter-regional traffic;
- f. Formulation of legal framework and development of incentive packages for encouraging private sector participation in infrastructure building activities;
- g. Strengthening the institutional capabilities both in terms of manpower and equipment for planning, execution and maintenance of road transport infrastructure;
- h. Undertaking adequate measures so that the road infrastructures do not pollute environment and affect ecology;
- i. Provision of adequate fund for road rehabilitation and maintenance works;
- j. Initiation of feasibility study for the Padma bridge at Mawa; and exploration of road connection with China through north-eastern India and Myanmar; and
- k. Strengthening of the Road Safety Administration for safe and secured trafficking.

17.11.3 Strategies/Policies: The strategies and policies to be pursued in the Fifth Plan will be as follows:

- a. Completion of priority ongoing projects in time by providing adequate allocation to derive maximum benefit, instead of spreading the limited resources thinly over a large number of projects ;
- b. Formulation of appropriate legal and policy framework to attract private investment in road infrastructures , particularly the construction of Dhaka Eastern By-pass and other toll - roads and bridges;
- c. Development of the national and regional highways, particularly the five arterial corridors in accordance with international standard to accommodate the domestic, regional and inter-regional traffics;
- d. Promotion of efficient use of existing facilities and addition to existing network mostly on economic viability;
- e. Continuation of road transport services as primary responsibility of the private sector;
- f. Establishment of proper co-ordination among land use plan, water management system and transport policies and programmes;
- g. Utilisation of existing facilities efficiently and optimally through appropriate tariff adjustments based on inter-modal transportation economics and maintenance of existing system; and
- h. Undertaking appropriate measures so that the road services and infrastructures do not pollute environment and affect ecology.

17.11.4 Projections and programmes: The projection and programmes of the road sub-sector in the Fifth Plan will be as follows;

- a. Completion of the Bangabandhu Bridge and the Jamuna access roads to derive maximum benefit out of it;
- b. Construction of the Dhaka Eastern By-pass and fly-overs in Dhaka City;
- c. Paving of at least 500 km of arterial roads each year;
- d. Construction of 200 km link roads every year; and
- e. Completion of 3 major bridges, namely , the Bhairab bridge, the Paksey bridge and the road -cum-railway bridge at Khulna.

17.11.5 The total length and the paved length of the national, regional and thana connecting roads at the end of the Fifth Plan period will be as follows (Table 17.6):

Table 17.6
Total Length and Paved Length of National Regional and
Thana Connecting Roads in Fifth Plan Period

(length in km)

National , Regional and Thana Connecting Roads	Estimated Benchmark on June 1997 (Cumulative)	Target for June, 2002 (Cumulative)	Increase (per cent)
Total length	16,500	17,500	6
Paved length	11,500	14,000	22

17.11.6 Financial outlay

a. Public sector: In the public sector, a total of Tk. 76,705.50 million including Tk. 11,800 million for the Bangabandhu Bridge at 1996/97 prices has been earmarked for the road transport sub-sector in the Fifth Plan . Out of this allocation Tk. 63,300 million (82.52 per cent) will be spent for completion of the on-going projects and Tk. 13,405.50 million (17.48 per cent) for the new projects. Programme-wise public sector outlay is shown in Table 17.7.

Table 17.7
Public Sector Outlay for Roads in Fifth Plan
(at 1996/97 prices)

(in million Taka)

Programmes/Project	Financial Outlay		
	Total	On going Projects	New Projects
A. Road / bridges excluding Bangabandhu Bridge			
1.Thana connecting Roads (Feeder 'A' Roads)	17,500.00	17,500.00	---
2. Road Rehabilitation and Maintenance projects	9,200.00	6,500.00	2,700.00
3. Bangabandhu Bridge Access Roads	8,000.00	7,500.00	500.00
4. Construction of Bridges	14,500.00	11,000.00	3,500.00
5. Other Major Link Roads	12,000.00	7,000.00	5,000.00
6. Dhaka Eastern By-pass/Fly-over*	3,005.50	1,800.00	1,205.50
7. Institutional Development / Feasibility study and other activities for BRTA, BRTC, Planning Commission, etc.	700.00	200.00	-
Total (A)	64,905.50	51,500.0	13,405.50
B. Bangabandhu Bridge	11,800.00	11,800.0	-----
Total (A+B)	76,705.50	63,300.0	13,405.50

*Private Sector investment in these areas will be encouraged. The present allocation of Tk.3,005.50 million is kept as seed money or government equity.

b. Private sector: It is expected that through appropriate policy, legal framework and incentives, the private sector will play, not only an increased role in road transport services but also in the construction of road/ bridge infrastructures. Tk. 20,500 million has been projected as the private sector investment in the Fifth Plan for infrastructures and services. In the case of infrastructure, emphasis will be given to the construction of Dhaka eastern by-pass and other toll roads / bridges at strategic points/areas, in the private sector. Investment of the private sector for development of infrastructures is projected to be Tk. 3,500 million in Fifth Plan. The services will be primarily confined to procurement of buses, trucks, etc., and establishment of workshops and servicing facilities . The estimate for such investment in the Fifth Plan period is Tk. 17,000 million.

B. BANGLADESH RAILWAY

17.12 Introduction

17.12.1 Bangladesh Railway (BR), a state owned and state managed organisation, is one of the three major modes of surface transport in the country. It had almost a monopoly in the mechanised transport system upto the mid sixties, but is no longer the principal mode of road transport. BR has been losing ground in competition with both water and road transports. This is primarily due to the fact that almost all investments made on BR since independence was on account of replacement and rehabilitation of assets damaged during the War of Liberation. There has been virtually no investment in new areas of capacity creation. Besides, Bangladesh Railway suffered severe damages due to several natural calamities, like floods of 1987, 1988, 1990 and cyclones of 1991 and 1995. Moreover, the existing railway system of the country is divided into two zones by the river Jamuna (Brahmaputra) and are linked by ferries at Bahadurabad and Jagannathganj, which do not operate with desired efficiency. It is, however, expected that after implementing the Railway Recovery Programme and establishing the link line between East and West Zones, BR will once again play significant role in the area of transport. The role of BR will further increase in future when the proposed Trans-Asian Railway (TAR) passing through Bangladesh will actually be built.

17.12.2 At present total railway route kilometerage in Bangladesh is 2,706, which consists of 884 km. of broad gauge (1.68 meters) and 1,822 km of meter gauge (1.0 meter). At the beginning of 1996/97, BR has a fleet of 283 locomotives (BG-68, MG-215), 1,368 passenger carriages (BG-300, MG-1068), 152 other coaching vehicles and 14,679 wagons. With these rolling stocks, the BR is at present catering to passenger and freight services at 489 stations spread over the entire country (except Barisal division).

17.13 Review of Performance of Past Plans

17.13.1 Performance during 1973-1990

a. Financial performance: The details of the Plan-wise allocations and expenditures are given in Table 17.8.

Table 17.8
Plan-wise Allocations for and Actual Expenditures on Bangladesh Railway
(in million Taka)

Plan	Allocation (at base year prices of each Plan)	Expenditure (at current Prices)
First Five Year Plan	1,261.30	1,650.00
Two Year Plan	1,230.80	1,843.10
Second Five Year Plan	4,133.90	5,414.50
Third Five Year Plan	8,360.00	6,642.00

b. Physical performance: During 1973-90, the major emphasis was given for the rehabilitation and reconstruction of BR's infrastructure and procurement of wagons, locomotives and carriages. The main physical performances included : procurement of 65 MG and 44 BG locomotives along with 3 Rail Cranes, 273 MG and 404 BG carriages and 404 MG and 500 BG wagons; and rehabilitation of 314 MG and 123 BG bridges, 14,050 km MG and 405 km BG tracks, 475 MG and 105 BG wagons, 32 MG and 24 BG locomotives, etc. Besides, two workshops were constructed/rehabilitated.

17.13.2 Performance during Fourth Plan (1990-95)

a. Financial performance

- i. The objectives set for the Fourth Plan were: achieving improved operational efficiency, reducing financial loss and reaching break-even position by the end of 1995, developing repairs and maintenance facilities, human resources development, rehabilitating tracks and bridges on a selective basis, rehabilitation and modernisation of existing signalling and tele-communication system and introduction of pre-stressed concrete sleepers on some core lines. In order to achieve these objectives, Tk. 8,350 million at base year's prices was provided, while Tk. 5,159.75 million was spent. The overall financial performance of BR during the Fourth Plan and projections up to 2010 AD is given in Table 17.9.

Table 17.9
Financial Performance of Bangladesh Railway During Fourth Plan and Projection up to 2010 AD (at current prices)

(figures in million)

Item	1990/91	1994/95	1995/96	1996/97	1997/98	1998/99	1999/2000	2000/01	2001/02	2009/10	
	ACTUAL	ACTUAL	ACTUAL	BUDGET	FORECAST						
Passenger	Earning	908	931	861	1100	1150	1200	1250	1412	1454	1843
	Passenger-Km	4587	4037	3366	4422	4712	5012	5319	6120	6416	9295
Other coaching	Earning	129	135	116	150	160	170	180	190	200	245
Freight	Earnings	1052	1191	1127	1300	1600	1670	1750	1964	2042	2795
	Tonne-Km	650	760	834	1089	1344	1413	1491	1685	1764	2543
	Total Earnings	2089	2257	2104	2550	2910	3040	3180	3566	3696	4883
MISC. :											
A.	Estate	-	71	97	100	110	120	130	135	140	180
B.	Scraps	-	186	101	100	110	120	130	130	130	130
C.	Traffic Hire Charges, Vending Fees, EEC.	-	165	149	100	150	170	180	185	190	240
D.	Telecom Lease	-	0	0	0	200	400	500	600	700	1500
Total. MISC. (A + B + C + D)		*293	422	347	300	570	810	940	1050	1160	2050
Receivables		0	290	390	350	150	100	100	0	0	0
PSO		0	779	965	860	775	700	630	570	510	223
Welfare Grant		0	135	147	151	164	172	181	190	200	295
A.	Total Earnings : Without PSO & Welfare Grant	2382	2969	2841	3200	3630	3950	4220	4616	4856	6933
B.	Total Earnings : With PSO & Welfare Grant	2382	3883	3953	4211	4569	4822	5031	5376	5566	7451
C.	Total Working Expenses	3370	3904	4012	4186	4329	4449	4570	4696	4825	6017

- Source : Bangladesh Railway

- ii. The financial performance shown in Table 17.9 indicates that the net operating income of BR was negative in the terminal year of the Fourth Plan. The main reasons for deterioration of financial and operational performance were: lack of investment in new areas, ineffectiveness of the existing network to cater to the present requirements, inadequate and inequitable sectoral allocation, excess staff and lack of meaningful short and long term programmes.

b. Physical performance

- i. During the plan period, 693 km MG and 287 km BG railway tracks were rehabilitated, and 81 MG and 24 BG bridges completed;
- ii. A modern workshop for heavy repair and major overhauling of facilities with an annual target of 120 locomotives was set-up at Parbatipur in May, 1992; Moreover, 3 major workshops of BR were rehabilitated;

- iii. 21 BG passenger carriages, 3 (2 MG & 1 BG) cranes were procured; In addition, 100 MG and BG carriages were rehabilitated;
- iv. Improvement of the tele-communication system was completed;
- v. Expansion of the existing Inland Container Depot (ICD) at Kamalapur was completed increasing the annual handling capacity from 10,000 TEUs to 25,000 TEUs;
- vi. For the development of skilled manpower, the Railway Training Academy at Chittagong was improved with latest equipment; moreover, 4 workshop training units were constructed and equipped with modern facilities; and
- vii. A number of reform measures including separation of more than 10,000 employees over the last three years, provision of cost support for Public Service Obligation (PSO) to BR and discontinuation of open-ended subsidy, upward adjustment of passenger tariff up to 20 per cent and withdrawal of concessional rates to defence and postal traffic and using own telecommunication network throughout the country were initiated and implemented.

17.14 Performance During 1995/96 and 1996/97

17.14.1. Financial performance: During 1995-96 and 1996-97, a total of Tk. 3,986.70 million was allocated through Annual Development Programmes. Of this, an amount of Tk. 3,960.10 million was spent.

17.14.2. Physical performance

- a. During the period, 97 km of track between Dhaka-Chittagong were renewed with pre-stressed concrete sleepers and 80 km between Tongi-Mymensingh renewed with reconditioned steel sleepers. Preliminary steps were initiated to rehabilitate the main lines and connecting rail link with Madhyapara Hardrock and Barapukuria Coal Mine areas.
- b. Procurement of 10 MG DE locomotives was completed; procurement of 66 MG carriages was undertaken.
- c. An Inventory Control Cell for spare parts management was established at Parbatipur Workshop.
- d. Signalling equipment at 6 stations on Mymensing-Jamalpur section were replaced and modernised and the existing ICD at Kamalapur Railway Station was taken up for expansion.

17.15 Fifth Five Year Plan (1997-2002)

17.15.1 The programmes of Bangladesh Railway during the Fifth Five Year Plan will largely be limited to the completion of Jamuna Railway link and the spill-over projects along with the programmes of overall improvement of efficiency, raising the standard of services, improvement of container movement, improvement of rail transport system including track renewal, improvement of repair and maintenance facilities along with locomotives/workshops, procurement of DE locomotives and passenger carriages, etc.

17.15.2 Objectives: The major objectives of the Fifth Five Year Plan for the Rail Sub-sector are as follows:

- a. Establishment of a direct railway link between the east and west zones through the completion of cross-Jamuna rail connection over the Bangabandhu Bridge;
- b. Completion of all on-going projects and maximisation of the utilisation of all existing facilities through proper maintenance and replacement;
- c. Rehabilitation of bridges on selected basis and replacement/procurement of over-aged and ineffective assets/rolling stocks;

- d. Reduction of financial loss through improvement of operational efficiency to reach a break-even position at the terminal year of the Plan period;
- e. Construction of Inland Container Depot at different strategic points of the country;
- f. Establishment of rail connections in different areas along with Madhyapara Hardrock and Barapukuria coal mines;
- g. Development of manpower through extensive and comprehensive training;
- h. Expansion of computerised ticket booking system at important stations and introduction of computerised wagon control system and undertaking of feasibility study on new rail lines (particularly Khulna-Mongla, Dohazari-Cox's Bazar and Laksham-Dhaka cordline);
- i. Opening up avenues for the private sector in the operation of a few branch lines as well as increased marketing and cargo handling activities;
- j. Emphasis on carrying containers and haulage of bulk cargo in block/unit train;
- k. Improvement of line capacity by doubling track; and
- l. Improvement of operational efficiency.

17.15.3 Strategies : The major strategies to be pursued are as follows:

- a. Greater emphasis on freight traffic, particularly containerised stuff and on better use and maintenance of existing assets;
- b. Improvement and modernisation of the existing system and rehabilitation of the existing assets and replacement of over-aged and ineffective assets;
- c. Utilisation of capacities of existing workshops;
- d. Prioritisation of investment on the basis of economic criteria and availability of fund;
- e. Reduction of unprofitable branch lines and increasing of speeds on the core lines;
- f. Improvement of human resources through training;
- g. Reduction of over-head cost through rationalisation of staff;
- h. Involvement of the private sector in the operation of some of the branch lines including marketing activities;
- i. Generation of resources by disposing off excess lands of Railway;
- j. Involvement of local government in the management of ware-houses; and
- k. Improvement of line capacity as well as reduction of environmental pollution.

17.15.4 Programmes: The development programmes of BR during the Fifth Five Year Plan will be as follows:

- a. **Tracks and bridges :** The Bangabandhu Bridge Railway Link line connecting the east and west zones through the construction of 99 km new dual gauge lines and 244 km route conversion from broad gauge to mixed gauge will be completed; rehabilitation of 452 km MG and 408 km. BG track on the main lines will be completed and 32 km new rail line at Madhyapara Hardrock and Barapukuria coal mine areas will be constructed; rehabilitation of selected bridges and branch lines will be taken up; doubling of track between Tongi and Bhairab Bazar will be undertaken.
- b. **Expansion of existing inland container depot :** Existing Inland container Depot at Kamalapur, Dhaka will be expanded to cater to the present demand. Besides, possibility of establishing another ICD at Tongi will be explored.
- c. **Civil engineering works :** Some important stations will be rehabilitated with rebuilding of station buildings.

- d. **Procurement/Replacement/Rehabilitation of rolling stock** : The programme envisages: procurement of 29 MG and 22 BG locomotives and 80 MG carriages, refurbishing of 60 MG locomotives, and major over-hauling of 72 locomotives.
- e. **Improvement of signalling and interlocking system** : Rehabilitation and improvement of signalling system at 30 stations, including Akhaura station, will be completed during the Fifth Plan period. Besides, for improvement of operational efficiency and safety, improved signalling and interlocking system will be introduced on some important sections and stations.

17.16 Participation of Private Sector in Railway Sub-Sector

17.16.1 Efforts will be made to involve the private sector for commercial operation of some of the branch lines and for construction of Inland Container Depot at multimodal transport centres around the country. In addition, BR will consider to privatise some of its workshops for efficient and effective use which may help to minimise the maintenance cost. The present involvement of private sector in the marketing area will be further geared up. The excess telecommunication facilities of the railway is to be privatised and necessary steps will be taken to involve private sector partnership in respect of container handling facilities along with management.

17.17 Financial Outlay

17.17.1 The financial outlay for the Fifth Plan will be as follows:

- a. **Public sector outlay**: A total of Tk. 24,000 million will be earmarked for the Bangladesh Railway in the Fifth Plan at 1996/97 prices. Out of this financial outlay, Tk. 17,900 million will be spent for the completion of on-going projects and Tk. 6,100 million for new projects. Programme-wise public sector financial outlay is shown in Table-17.10.

Table 17.10
Public Sector Outlay for Railways During Fifth Plan
(at 1996/97 prices)

(in million Taka)

Programme/Projects	Financial Outlay		
	On-going Projects	New Projects	Total
(a) Jamuna Rail Link	8,000.00	500.00	8,500.00
(b) Rail link in Madhapara Hardrock and Barapukuria Coal Mining Projects.	600.00	1,000.00	1,600.00
(c) Procurement of locomotives	2,150.00	-	2,150.00
(d) Rehabilitation, Renovation & Refurbishing of locomotives	300.00	2,000.00	2,300.00
(e) Procurement of passenger carriages	800.00	-	800.00
(f) Rehabilitation/Renovation of passenger carriages	200.00	600.00	800.00
(g) Rehabilitation of main & branch lines of BR	3,500.00	1,000.00	4,500.00
(h) Improvement of signalling & interlocking system and computerisation	380.00	500.00	880.00
(i) Rehabilitation of bridges and other infrastructures	1,250.00	500.00	1,750.00
(j) Expansion of ICD	720.00	-	720.00
Total	17,900.00	6,100.00	24,000.00

- b. **Private sector outlay**: An amount of Tk. 8,876.80 million is expected to be invested by the private sector in the branch lines of BR as well as in Inland Container Depots (ICD) at Tongi and Chittagong.

C. AIR TRANSPORT

17.18 Introduction

17.18.1 Civil Aviation Authority of Bangladesh (CAAB) is responsible to ensure safe, orderly and expeditious operation of international and domestic air traffic within the territorial air space of Bangladesh. This authority is also responsible for construction and maintenance of aviation infrastructure for smooth and efficient movement of all types of domestic and international aircrafts.

17.18.2 During the Liberation War, the runways and aeronautical communication facilities along with other infrastructures were badly damaged. By 1996, Civil Aviation Authority could rehabilitate and develop infrastructure and facilities as were required to cope with the requirement of national and international standards and practices. During the Fifth Plan, the major thrust will be given to develop the international airport at Dhaka or at Trisal (proposed) as a regional hub of air traffic. Besides, necessary action will be undertaken to complete the conversion of M. A. Hannan airport at Chittagong and Osmani airport at Sylhet into international airports and to develop other airports for both internal air transport and STOL services.

17.19 Review of Performance of Past Plans

17.19.1 Financial and physical performance during 1973-90

- a. **Financial performance:** The details of the plan-wise allocations and expenditures are given in Table 17.11.

Table 17.11
Allocations for and Expenditures on Development of Air Transport in Past Plans
(in million Taka)

Plan	Allocation (at base year price of each Plan)	Expenditure (at current prices)
First Five Year Plan	792.21	792.00
Two Year Plan	988.20	822.02
Second Five Year Plan	3,411.05	2,119.30
Third Five Year Plan	700.00	655.90

- b. **Physical Performance:** During 1973-90, Civil Aviation Authority reorganised, rebuilt and developed the existing runways and airports for smooth operation of air traffic. In this period construction of six STOL airports and recarpetting of runway of the international airport at Dhaka, were completed.

17.19.2 Performance during Fourth Plan(1990-95)

- a. **Financial performance:** The total allocation for development of air transport in the Fourth Plan at 1989/90 prices was Tk. 1,804.40 million. Against this allocation, the actual expenditure incurred was Tk. 1,266.40 million (about 70 per cent). The implementation process suffered due to (i) delay in aid negotiation, (ii) delay in deciding local sources of funding, (iii) inadequate allocation of government fund, (iv) natural calamities and shortage of construction materials and (v) slow progress of land acquisition work.
- b. **Physical performance:** During the Fourth Plan, the Civil Aviation Authority implemented a number of projects for strengthening of runway, extension of international passenger terminal buildings, installation of boarding bridge, installation

of ILS, AMSS at airports in Dhaka and Chittagong, construction of a new airport at Barisal and construction of STOL airports at Bogra and Mongla. Besides, extension and strengthening of runway, taxiway, apron and installation of other facilities at Osmani Airport, Sylhet for operation of international flights and extension and development of runways at Cox's bazar, Rajshahi and Saidpur airports were taken up.

17.20 Performance during 1995-97

17.20.1 An amount of Tk. 1,027 million was allocated to this sub-sector during this period, out of which Tk. 712 million was spent. The work for extension of Barisal and Sylhet Osmani Airports was taken-up along with the construction of a cargo village at Dhaka. Necessary steps were taken to construct two STOL airports at Bogra and Khan Jahan Ali (Mongla or Bagerhat).

17.21 Fifth Five Year Plan (1997-2002)

17.21.1 Objectives: The objectives of the Fifth Five Year Plan in the field of air transport will be:

- a. Development of the international airport at Dhaka or one at Trisal (proposed) to serve as a regional hub of air traffic;
- b. Development of M.A. Hannan airport at Chittagong and Osmani airport at Sylhet as international ones;
- c. Strengthening and expansion of existing runways, taxiways, apron, etc., of all airports for efficient and smooth operation of aircrafts;
- d. Construction of new domestic and STOL airports for extension of domestic services;
- e. Expansion of terminal facilities for meeting demands of passengers and requirements of cargo movement and modernisation of ATC and navigational aid systems;
- f. Development of operational facilities of domestic aircrafts to facilitate operation of mid-haul type aircraft's; and
- g. Construction of a second runway at the international airport, Dhaka and to undertake necessary survey/study for construction of another international airport near Dhaka, (i.e., at Trishal).

17.21.2 Strategies: The following will be the elements of strategies to be pursued during the Plan period:

- a. Formulation of a time-bound action plan for the completion of all on-going projects;
- b. Selection of new projects on the basis of priority and availability of financial resources;
- c. Implementation of ICAO standards and recommended practices to the greatest extent possible;
- d. Ensuring the currency, co-ordination and implementation of Regional Air Navigation Plans and providing the framework for the efficient implementation of new air navigation systems;
- e. Effective monitoring of implementation of projects and timely utilisation of foreign assistance;
- f. Training to technical and operational personnel of CAAB for promoting operational efficiency;
- g. Review of the progress of work of the projects at regular intervals for ensuring effective co-ordination in implementation management; and
- h. Formulation of necessary policies and legal framework to involve the private sector to:

- i. provide air-cargo services and undertake joint venture projects for construction;
- ii. participate in the management and operation of the international Five Star Hotel and under-construction Cargo-Complex at the international airport at Dhaka;
- iii. provide helicopter services in the newly built STOL airports; and
- iv. establish refrigerated cargo handling facilities in major airports.

17.21.3 Programmes: The following programmes have been set for the Fifth Plan :

- a. The two major programmes will be to start operation of the country's second international airport at Chittagong (M. A. Hannan airport) and to open direct international flights at Osmani Airport, Sylhet. The other programmes to be completed are: installation of ILS at Osmani and Hannan Airports, procurement of fire vehicles and ambulance for airports in Dhaka, Chittagong and Sylhet, STOL airport at Bogra and Khan Jahan Ali Airport at Bagerhat and the second terminal building and cargo complex, installation of two new boarding bridges and completing feasibility for master plan (Phase-II) to develop an additional airport in Dhaka.
- b. **Employment and training:** Recruitment of more than 400 permanent employees for operation and maintenance of the completed projects will be made and necessary training provided for promoting operational efficiency in the Plan period.

17.21.4 Financial outlay: The financial outlay for both the public and private sectors to the end of development of air transport are given below:

- a. **Public sector:** A total of Tk. 7,500 million at 1996/97 prices has been earmarked for Civil Aviation Authority in the Fifth Plan. The programme-wise financial outlay is shown in Table 17.12.

Table 17.12
Public Sector Financial Outlay for Air Transport During Fifth Plan
(at 1996/97 prices)

(in million Taka)

Programmes	Financial Outlay		
	On-going projects	New projects	Total
Development of Airports (Barisal, Sylhet, Dhaka)	600.00	500.00	1,100.00
Development of M. A. Hannan Airport at Chittagong into International Airport	4,600.00		4,600.00
Construction of STOL Airport	450.00		450.00
ILS & Other equipment	420.00		420.00
Construction of Cargo Village at Dhaka	90.00		90.00
Training of Cockpit Crews/Simulation Training maintenance	-	40.00	40.00
Second phase of runway at Dhaka & feasibility study for a new international airport near Dhaka.	-	800.00	800.00
Total	6,160.00	1,340.00	7,500.00

- b. **Private sector:** An amount of Tk. 7,000 million is expected to be invested by the private sector, particularly in the field of cargo shed building, acquisition of STOL aircrafts and ground handling, etc.

D. BANGLADESH BIMAN

17.22 Introduction

17.22.1 Bangladesh Biman plays a vital role by establishing airlink with other countries as well as connecting different places within the country. Biman, Bangladesh Airlines, the national carrier, presently operates 25 international and 8 domestic destinations with a fleet of 4 DC-10-30, 2 A310-300, 2 F-28-400 and 1 ATP aircrafts. The international flights are operated on a competitive basis. The domestic tariff is regulated by the government and it is below the cost of operation. This requires cross-subsidy for domestic operations.

17.22.2 Performance during 1973-90

- a. **Financial performance:** An amount of Tk. 2,701 million was allocated to this sector up to the Third Five Year Plan in constant prices of base year of the respective Plans, whereas an amount of Tk. 5,761 million in current prices was actually spent, partly from its own resources. The excess expenditure was due to the purchase of DC-10-30 aircraft by taking bank loans.
- b. **Physical performance:** During the period, Bangladesh Biman constructed its new Head Office Building; Administrative Building, at Dhaka; M.T. shed, flight catering centre, etc.. It procured ground support equipment, communication equipment and M.T. vehicles. Biman also developed overhaul shop, computerised reservation system, ground training centre and hangar complex.

17.22.3 Performance during Fourth Plan period

- a. **Financial performance:** During the period, Bangladesh Biman spent about Tk. 1,160 million (US \$ 30 million) for the construction of Hangar Complex for the airport at Dhaka. Besides, it spent Tk. 46.70 million in 1992/93 for purchase of its office building in London.
- b. **Physical performance:** Bangladesh Biman completed the construction of ground training centre (GTC) and the hangar complex at the International airport at Dhaka, besides procurement of ground support equipment. It also established computerised departure control system, engineering maintenance and inventory system and constructed its own office buildings at Khulna and Chittagong.

17.22.4 Performance during 1995-97: During the period, Biman has spent about Tk. 6,100 million to procure 2 Airbuses partly through government equity, but mainly from bank loan to expand its operation along international routes.

17.23 Fifth Five Year Plan(1997-2002)

17.23.1 Objectives: The major objectives of Biman in the Fifth Five Year Plan will be to:

- a. develop safe, efficient, adequate, economical air transport for domestic as well as international services;
- b. modernise and expand the existing fleet to meet the customer satisfaction as well as operational requirements;
- c. improve efficiency through adoption of modern technology and training of manpower;
- d. initiate necessary steps to increase profitability of Biman;
- e. introduce and expand cargo service in order to facilitate exportation; and
- f. procure at least 2 air crafts for domestic and 2 air crafts for international services.

17.23.2 Policies/Strategies: The policies and strategies to be pursued by Biman will be as follows :

- a. Undertaking fleet and route planning studies to determine the future needs;
- b. Undertaking development programmes to tie up with technological advancement and adopting computer-based technology in different areas, including ticketing, cargo booking system, crew management and aircraft scheduling etc.;
- c. Maximising utilisation of the Hangar Complex by undertaking more checks and maintenance of aircrafts;
- d. Entering into code-sharing arrangement with other international airlines to extend services to international destinations where Biman does not operate at present;
- e. Ensuring optimal use of existing equipment/resources and adopting effective cost-control measures to maintain its profitability;
- f. Improving and strengthening training facilities and arranging for training in collaboration with other world-class airlines; and
- g. Issuing bonds to meet the expenditure for its development activities along with increasing equity capital through public subscription.

17.23.3 Financial outlay: No public sector allocation is provided for Biman in the Fifth Plan. It is however, expected that Biman will expand its fleet by acquiring new air crafts with bank loans and involve the private sector for using the STOL airports. An amount of Tk. 12,500 million is projected to be invested by the private sector for development of both internal and external air transport. Biman may issue bonds to meet the expenditures on capacity creation.

E. WATER TRANSPORT

(Inland Water Transport, Port and Maritime Shipping)

17.24 Introduction

17.24.1 The inland waterways networks, which vary from 6,000 km in navigable waterways during the monsoon to about 3,800 km during the dry season, not only cater for inland movement of freight and passenger but also play a key role in the transportation of import and export cargo through the ports of Chittagong and Mongla. While the government provides the infrastructures for inland transport, the services are dominated by the private sector. The country boat plays a significant role and provides for about 58 per cent of the total employment in the transport sector as a whole. The infrastructure facilities and services in the inland water transport (IWT) sub-sector are provided by the Bangladesh Inland Water Transport Authority (BIWTA) and the Bangladesh Inland Water Transport Corporation (BIWTC) respectively.

17.24.2 The seaports serving Bangladesh are Chittagong in the east and Mongla in the west. About 77 per cent of total sea-borne export and import of the country are handled by Chittagong port. On average, Chittagong port handles about 80 per cent of the imports and 70 per cent of the exports, while Mongla port handles the rest of export and imports freights. Both the seaports of Bangladesh are suffering from "draft" problem, requiring lighterage to carry cargo up to jetty from distant anchorage accommodating big vessels of over 25 thousand DWT. This problem will be attended to in concrete terms in the Fifth Plan.

17.24.3 In maritime shipping, the Bangladesh Shipping Corporation (BSC), a public sector organisation, provides about 60 per cent of the services in respect of Dead Weight Tons (DWT),

while Bangladeshi private sector provides only 40 per cent. Presently, Bangladesh handles only 16 per cent of the overall import and export cargo, although, under the International Convention, it is entitled to handle upto 40 per cent. This indicates that there is significant scope for both BSC and Bangladeshi private sector to increase their fleet. In the Fifth Plan, necessary efforts will be taken to this end.

17.25 Review of Performance of Past Plans

17.25.1 Performance during 1973-90

- a. Financial performance:** The details of the total allocation and expenditure in different Plans during 1973-90 are given in Table 17.13.

Table 17.13
Public Sector Allocations for and Expenditures on Water Transport During 1973-90
(in million Taka)

Plan	Allocation (at base year prices of each Plan)	Expenditure (at current prices)
First Five Year Plan	1,862.20	2,583.30
Two Year Plan	1,098.60	879.20
Second Five Year Plan	3,168.70	3,510.00
Third Five Year Plan	5,710.00	4,394.20

- b. Physical performance:** The following were the performances of the Inland Water Transport, Ports and Maritime sub-sectors during 1973-90 :

- i. BIWTA completed 141 launch landing stations and provided 10 pontoons. They also procured 5 dredgers, 3 hydrographic survey vessels, 1 salvage vessel, developed 816 km of waterways through dredging and constructed one port and two ferry ghats;
- ii. BIWTC procured 8 Ro-Ro ferries, 11 oil tankers, 13 inland tugs, 5 bay crossing passenger vessels, 37 inland and 35 bay crossing barges, 16 dump barges, 4 coastal LTC vessels and 4 coasters;
- iii. The Chittagong Port Authority (CPA) rehabilitated 1-6 Nos. of jetties and 5 transit sheds; constructed one ware-house, 1 transit shed, 1 workshop and 2 multipurpose berths and procured 4 service vessels, 60 different types of container handling equipment and 12 shore cranes;
- iv. The Mongla Port Authority (MPA) completed the establishment of 5 light towers; replaced 12 mooring buoys, constructed transit shed, 1 warehouse 11 residential buildings, 1,200 sq.m open stack yard and procured 1 tug, 1 buoy lifting vessel and 1 fire-fighting tug; and
- v. BSC acquired 14 general cargo ships, 1 pilgrim passenger vessel, 5 oil tankers, 4 coastal vessels, 1 passenger ship and 14 dry multipurpose cargo vessels.

17.25.2 Performance during Fourth Plan (1990-95)

- a. Financial performance:** During the Fourth Plan, Ministry of Shipping and its different agencies were allocated Tk. 6,820 million against which Tk. 6,411.80 million were utilised.

b. Physical performance

- i. During the Fourth Plan period, BIWTA dredged 246 km of waterways, rehabilitated 99 pontoons and procured 4 hydrographic survey and other vessels. Besides, about 75 percent mapping of the coastal area was completed;

- ii. BIWTC constructed 2 Ro-Ro ferries and 2 Ro-Ro pontoons and rehabilitated one floating dock. BIWTC carried 1.5 million tons of cargo, 39 million passengers and 3.55 million of vehicles;
- iii. CPA procured 36 container handling equipment for increased volume of containerised cargo and one dredger, one water boat and one buoy lifting vessel and constructed a bridge over Moheskhal; during 1990-95, CPA handled 5,259 ships and 40.03 million tons of cargo including 0.775 million TEUs of containerised cargo;
- iv. MPA dredged 3.5 million cubic metres of earth to keep the channel navigable; it procured 4 container handling equipment and developed sweet water supply system in the port area; MPA handled 1931 ships, 14.93 million tons of cargo including 72,794 TEUs of containerised cargo;
- v. The Department of Shipping (DOS) developed modern facilities for imparting training to 300 new and 1,000 fresh seamen annually in accordance with the STCW-78 convention; and
- vi. The Marine Academy rehabilitated the academy buildings damaged by the cyclone of 1991.

17.25.3 Performance during 1995-97

- a. Financial performance:** During 1995/96 and 1996/97, organisations under the Ministry of Shipping were allocated Tk. 641 million and Tk. 678 million respectively. Against these allocations, expenditures incurred in 1995/96 was Tk. 597.90 million and in 1996/97 Tk. 619.70 million.
- b. Physical performance**
 - i. BIWTA rehabilitated 20 pontoons, dredged the Rail Ferry Route across the Jamuna river and procured 5 work boats and 3 accommodation barges;
 - ii. BIWTC rehabilitated three dieselized passenger vessels and constructed some zonal office buildings;
 - iii. CPA procured 20 container handling equipment and initiated rehabilitation of 1991 cyclone-damaged facilities;
 - iv. During the period, the incomplete works of permanent port on the Passur river was completed and development and expansion works of Benapole Land Port was taken up;
 - v. Marine academy upgraded Navsina-4 simulator and rehabilitated jetties; and
 - vi. DOS procured 6 patrol boats.

17.26 Fifth Five Year Plan (1997-2002)

17.26.1 Objectives: The main objectives of the Fifth Plan for inland water transport, ports and maritime shipping will be as follows :

- a. Expansion of the ocean going fleet, based on fleet planning study, both in public and private sectors;
- b. Improvement and maintenance of the inland navigational channels as well as port channels;
- c. Development of riverine ports, jetties and inland container ports and depots;
- d. Establishment of rural launch landing facilities and ensuring safety in navigation;
- e. Improvement of traditional country boat sub-sector through mechanisation;
- f. Providing containerised services and procuring passenger vessels/ferries;
- g. Optimum utilisation of dockyard facilities through BMRE;
- h. Construction of new container port including back-up facilities and procurement of container-handling equipment;

- i. Increasing operational efficiency and institutional capability along with maintaining links with offshore islands;
- j. Providing passenger services as well as landing facilities in the off-shore islands and in the main trunk routes of inland waterways;
- k. Undertaking study for the establishment of a deep sea port at Chittagong;
- l. Ensuring marine safety standard and protect waterways from environmental degradation;
- m. Expanding and modernising training facilities for cadet, sea-men and inland IWT crews in both marine academy and sea man training school;
- n. Improving of salvage operation and strengthening dredging capabilities; and
- o. Providing ferry services in the road gap between two ports.

17.26.2 Strategies: The strategies to be pursued during the Fifth Plan are as follows :

- a. Completion of spill-over projects on priority basis and maximisation of and utilisation of existing assets;
- b. Development of necessary dredging capabilities, both for 'maintenance' and 'capital' dredging;
- c. Promotion of mechanisation of country boats by providing technical support and credit facilities;
- d. Development of inland container river ports with back-up facilities;
- e. Operation of services in public sector only in those locations where private sector is not interested;
- f. Development of modern 'ship-to-ship' and 'shore-to-ship' container handling equipment in ports;
- g. Development of appropriate regulatory framework and incentive package for increased participation of the private sector in port development activities; establishment of container terminal and ferry services; and procurement of container feeder vessels and mother tanker;
- h. Reduction of dwell-time of ships in ports by increasing the terminal facilities;
- i. Organising adequate training for increasing operational efficiency and developing institutional capability for keeping safety and pollution-free waterways; and
- j. Development of training facilities for cadets, seamen, IWT crews in the existing academy and training institutes.

17.26.3 Programmes: The sub-sectoral investment programmes are as follows :

- a. Development of inland waterways by dredging; and establishment of launch landing stations, ferry ghats, inland river ports/container ports;
- b. Procurement/construction of inland and coastal passenger vessels, container vessels, ferries, floating dock, dredgers and sea trucks, tugs and rehabilitation of passenger vessels 4 Landing Craft Type (LCT) vessels and ferries;
- c. Expansion of 2 container terminals and bunkering facilities and procurement of container handling equipment including gantry cranes and a high powered tugs;
- d. Undertaking programmes for increasing the 'draft' of seaports and developing a deep sea port at Chittagong;
- e. Undertaking programmes for the dredging of the Passur channel, replacement of cargo/container handling equipment, construction of multipurpose berths with back-up facilities and light tower and procurement and installation of beacon signalling devices at fairway buoy at Mongla Port;
- f. Development of facilities to handle containers from 290,330 TEUs capacity in 1996-97 to 522,547 TEUs in 2000;

- g. Development of human resources for shipping and protection of maritime environment;
- h. Upgradation of the standard of training in the Marine Academy by acquiring modern training equipment like ship-handling and engine room simulator to impart pre and post-sea courses;
- i. Completion of IWT - 3 package programme for improving water transport infrastructures; and
- j. Improvement of salvage operation of BIWTA.

17.27 Private Sector Participation

17.27.1 Increased private sector participation will be ensured in the Fifth Plan through appropriate policies and incentives for handling cargo and undertaking joint ventures with Chittagong Port Authority for operation and maintenance of dredgers along with ancillary equipment. Besides, private sector participation will be encouraged in the following areas:

- a. Construction and operation of container terminal as well as bulk, break-bulk, multipurpose berth and specialised cargo berths out side the port protected area;
- b. Creation of container freight service (CFS) and inland containers depots (ICD) facilities, inland river ports, container ports/transshipment ports ;
- c. Leasing of equipment for port handling, etc.;
- d. Transportation of containers from sea ports to Dhaka ICD;
- e. Increased operation of ocean-going vessels; and
- f. Increased involvement in the areas of inland dredging operation, maintenance of ferry ghats and development of rural launch landing stations.

17.28 Financial Outlay

17.28.1 The financial outlay in the Fifth Plan for the public and private sectors is given below :

- a. Public sector outlay:** At 1996/97 prices, a total of Tk.13,550 million has been earmarked for the shipping sub-sector during the Fifth Plan. Out of this financial outlay, Tk. 9,750 million will be spent for completion of the on-going projects and Tk. 3,800 million for taking up new projects. The programme-wise break-down of the public sector outlay in the Fifth Plan is shown in Table 17.14.

Table 17.14
Public Sector Outlay for Water Transport During Fifth Plan
(at 1996/97 prices)

(in million Taka)

Programmes/Projects	Financial Outlay		
	On-going Projects	New Projects	Total
Development of inland waterways by dredging	500.00	100.00	600.00
Inland river/Container ports	2,500.00	500.00	3,000.00
Development of launch landing system	350.00	450.00	800.00
Acquisition of new dredgers (for IWTA/ Mongla Port)	600.00	600.00	1,200.00
Procurement of Ro-Ro Ferries/Coastal Passenger vessels/other vessels (for BIWTA/BSC)	850.00	850.00	1,700.00
Rehabilitation of selected vessels (of BSC, BIWTC)	400.00	--	400.00
Construction of Container Terminal (for Chittagong port)	4,000.00	--	4,000.00
Replacement of container/cargo handling equipment (for Chittagong & Mongla ports)	--	1,000.00	1,000.00
Maintenance dredging at Mongla	300.00	100.00	400.00
Other infrastructural development	250.00	200.00	450.00
Total	9,750.00	3,800.00	13,550.00

- b. Private sector outlay:** An amount of Tk. 35,000 million is expected to be invested in the private sector particularly in the field of procuring ocean-going vessels and river craft, establishing container depot, container ports/transshipment ports, cargo jetties in two ports along with container handling equipment, etc. Foreign direct investment will be encouraged to come in as joint venture with local entrepreneurs and participate in development of these facilities and transportation.

CHAPTER XVIII

COMMUNICATION

18.1 Introduction

18.1.1 Communication is one of the basic physical infrastructures for economic development and plays a vital role in stimulating economic growth and improving the quality of life. Telecommunication and postal services reduce the need for travelling and thus save both time and money. Timely weather forecasting including the forecasting of natural calamities like cyclones, floods, etc. saves valuable lives and properties and helps in agricultural and other development. Although the contribution of transport and communication to GDP was quite significant, about 12 per cent in 1994/95, the present facilities, particularly in the area of telecommunication, are quite inadequate in terms of requirement, technology and quality of services. The number of post offices and the quality of postal services are also not upto the desired level. Because of the importance of communication systems in the socio-economic development, high priority will be attached to this sector in the Fifth Plan period.

18.1.2 The communication sector comprises of Bangladesh Telegraph and Telephone Board, Bangladesh Postal Department and Meteorological Department. Besides the public sector programmes, courier and telephone services are in operation in the private sector in a modest scale.

18.2 Bangladesh Telegraph and Telephone Board (BTTB)

18.2.1 Telecommunication is both an industry and an infrastructure, which helps other infrastructures to grow. Absence of good telecommunication facilities deters investments in other sectors of the economy. The telephone density in Bangladesh was about 0.39 per 100 people in 1996/97, far below the world average of 10 telephones per 100 people. This low density of telephone in Bangladesh is due primarily to inadequate investment in this sector in the past. In order to enhance the investment in the telecommunication sector, the government has been pursuing the policy of raising the public sector allocation on the one hand and attracting private sector investment by privatising certain services e.g. rural telecommunication, cellular mobile service, paging and radio trunking services etc. on the other.

18.3 Review of Past Performance

18.3.1 Financial and physical performance (1973-90): From 1973 through 1990, a total of Tk. 7,414.30 million in current prices was allocated to the Bangladesh Telegraph and Telephone Board through Annual Development Programmes (ADPs). The total expenditure against this allocation was Tk. 7,043.60 million which was about 95 per cent.

18.3.2 In 1973/74, there were 60,000 telephones operating in the country (6,000 in rural areas and 54,000 in urban areas). The number of telephones increased to 120,000 lines in 1979/80 (10,600 rural and 109,400 urban) and to 182,000 lines in 1984/85 (26,600 rural and 155,400 urban). The telephone density of the country was 0.13 per 100 population in 1979/80 and it increased to 0.18 in 1984/85. The country entered into satellite communication after installation of a standard "A" Earth station at Betbunia, Chittagong in 1975. This facility for overseas telecommunication was further expanded by setting up a standard "B" Earth Station at Talibabad in 1981.

18.3.3 In the Third Plan (1985-90), BTTB undertook a number of programmes / projects to expand and develop the telecommunication system of the country. The Third Plan target was

to install 75,000 telephone lines (65,000 in urban areas and 10,000 lines in rural areas). Against this target, 59,190 telephone lines (53,500 in urban areas and 5,690 in rural areas) were installed during the Third Plan period. As a result, telephone density per 100 population increased from 0.18 in 1984/85 to 0.21 in 1989/90 and the total number of telephones in the country stood at 241,190 in 1989/90. Digital technology in the country's local telephone system was introduced during the Third and Fourth Plans through the installation of 26,000 lines capacity digital exchanges (comprising six exchanges) and a 5,000 line tandem switching exchange in Dhaka city. The Dhaka-Khulna analogue microwave link was replaced by a digital system during the Third Plan. The expansion of Dhaka Telecommunication Training Centre (TTC) and the construction of the Telecommunication Staff College at Gazipur were completed during the Third Five Year Plan.

18.4 Performance During Fourth Plan(1990-95)

18.4.1 Financial performance : In the Fourth Plan, the total allocation for telecommunication sub-sector provided through ADPs was Tk. 14,228.10 million and the total expenditure was Tk. 13,524.80 million or 95 per cent.

18.4.2 Physical performance: The Bangladesh T&T Board undertook a number of projects to modernise, expand and develop the telecommunication system of the country during the Fourth Plan. Against a target of 103,058 telephone lines, 72,507 lines were installed (67,801 lines in urban areas including 46,851 digital and 4,706 lines in rural areas). As a result, the telephone density increased to 0.26 per 100 people at the terminal year of the Fourth Plan. However, 89 per cent of the telephones were in the urban areas and only 11 per cent in the rural areas.

18.4.3 During the Fourth Plan, 6 more district headquarters and other important places were covered with 9 auto exchanges and in the process, 3 manual exchanges were replaced by auto ones. The target for Public Call Offices (PCOs) at union level was 118, out of which 57 was installed. In the village growth centres, 84 PCOs were established against a target of 105. To increase accessibility of the telephone facilities to the common people 1,200 card phones were installed.

18.4.4 The Nation Wide Dialling (NWD) facilities were extended to 5 district headquarters and 4 other important places, thus covering all of 64 district head quarters. The overseas circuits were increased and a new Standard "A" Earth Station was set up at Mohakhali, Dhaka.

18.5 Performance During 1995-97

18.5.1 Financial performance: In 1995/96 and 1996/97, an allocation of Tk. 3,450.97 and Tk. 2,137.77 million respectively were provided of which the entire amount was utilised.

18.5.2 Physical performance: The total number of telephone lines were 463,185 in the public sector and 21,000 in the private sector upto June, 1997. The private sector is mainly confined to different thanas and villages. Besides, the number of cellular phones rose to 39,000 in 1996/97 over 2,000 in 1994/95.

18.5.3 In 1995-97, 95,000 digital lines were installed in Dhaka. In the same year 41,250 new digital telephone lines were installed in Chittagong. Internet connections were lined up in 1995/96 under private initiative with the support of BTTB.

18.6. Private Sector Participation

18.6.1 During the Fourth Plan period, the newly licensed private sector operators started their services. Bangladesh Rural Telecom Authority (BRTA) was given licence for establishment of telecommunication services at 199 Thanas. BRTA installed 27 exchanges at thana / rural growth centres. Pacific Bangladesh Telecom Ltd. started providing cellular mobile telephone service in the country. Bangladesh Telecom Pvt. Ltd. started the Paging and Radio Trunking services. Licence for establishing telecommunication services in 191 thanas was given to another rural operator Sheba Telecom Ltd. in early 1995.

18.6.2 In November, 1996, licences for cellular mobile telephone were issued to Grameen Phone, Telecom Malaysia International BD Ltd. and Sheba Telecom Ltd. This will increase competition in the sector and lower the cost of cellular mobile phone considerably. The new licencees have already started providing services. All these are joint-venture companies between Bangladeshi companies and foreign partners. Thus, in the private sector, there are 7 operators for different services. In addition, six private companies, namely, Integrated Services Network, Grameen Cybernet, BRAC, Prodesta and Spectranet have started providing Internet and Electronic Mail services in the country.

18.7 Constraints/Bottlenecks During Past Plans

18.7.1 Delay in land acquisition in many cases caused delay in project implementation. The tendering process, specially in case of the international tender for "Greater Dhaka Telecommunication Network Improvement (Phase-II)" took a long time in finalisation causing abnormal delay in implementation of the project. Also for want of a suitable collaborator, the project for "Modernisation of TSS with appropriate Technology Transfer for Manufacturing and Installation of 100,000 line Digital Switching Equipment per annum" could not make any headway.

18.7.2 As the experience over various plan periods has it, poor management, faulty preparation of the project documents, inadequate transfer of technology, too much dependence on the expatriate consultants, delay in recruiting the project personnel, frequent changes of project directors, lack of MIS and inadequate maintenance services and inability of BTTB to raise funds from the market, stood on the way of timely implementation of projects for development of the telecommunication of the country.

18.8 Fifth Five Year Plan (1997-2002)

18.8.1 One of the main objectives of the Fifth Plan is to alleviate poverty through accelerated economic growth and the creation of gainful employment. The average annual growth rate of GDP during the Plan period is projected at 7 per cent. One of the prerequisites for accelerated economic growth of Bangladesh in a competitive environment is the availability of adequate telecommunication services for quick acquisition and dissemination of information, both inside and outside the country.

18.8.2 Objectives: The major objectives of the Fifth Plan for the telecommunication will be to :

- a. ensure universal telephone services;
- b. expand the telecommunication infrastructures in both the urban and rural areas so as to enable the providers to give one telephone per 100 people by 2002 against the existing 0.39 telephone per 100 people;
- c. expand the international telecommunication circuits and ancillary facilities for smooth international telecommunication operations both in urban and rural areas;

- d. ensure telephone connection to all industries, particularly those located in Export Promotion Zones(EPZs) and industrial estates;
- e. improve the quality of service;
- f. develop necessary telecommunication network to facilitate export of software, data entry/data processing services and support the growth of informatics;
- g. encourage competition between public and private sectors to provide best services at customer's choice;
- h. attract foreign direct investment (FDI);
- i. increase the role of the private sector in telecommunication ; and
- j. strengthen the Telecommunication Regulatory Board for the formulation of appropriate legal and institutional frames to introduce and sustain fair competition among the operators and to protect consumer's interest.

18.8.3 Major policies : The major policies to be pursued in the telecommunication sub-sector will be :

- a. strengthening the regulatory body in order to create an environment of competition and non-discriminatory treatment amongst operators; this regulatory body should in future be transformed into a Commission outside the Ministry to bring more transparency and autonomy in discharging its functions;
- b. improvement of interfacing between the public and private sectors as well as between national and international operations;
- c. preparation of a comprehensive set of measures to facilitate accelerated growth of telecommunication services and informatics as well as to attract foreign investors;
- d. adoption of a tariff policy to encourage private sector participation;
- e. introduction of new services like data communication, different types of Internet, E-mail and mobile services to meet the demands of various target groups and to generally lay the foundation of a knowledge based society; and
- f. development of human resources for planning, designing and implementation of projects and enhancement of managerial capability.

18.8.4 Strategies : In order to achieve the above objectives the following strategies will be pursued :

- a. creation of an environment for efficient telecom-related infrastructure development programmes so as to enable the providers to install adequate telephone lines to meet the increasing demand, both in the rural and the urban areas;
- b. encouragement for more private sector participation so as to sustain competition between the public and private sectors ;
- c. adoption of appropriate technology, acquisition and use of fast developing technology and digitalisation and conversion of existing analogue system in phases;
- d. improvement of telecommunication operation with overseas countries by increasing circuits through satellite and submarine optical fibre communication systems ;
- e. development of appropriate and cost-effective telecommunication infrastructures for high speed data communication network in support of competitive data entry/ data processing services and software export ;
- f. encouragement of increased participation of private service operators in the rural areas and cellular mobile service operators throughout the country ;
- g. development of necessary incentive packages for attracting private sector investors in the expansion of national and international telephone lines and transmission links through BLT/ BOT/BOO schemes ;
- h. meeting increased investment of BTTB primarily by selling bonds and debentures;

- i. increasing accessibility of common people through installation of more card phones across cities, towns and rural areas;
- j. deregulation of telephone call charges ;
- k. development of human resources in management, administration, project implementation and other related technical and non-technical areas;
- l. setting up appropriate institutional structure and procedure to ensure promotion of multi-operator environment; and
- m. initiation of reform measures to make BTTB more efficient and cost-effective.

18.8.5 Programmes for Fifth Plan : The main programmes of the telecommunication sub-sector in the Fifth Plan will be as follows :

- a. installation/expansion/replacement of digital local exchanges/switching;
- b. installation of national and international trunk automatic exchange (TAX) / switching;
- c. establishment of increased national and international transmission links; and
- d. initiation of innovative programmes including data communication network and information technology.

18.8.6 Physical projections : The physical projections of the T&T sub-sector during the Fifth Plan period are given in Table 18.1.

Table 18.1
Physical Projections for Fifth Plan

Items	Position (1994/95)	Position (1995-97)	Addition (1997-2002)	Position (2001/2002)
Total Telephone Capacity	319,480	523,185	700,000	1,223,185
i. Telephone Capacity (BTTB)	314,980	463,185	450,000	913,185
a. Urban	267,773	412,479	420,000	832,479
b. Rural	47,207	50,706	30,000	80,706
ii. Telephone Capacity (Private Sector)				
a. Thana & Villages	2,500	21,000	100,000	121,000
b. Cellular Phones	2,000	39,000	150,000	189,000
Card Phones	1,058	1,283	600	1,883
OTD Phones	700	800	150	950
NWD Circuits	10,689	15,384	66,590	81,384
Overseas Circuits	1,257	1,580	7,980	9,580
Telephone (per hundred persons)	0.26	0.39	-	1
Internet Subscriber (Public & Private)	-	-	15,000	15,000
Pager Subscriber (Private)	3,763	-	30,000	33,700
Radio Trunking (Private)	275	-	2,200	2,400

18.8.7 Financial outlay : The projected financial outlays for the public and private sectors are given below :

- a. Public sector** : Out of a total outlay of Tk. 23,784.60 million in the public sector for communication, Tk. 21,864.60 million has been earmarked for BTTB. This is about 91.92 per cent of the total sectoral financial outlay. The programme-wise breakdown of this financial outlay is shown in Table 18.2.

Table 18.2
Financial Outlay for BTTB During Fifth Plan

(in million Taka)

Programmes	Total	On-going Programmes	New Programmes
Installation/Expansion of digital exchanges/switching	11,790.00	9,940.00	1,850.00
Installation of national and international trunk automatic exchange (TAX)/ switching	1,020.00	320.00	700.00
National and International Transmission links	8,470.00	5,470.00	3,000.00
Innovative programmes including data communication network and information technology	584.60	110.00	474.60
Total	21,864.60	15,840.00	6,024.60

b. Private sector : It is envisaged that the private sector investment will be about Tk. 34,500 million for developing different telecommunication services already licensed and for BLT/BOT schemes of BTTB. Licences were issued in November 1996 to Grameen Phone Ltd., Telecom Malaysia International Bangladesh Ltd. and Sheba International Ltd. Grameen Phone has already started providing services. All three are joint-venture companies between Bangladeshi companies and foreign partners. Operation of these companies will increase competition in the sector and the cost of cellular mobile phone is expected to come down considerably.

c. In the Fifth Plan period, more private sector participation in the value added services like cellular mobile, paging, e-mail, internet, voice mail, low/medium orbit satellite service, etc. are expected. More liberalisation of terminal equipment and standardisation of the same is also likely to take place.

18.9 Bangladesh Post Office

18.9.1 Bangladesh Post Office is one of the important public utility departments responsible for providing postal facilities to the door steps of the public at a minimum cost. In spite of many handicaps, post offices continue to be the most economical and easily available medium of communication, specially for the people of rural areas who are generally poor and deprived of other communication media. The total number of post offices in Bangladesh are 9,068 (as of 1996/97). This is quite inadequate in accordance with the standard set by the Universal Postal Union (UPU). The UPU standard requires on an average one post office for 3,000 to 6,000 people. Currently in Bangladesh, one post office serves, on an average, about 13,800 population. It is envisaged that during the Fifth Plan, the number of post offices in Bangladesh will be increased from existing 9,068 to 10,068 to provide improved services particularly in the rural areas.

18.9.2 Performance during 1973 - 90

a. Financial performance : From 1973 through 1985, Tk. 351.60 million in current prices was allocated to Bangladesh Post Office through ADPs. The entire allocated amount was spent. Tk. 338.20 million (at 1984/85 prices) was allocated during the Third Plan for Bangladesh Post Offices for completion of its on-going projects. Out of this amount, Tk. 330.40 million was provided through ADPs. In addition, Tk. 3 million for TA projects and Tk. 43.70 million from the bloc allocation of the Zilla and Thana Infrastructure Development Fund were provided. Out of Tk. 377.10 million allocated in the Third Plan, Tk. 332.02 million or 88 per cent was actually spent.

b. Physical performance : The total number of post offices in the country in 1973/74 was 6,680. This number were increased to 7,292 in 1979/80 and to 7,624 (644 urban and 6,980 rural) in 1984/85. The delivery system was also improved through acquisition of mail vans. In 1982 /83, a new programme was taken up for construction of thana post office buildings in places where there were no pucca buildings. The number of post offices were increased from 7,624 in 1984/85 to 7,982 in 1989/90. Besides, 33 post office buildings and 275 units of residential quarters were constructed. To improve the mail van services of post offices, 96 vehicles of different types were procured. For modernisation of services, 122 machines of different types were procured and 57 thana post office buildings were constructed. Moreover, construction of postal printing press at Tongi, Gazipur and a postal complex at Rajshahi were completed. Besides, post offices damaged by the devastating floods of 1987 and 1988 were repaired / reconstructed.

18.9.3 Performance during Fourth Plan (1990 -95)

a. Financial performance : A total of Tk. 170.00 million at 1989/90 prices was allocated to Bangladesh Post Office in the Fourth Plan, against which Tk. 193.60 million was provided in current prices. Out of this amount Tk 175.30 million or 91 per cent was spent.

b. Physical performance : During the period, 786 new post offices were set-up against the target of 750, thus raising the total number of post offices in the country at the terminal year of the Fourth Plan to 8,768. Besides, 74 post office buildings at Thana centres, 1 sub-post office in Urir char, 2 town sub-post offices in Dhaka Metropolitan city, 2 postal training centres, 1 head-post office at Bagerhat and 54 post offices in the rural areas of the country were constructed. In order to improve postal services, necessary equipment and vehicles were procured and personnel appointed.

18.9.4 Performance during 1995 -97

a. Financial and physical performance : In 1995/96, Tk. 72.38 million was provided out of which Tk. 69.78 million was spent. In 1996/97, out of an allocation of Tk. 53.00 million Tk. 4,814 million was spent. New extra-departmental branch post offices numbering 325 were set up against a target of 300 during 1995-97. Construction of 3 post office buildings at Thana centres, extension of three post office buildings and extension of 5 town sub-post offices in Dhaka Metropolitan city, construction of 1 HPO buildings and extension of 18 HPO buildings, construction of 4 Deputy Postmaster Generals' offices and construction of 62 rural post offices were completed. Procurement of 10 mail vans, 5 mobile post office vans, 50 scooters, 20 motor cycles and 192 franking machines were completed.

b. Constraints/Bottlenecks : Delay in land acquisition, poor project planning and implementation and inadequate training were the main constraints during the past Plan period.

18.10 Fifth Five Year Plan (1997-2002)

18.10.1 In sync with the planned GDP growth rate, the demand for postal services will significantly increase during the Fifth Plan. To meet this increased demand, adequate and quality postal services will be extended.

18.10.2 Objectives : The main objectives of the Fifth Plan for the Bangladesh Post Office sub-sector are:

- a. expansion of postal services particularly in the rural areas;
- b. improvement of quality and efficiency of postal services;
- c. faster delivery of mails within the country; and
- d. improvement and expansion of postal services with the overseas countries.

18.10.3 Major policies : The major policies during the Plan will be :

- a. mechanisation of postal operation;
- b. improvement of mail transmission system;
- c. development of rural postal services;
- d. development of cost-based postal services gradually;
- e. development of human resources; and
- f. improvement of Postal Insurance Services.

18.10.4 Strategies : To achieve the above objectives, the following strategies will be pursued:

- a. training of all categories of personnel to provide managerial and skilled manpower at different levels;
- b. introduction of new technology into postal operation for improvement of efficiency and speed;
- c. introduction of cost-effective innovative programmes for providing better service to the customer;
- d. improvement of existing service facilities;
- e. adoption of necessary measures so that post office is used as a conduit for mobilisation of savings;
- f. development of MIS post offices; and
- g. introduction of Fax, E-mail and telephone services.

18.10.5 Programmes : The following programmes will be implemented during the Plan period:

- a. development of rural post offices including increase in their number ;
- b. development of physical facilities of urban sub-post offices, head post offices, thana post offices, sub-office mail and sorting offices, training centres;
- c. modernisation of postal equipment, acquisition of machinery and vehicles ;
- d. improvement of planning and management capability of postal personnel ;
- e. adoption of innovative programs (e.g. E-mail, Fax machine, etc.);
- f. development of management information system (MIS); and
- g. development of human resources for planning, designing and implementation of projects including enhancement of managerial capability.

18.10.6 Physical projections : The projections of the Post Office sub-sector in the Fifth Five Year Plan are shown in Table 18.3.

Table 18.3
Physical Projections of Post Offices in Fifth Plan

Items	Position (1994/95)	Position (1996/97)	Addition (1997-2002)	Position (2001/2002)
No. of post offices	8,768	9,068	1,000	10,068
a. Urban	678	678	0	678
b. Rural	8,090	8,390	1,000	9,390
Population per post office	13,900	13,800	13,500	13,600

18.10.7 Financial outlay

a. Public sector : An amount of Tk. 600 million has been earmarked in the public sector for the post offices. The programme- wise distribution of the financial outlay is shown in Table 18.4.

Table 18.4
Financial Outlay for Post Offices in Fifth Plan

(in million Taka)

Programmes	Total	On-going Programmes	New Programmes
Development of rural post offices	90.60	90.60	0.00
Development of physical facilities in town sub post offices, head post offices, thana post offices, sub- office mail and sorting offices, training centres	278.10	178.10	100.00
Modernisation of postal equipment, machinery and vehicles	151.30	51.30	100.00
Planning and management capability of postal personnel	40.00	0.00	40.00
Innovative programmes (e.g.: E-mail, Fax machine, etc.) including express mail services and mobile post offices	20.00	0.00	20.00
Management information system	20.00	0.00	20.00
Total	600.00	320.00	280.00

b. Private sector participation : Some private postal services are operating in urban areas providing "courier services". They are providing relatively prompt and efficient services but on payment of charges much higher than those of post offices. The courier service is likely to expand further. This situation will be closely monitored in order to formulate a development strategy for this sub-sector. An indicative private investment of Tk. 500 million is envisaged for the sub-sector.

18.11 Meteorology

18.11.1 Meteorology, the science of the earth's atmosphere, is of vital importance to everyone. Weather forecasting by the Meteorology Department is of particular importance to Bangladesh which is often subject to various seasonal meteorological events like floods, droughts and cyclones. A good number of these events turn out to be catastrophic and damage not only crops and properties but also take away valuable lives. The loss of lives and damages are avoidable significantly if adequate forewarning of their likely occurrences can be ensured.

18.11.2 In January, 1972, Bangladesh Meteorological Department (BMD) had nine First Class Meteorological Observatories, 6 Pilot Balloon Observatories and 2 Rawinsonde

Observatories. BMD now operates 36 1st Class Meteorological Observatories, 11 Pilot Balloon Observatories and 3 Rawinsonde Observatories.

18.11.3 Financial and physical performance during 1973-90: A sum of Tk. 360.20 million was allocated during 1973-90 of which 309.20 million (86 per cent) was spent. During the period, the Cox's Bazar and Khepupara Radars were replaced. BMD had three weather surveillance radars at Dhaka, Cox's Bazar and Khepupara which are in operation now. A meteorological workshop and a laboratory with the capacity of repairing and calibrating all conventional meteorological instruments as well as electronic instruments were established.

18.11.4 A Meteorological Training Institute was established in 1977 to impart basic inservice training to the professional forecasters as well technicians. An agro-meteorological unit was established with 3 fully instrumented Pilot Research Stations at Joydebpur, Mymensingh and Rangpur and 5 auxiliary stations at Comilla, Rangamati, Srimangal, Bogra and Barisal. A Climate Division was established in 1978 with an IBM S-34 mini computer for systematic collection, processing, preservation and statistical study of past weather data.

18.11.5 The Meteorological Telecommunication System was improved through addition of new teleprinters, SSB transcribers, Facsimile Recorders, and Transmitters along with the necessary maintenance and testing equipment. A 50 bands point to point satellite circuit between National Meteorological Communication Centre (NMCC), Dhaka and Regional Telecommunication Hub (RTH), New Delhi was established in 1978.

18.11.6 The operational capability of the aviation forecasting offices located at different airports of the country was strengthened through addition of modern aeronautical equipment for improved safety of aircrafts in flight and on ground.

18.11.7 The Head Quarters Building of the Bangladesh Meteorological Department was constructed to house different units in the same place.

18.11.8 Financial and physical performance during Fourth Plan (1990-95): An amount of Tk. 100 million was initially allocated in the Fourth Five Year Plan (1990-95). But an amount of Tk. 414.75 million was spent during the Plan period for the implementation of various projects. The speed of the Dhaka-New Delhi satellite circuit was increased from 50 bits per second (BPS) to 2,400 BPS to cope up with growing traffic of larger volume of data communication both for national and international requirements. An Ultra High Frequency (UHF) link was established between National Meteorological Communication Centre (NMCC) at Sher-e-Bangla Nagar and Ramna Telephone Bhaban, Dhaka to ensure uninterrupted transmission and reception of data.

18.11.9 Microwave link between Storm Warning Centre at Dhaka and Radar Station at Cox's Bazar and Khepupara was established to receive radar echoes directly from Cox's Bazar and Khepupara for real time use at the Storm Warning Centre for improved tropical cyclone forecasts and warnings.

18.11.10 The 19 coastal observatories as well as the Cox's Bazar and Khepupara weather surveillance radars affected by the tropical cyclone of 29 April, 1991 were rehabilitated.

18.11.11 Performance during 1995-97: The land acquisition for the construction of a first class meteorological observatory at Hatiya was completed and the construction work started. The implementation of 2 projects was delayed due to non-availability of project aid,

although very recently, the Government of Japan has agreed to provide assistance for the project, Strengthening of Weather Warning Services Related to Natural Disasters.

18.11.12 Constraints : Non-availability of project aid was one of the major impediments for timely implementation of projects. Delay in land acquisition caused delay in the implementation of shifting and reconstruction of meteorological observatory to Hatiya. Lack of modern equipment and adequate trained manpower also hampered the efficient functioning of the facilities.

18.12 Fifth Five Year Plan (1997-2002) :

18.12.1 The objectives of the Fifth Plan of Bangladesh Meteorological Department is to improve its operational capabilities for maintaining round the clock meteorological observations and issuance of improved weather forecasts/warnings in order to meet the increasing national and regional demand for disaster prevention.

18.12.2 Objectives : The main objectives of the Fifth Five Year Plan for the meteorology sub-sector are :

- a. development of a system for improved weather forecasting to minimise loss of lives and properties due to natural disasters;
- b. development of seismological networks for monitoring and forecasting of earthquakes; and
- c. improvement of agro-meteorological services.

18.12.3 Strategies : To achieve the above objectives, the following strategies will be followed :

- a. introduction of latest technology such as Numerical Weather Prediction techniques in day-to-day weather forecasting;
- b. establishing a seismological network for monitoring of earthquakes;
- c. fostering increased co-operation and interaction with other countries for effective weather forecasting ;
- d. expanding and modernising agro-meteorological facilities to provide necessary meteorological information to support crop production;
- e. upgrading data reception and dissemination facilities;
- f. monitoring climatic changes through the establishment of meteorological logistic facilities ; and
- g. establishing increased co-ordination and interaction with other relevant organisations (e.g., Space Research and Remote Sensing Organisation, Department of Environment and Bangladesh Institute of Development Studies, etc.).

18.12.4 Programmes for Fifth Five Year Plan

The following programmes will be implemented :

- a. strengthening of weather warning services;
- b. creation of physical and other facilities of Bangladesh Meteorological Department; and
- c. procurement of essential meteorological equipment including a high speed computer for processing and analysis of data.

18.12.5 Physical projections : The physical projections of the meteorological sub-sector during the Fifth Plan are shown in Table 18.5.

Table 18.5
Physical Projections of Meteorological Sub-sector During Fifth Plan

Observatories/Installations	Position (1994/95)	Position 1996/97)	Addition (1997- 2002)	Position (2001/2002)
First Class Meteorological Observatories.	36	36	3	39
Weather Surveillance Radar	3	3	1	4
Computer (NWP) Centre.	-	-	1	1
a. Agro-met Pilot Station.	3	3	4	7
b. Agro-met Observatory.	5	5	4	8*
Seismic Observatory.	1	1	3	4
Hydrogen Plant.	1	1	1	1**
Micro-wave and UHF link.	3	3	3	6
Buoy (Sea observation collecting platform).	-	-	3	3
Tide Gauze Station.	-	-	2	2

* The Agro-Met Observatory at Barisal will be upgraded into pilot station.

** The existing plant will be rehabilitated.

18.12.6 Financial outlay : Meteorological services are provided by the government. A total Tk. 1,320 million has been earmarked for Bangladesh Meteorological Department for the Fifth Plan period. The programme-wise distribution of this financial outlay is shown in Table 18.6.

Table 18.6
Financial Outlay for Meteorological Sub-sector in Fifth Plan

(in million Taka)

Programmes	Total	On-going Programmes	New Programmes
Strengthening of weather fore-casting/ warning systems /services	970.00	770.00	200.00
Creation of physical and other facilities	111.00	0.00	111.00
Procurement of meteorological equipment	239.00	50.00	189.00
Total	1,320.00	820.00	500.00

18.12.7 In the Fifth Plan period, telecommunication, postal and meteorological services will have to acquire new technologies, interface effectively with the international system, delineate avenues for efficient participation of the private enterprise to the end of making the delivery of all these services efficient and economic. For those charged with responsibilities in these fields there will be challenges to be faced boldly with imagination.

CHAPTER XIX

PHYSICAL PLANNING WATER SUPPLY AND HOUSING

19.1 Introduction

19.1.1 The overall growth of population along with rapid urbanisation during the last two decades and a half caused a high pressure on the limited land of the country. It also created a number of problems in the areas of environment, housing, water supply and sanitation. Decentralisation of administration and development of local government institutions also created enhanced demand for physical infrastructures and other utility services at the district, thana, union and pourashava levels. In addition, development of facilities to cater for the increasing recreational needs of the citizens and to promote tourism also demands further development of infrastructure. Construction of low-cost housing both in the rural and the urban areas, and multi-storied houses and office buildings in the urban areas is undertaken to improve the living and working conditions of the people. All these changes call for an appropriate planning for land-use both in the rural and urban areas to systematically provide necessary physical infrastructures, utility services and housing. Moreover, the continuous migration of the rural poor to the urban areas, particularly to the metropolitan cities of Dhaka, Chittagong and Khulna for jobs has given rise to slums and squatters and created problems of transportation and environmental degradation. Emphasis is to be given to combat environmental degradation by building adequate sewerage and sanitation facilities, arranging safe disposal of solid waste and controlling air and water pollution from industries and vehicles. Besides, improvements in city road networks are to be made to reduce traffic jam. Improvement of the quality of life and living conditions of the slum dwellers needs to be attended to through resettlement based on adequate physical facilities and utility services. To meet the growing challenge of urbanisation, an urban development strategy along with land-use plan needs to be adopted during the Plan period.

19.1.2 There is virtually no land-use plan for the rural areas of the country, which comprises about 85 per cent of the total land area. The present facilities in respect of physical infrastructures, housing, water supply, sanitation, etc., are very inadequate. Housing shortage in the country in 1991 was estimated to be 3.1 million units, out of which 2.15 million units were in the rural areas. It was projected that this shortage might exceed 5 million units by the end of the century if the current trend continued. Even in the public sector, less than 10 per cent of the employees get residential accommodation. Most of the remaining employees live in rented houses under financial hardship and lack of adequate physical facilities. About one-third of the urban people live in slums or as squatters in most unhygienic condition. The piped-water supply in Dhaka city, Chittagong city and district towns hardly covers 65, 50 and 51 per cent of the population respectively. In thanas and pourashavas, this coverage of water supply hardly exceeds 5 per cent. Presently, there is only 1 tube-well for every 105 persons to supply drinking water in the rural areas. The sanitation coverage in the rural areas is only 36 per cent of population; even in Dhaka city the sewerage system covers only 35 percent of population. In spite of high potential, the state of tourism in Bangladesh is yet in its infancy due to lack of physical facilities. The main thrust of the Fifth Five Year Plan will, therefore, be to improve the quality of life and living conditions of the people and their working environment by providing adequate physical infrastructures and other services.

19.1.3 The physical planning, water supply and housing sector covers the following activities that are being implemented by a number of agencies under 12 ministries/divisions.

- a. Preparation of land -use master plan for the urban centres and the rural areas;
- b. Provision of housing for government personnel and development of satellite towns for different income groups living in urban areas;
- c. Provision of low cost rural housing;
- d. Resettlement of slum dwellers and squatters;
- e. Delivery of basic services to the slum dwellers;
- f. Provision of safe drinking water, sewerage and sanitation facilities both in urban and rural areas;
- g. Construction of government offices and institutional and residential buildings at administrative centres and important places;
- h. Development of basic infrastructures and services at zilla, thana, union and village levels;
- i. Combating environmental degradation and controlling air and water pollution;
- j. Development of road networks in the metropolitan cities to reduce traffic jam;
- k. Development of tourism and recreational facilities; and
- l. Research and Development in the field of building materials and construction.

19.2 Review of Performance of Past Plans

19.2.1 Performance during 1973-90

- a. **Financial performance:** The plan-wise total allocation and expenditure in the public sector is given in Table 19.1.

Table 19.1
Public Sector Allocations and Expenditures During 1973-90
for Physical Planning Water Supply and Housing

(in million Taka)

Plans	Allocation (at base year prices of respective Plan)	Relative Share of Sector (%)	Expenditure (at current prices)
First Plan (1973-78)	272.00	5.81	270.00
Two Year Plan (1978-80)	250.00	7.80	241.00
Second Plan (1980-85)	1,139.00	5.20	1,158.00
Third Plan (1985-90)	1,622.00	2.20	1,556.00

b. Physical performance (1973-90)

- i. During the period, land-use master plans for 398 thana headquarters and master plans for 60 district towns were undertaken. Office accommodations at 44 district and thana head quarters were completed and 13,918 service plots were distributed among people belonging to low income group and about 6,860 squatter families were rehabilitated. Besides, 17,480 flats, 252 dormitories at thana level, 1,065 office buildings, 2,033 union tahsil offices and 362 thana land offices were constructed. The landmarks in development of this period were the constructions of the twenty-storied office building at the secretariat, Dhaka, the International Conference Centre at old Sangsad Bhaban, the Monument for the Martyrs of the Liberation War at Savar, the National Monument at Mujibnagar and the Osmani Memorial Hall at Fulbaria.

ii. In case of rural water supply, following the policies initiated by the government in 1973, the coverage was raised to 125 persons per tube-well in June 1990 from

238 persons per tube-well in June 1973. A total of 918,125 water- sealed latrines were distributed. This together with the home-made latrines made it possible to cover 11 per cent of the population under sanitation programmes.

iii. Water supply in Dhaka city rose to 546 million litres per day (MLD) in June 1990 from 182 MLD in June 1973, covering 50 per cent of the total city population as against 25 per cent in 1973. The sanitation coverage in Dhaka city through sewerage connection stood at 25 per cent in June 1990 compared with only 10 per cent in 1973. The water supply in Chittagong city increased to 136 MLD in June 1990 covering 45 per cent of the total city population as against 68 MLD and a coverage of 30 per cent in 1973. The total water supply capacity in the district towns was raised to 250 MLD covering 41 per cent of the total town population by June 1990 as against only 27 MLD of water supply and coverage of only 10 per cent in 1973.

19.2.2 Performance during fourth five year plan (1990-95)

a. Financial performance: In the Fourth Plan, Tk. 18,420.00 million (at 1989/90 prices) was allocated to this sector which was 5.31 per cent of the total public sector allocation. At the end of the Plan period, total expenditure stood at Tk. 20,940.00 million at current prices. This expenditure also included expenditure of the National Implementation Committee for Administrative Reforms (NICAR) and Flood Action Plan (FAP) for water supply and sanitation and construction of 3,080 houses for public servants in Dhaka city.

b. Physical performance : The land-use master plans for 398 thanas and 60 district towns were completed. Preparation of master plans for Dhaka and Chittagong cities was initiated. The National Housing Policy was approved in 1993. Improvement of the physical infrastructures for the secondary district towns were carried out.

19.2.3 Housing

a. Core houses for 1,000 squatter families at Dattapara, Tongi were provided and 5,000 residential plots at Mirpur and 4,100 plots at Kaibalyadham, Chittagong, were developed and allotted to people of low income group;

b. 3,000 residential flats in 44 newly created districts and 3,000 flats in Dhaka were constructed for the public employees;

c. RAJUK developed and provided 4,787 plots at Uttara;

d. Construction of 44 new circuit houses was initiated. A new Dhaka district court building was constructed. A new circuit house at Chittagong was built and the old one turned into a museum;

e. The Prime Minister's Secretariat at Tejgaon was renovated and a four-channel conference system was installed;

f. Private enterprise made a significant stride to develop housing in urban areas; and

g. Some NGOs undertook low cost housing programmes for the poor in the rural areas.

19.2.4 Water supply and sanitation

a. Water supply and sanitation in rural areas: At the end of the Plan period, water supply facilities in the rural areas figured at one hand tube-well for 107 persons compared with 125 persons in 1990. As a result of joint efforts of the government and NGOs, sanitation coverage in the rural Bangladesh went up to 36 per cent

(including home-made latrines) by the terminal year of the Fourth Plan from 11 per cent in 1990.

b. Water supply and sanitation in urban areas :

i. Water supply and sanitation in Pourashavas and Thanas: During the Plan period, 96 production wells, 303 km of pipe line, 7 water treatment plants, 13 overhead tanks and 52 km of drains were constructed, while 6,074 house connections were given in pourashavas and thanas. Against a target of 477 MLD water supply the achievement was 296 MLD. A total of 19,828 pit latrines were installed against the target of 25,000.

ii. Water supply and sanitation in Dhaka and Chittagong cities: During the Fourth Plan 67 DTWs were installed in Dhaka city. Besides, 266 km of water pipe lines, 39 km of sewerage lines and 47 km of storm sewer lines were constructed and a supply of 1,023 MLD water supply was achieved. On the whole, 65 per cent of the population was covered with piped water supply, 35 per cent with sewer facilities and 25 per cent with storm - sewer facilities at the end of the Fourth Plan. The total water supply capacity of Chittagong city increased from 136 MLD in 1990 to 159 MLD in 1995 covering 52 per cent of the population . Besides, the Mohra water treatment plant was planned to be modernised.

iii. Tourism: Bangladesh Parjatan Corporation drew up a master plan for development of tourism. Efforts were made to operate the tourism facilities on a commercial basis. A National Tourism Training Institute was established at a cost of Tk. 120.00 million.

iv. Fire Service Police Service and environmental projects: Rajarbag police hospital and Sarda Police Training Academy were modernised and expanded. Two projects were implemented for environmental improvement of Dhaka and Chittagong metropolitan areas. The Housing and Settlement Directorate, Dhaka City corporation, Dhaka WASA and the Environment Directorate implemented the package programme under the Dhaka Urban Infrastructure Improvement project (DUIP) at Mirpur at a cost of Tk. 900.00 million.

v. Construction of other infrastructures: Construction of office building for the Department of Immigration and Passports at Dhaka was initiated during this period. The construction and repair of union tahsil offices and thana land offices were taken up. The Court Building in Dhaka was completed and residential houses for Judges in Dhaka, Khulna, Barisal, Rajshahi and Chittagong were constructed.

c. Financial and physical performance during 1995-97

i. Financial performance: During the years 1995/96 and 1996/97, Tk.5,866.50 million and Tk. 6,803.90 million respectively were allocated in the public sector out of which about 95 per cent was utilised.

ii. Physical performance: During 1995-97, 2,020 flats for government employees in Dhaka were constructed and 8,480 site and service plots were distributed to people of low and medium income groups. A Conference Room at the Prime Minister's Secretariat and the International Jute Organisation Office (IJO) building were completed. During the period, 35,270 shallow hand tube-wells, 16,837 deep tube-wells, and 20,137 Tara deep-set tube-wells were installed and 35,000 choked-up tube-wells were rehabilitated. About 430,000 sanitary latrines were installed during the period. The traffic congestion in Dhaka city was addressed by constructing foot over-bridges and underpasses and introducing premium bus services.

The position of the sectoral achievements as on June 1990, 1995 and 1997 is given in Table 19.2.

Table 19. 2
Major Achievements of Physical Planning
Water Supply and Housing Sector in Selected Years (1990-97)

Major areas	Unit	Position June '90	4th Plan (1990-95) Addition		Position June '95	Position June '97
			Target	Achievement		
Housing						
1. Rehabilitation of squatter families	Nos	6,860	3,620	3,400	10,260	10,260
2. Distribution of site and services plots for low and middle income group people	"	13,918	8,480	8,480	22,398	22,398
Government flats and offices						
3. Construction of flats	Nos	17,408	3,120	3,120	18,508	20,528
4. Construction of office buildings	"	1,065	225	180	1,245	1,245
5. Construction/Re-Construction of Union Tahsil Offices	"	2,033	950	950	2,983	2,983
6. Construction./Re-Construction of Thana Land Offices	"	362	110	60	422	422
Rural water supply and sanitation						
7. Shallow hand tube-wells	"	718,168	97,313	95,795	813,963	849,233
8. Deep tube-wells	"	22,498	71,670	68,800	91,298	108,135
9. Tara Deep-set tube-wells	"	27,231	28,718	28,255	55,486	75,623
10. Rehabilitation of choked-up tube-wells	"	56,374	100,000	88,356	144,730	179,730
11. Water supply coverage in the rural areas	Persons per tube-well	125	95	107	107	105
12. Distribution of water sealed latrines	Nos	918,125	1,500,000	1,209,624	2,127,749	2,557,749
13. Household's Sanitation coverage in the rural areas (including home-made latrines)	Per cent of population	11	-	25	36	40
Urban water supply and sanitation:						
a) Dhaka and Chittagong cities						
14. Dhaka City water supply	MLD	546	250	227	773	850
15. Water supply coverage in Dhaka City	Per cent of population	50	15	10	60	65
16. Sanitation coverage in Dhaka City through sewerage connection	Per cent of population	25	10	8	33	35
17. Chittagong City water supply	MLD	136	68	23	159	168
18. Chittagong City water supply coverage	Per cent of population	45	-	5	50	52
b) Pourashavas and thanas						
19. Water supply	MLD	250	227	45	295	518
20. Water supply coverage	Per cent of population	41	35	8	49	51

Note: MLD: million litres per day.

19.3 Fifth Five Year Plan (1997-2002)

19.3.1 A major concern of planned development is to improve the physical facilities of living such as housing, water supply, sanitation and environment. During the Fifth Five Year Plan,

physical planning, water supply and housing sector envisages provision of these basic amenities through formulating appropriate policies and undertaking effective programmes in these areas. The objectives, policies and strategies of its various sub-sectors are given below:

19.3.2 Physical planning

a. Objectives

- i. Preparation of land-use master plans for both rural and urban areas for deriving maximum benefit out of the limited land area through effective co-ordination among the concerned agencies;
- ii. Preparation of regional development plans as well as master plans for all metropolitan cities and district towns in phases;
- iii. Improvement and development of infrastructures such as roads, water supply, sanitation and drainage, flood control, solid waste management, markets and community facilities, etc., in all metropolitan cities, district towns and thana headquarters;
- iv. Provision of basic infrastructures in the urban slums and squatters settlement; and
- v. Strengthening and supporting authorities like RAJUK, CDA, KDA and RDA so as to make them play important roles in town planning and regulation of urban development.

b. Policies

- i. Formulation of appropriate policy for maximising the use of rural land including refixing of land ceiling for agricultural and non-agricultural use;
- ii. Planned development of urban areas taking into cognisance of the land-use pattern and environmental impact;
- iii. Greater involvement of local government bodies in planning and development of physical infrastructures as well as their operation and maintenance at district, thana, union and village levels;
- iv. Effective involvement of the private sector and NGOs in improvement of slums, waste disposal and sanitation activities; and
- v. Integrated development of urban areas, taking into consideration housing, water supply and sanitation, transportation, slum improvement, etc., as components.

19.3.3 Housing : Housing is one of the most important basic needs of life. At present, there is an acute shortage of affordable housing both in urban and rural areas of Bangladesh. A National Housing Policy was approved by the government in 1993 with the prime objective of ensuring housing for all strata of the society, especially the low and middle income groups and the disadvantaged and the shelterless poor. However, its follow-up activities has been very limited. There has been virtually no government programme for improving the conditions of housing in rural areas. The same has been the case with resettlement programme for the slum dwellers. The construction of low-cost houses for the low and middle income groups has also been limited. Then again, it has primarily been confined to areas in and around the metropolitan cities. In Bangladesh, private sector participation in house construction, especially in the metropolitan cities, is encouraging. Residential quarters for government employees can hardly meet 10 per cent of the requirement. Against the above backdrop, the objectives and strategies of this sub-sector set for the Fifth Plan are as follows:

a. Objectives

- i Development of low cost houses/multi-storied buildings for housing / resettlement of slum-dwellers, the disadvantaged, the destitutes and the shelterless poor and in situ development of the slum and of shelters for squatters;

- ii. Development of sites and services for residential accommodation of low and middle income groups of people;
- iii. Construction of condominiums for low and middle income groups of people;
- iv. Construction of multi-storied flats for sale to government employees at different places to ease the accommodation problem;
- v. Construction of housing facilities for working women ;
- vi. Construction of low cost houses in the coastal areas of Bangladesh; and
- vii. Involvement of the private sector with necessary incentives for its greater participation in the housing sub-sector.

b. Policies

- i. A National Housing Authority will be set up in accordance with the National Housing Policy of 1993 to address, inter alia, the housing problem of the low and middle income groups of people, the disadvantaged, the destitutes and the shelterless poor;
- ii. Government khas land will be used to the maximum extent possible for solving housing problem, especially for the poorer households;
- iii. Tax concession will be given to those who build houses with their own resources;
- iv. Hire purchase system for housing in the private sector will be encouraged;
- v. Tenancy Act will be updated for renting houses in the urban areas for mutual benefit of both the owners and the tenants;
- vi. Abandoned houses will be turned into multi-storied buildings by the Housing and Settlement Directorate in phases for solving the housing problem;
- vii. The size of residential plots will be limited to 3 katha in Dhaka city and 5 katha in other places in housing estates developed by the government and the private sector;
- viii. Necessary action will be taken to strictly enforce the Building Code of 1993;
- ix. Arrangements for soft loans for housing will be made for the poor; to this end, a special fund will be created by the government;
- x. Rural housing will be given emphasis by providing better access to land, finance and cheap, affordable and durable building materials and technology following the Grameen Bank Model;
- xi. Houses for working women will be constructed by the relevant city/town authorities; and
- xii. Low cost houses in the coastal areas of Bangladesh will be constructed by the local bodies and funded by the government.

19.3.4 Office and institutional buildings

a. Objectives

- i. Construction of adequate office space for public offices in urban areas;
- ii. Construction of Tahsil offices, thana buildings, sub-registrar's offices and union offices in the rural areas;
- iii. Construction of martyrs monuments at Rayerbazar, Dhaka and Kollaphathar in Comilla and Victory monument at Shuhrawardy Uddan; and
- iv. Making optimum utilisation of office space.

b. Policies

- i. Scarce domestic resources will be allocated to such office buildings/ constructions as are prioritised;
- ii. Economic use of both land and office space will be ensured through construction of high-rise buildings with modern functional facilities;

- iii. Funds for housing construction will be set up and canalised for meeting the needs of the lower income people.

19.3.5 Water supply and sanitation in rural areas

a. Objectives

- i. Improvement of the health status of people and the environment through increased access to safe water and sanitation facilities;
- ii. Increasing coverage of rural water supply to 80 persons per tube-well from the present 105 persons per tube-well;
- iii. Strengthening of the capacity of sectoral institutions for sustainable development of rural water supply and overall sanitation;
- iv. Minimising the discrimination between well-served and under-served areas with particular emphasis on the northern districts and hilly and coastal areas by providing more tube-wells with appropriate technology in the latter areas;
- v. Installation of 529,000 tube-wells in rural areas by the public sector in addition to 400,000 to be installed by NGOs;
- vi. Increasing sanitation coverage from the present 36 per cent to 70 per cent of the population by the terminal year of the Fifth Plan;
- vii. Increasing sanitation facilities in the haor areas to avoid water pollution;
- viii. Providing water supply and sanitation facilities to the poor, free of cost or at below cost price;
- ix. Promotion of local manufacture of tube-wells for the supply of safe drinking water; and
- x. Encouraging local participation through local governments in site selection, installation, repair and maintenance of tube-wells and sanitary latrines, particularly involving women in these areas.

b. Policies

- i. The present system of fixed rate contribution for deep tube-well will be modified and the extent of contribution by beneficiaries will be determined on the basis of average depth of tube-well as well as the financial capacity of users;
- ii. Training programme for the caretaker family (CTF) will be continued in order to reduce public expenditure for maintenance and ensure people's participation in rural water supply programme;
- iii. Private technicians and unemployed youth will be trained for installation and maintenance of hand tube-wells;
- iv. Private sectors will be promoted in the manufacture of tube-wells and sanitary latrines by providing soft loans;
- v. NGOs will be encouraged to establish production centres for sanitary latrines in remote areas where such centres do not exist at present;
- vi. Social mobilisation will be intensified through rallies and communication techniques for behavioural change towards sanitation;
- vii. Bio-gas plants based on human and animal excreta will be set up in rural areas;
- viii. Water supply and sanitation facilities to the poor will be provided free of cost and well-to-do persons installing such facilities at their own cost will get tax concessions;
- ix. Survey of arsenic poisoning of the wells will be undertaken and remedial measures implemented; and
- x. Special emphasis will be given to the extension of sanitation facilities in the haor areas.

19.3.6 Water supply and sanitation in Pourshavas and Thanas

a. Objectives

- i. Raising supply of piped water to cover all the households in all district and thana towns and other urban centres;
- ii. Improvement of sanitary disposal of human excreta, safe disposal of sewerage and storm water and solid wastes;
- iii. Strengthening of local bodies through extensive training programmes in order to ensure smooth operation and maintenance of installed facilities;
- iv. Extending water supply coverage at district towns from 49 per cent to 70 per cent of the population by the end of the Plan period;
- v. Increasing coverage of piped water supply in the thana towns from the present level of 5 per cent to 25 per cent of the population by the terminal year of the Plan period;
- vi. Setting up of more community latrines at district and thana levels and in slum areas; and
- vii. Strengthening of capacity of sectoral institutions for sustainable development of water supply and sanitation.

b. Policies

- i. Adequate measures will be taken to reduce leakages and wastages in piped water supply system;
- ii. Urban piped water supply will be run on cost-recovery basis;
- iii. Local bodies will be empowered to take over operation, repair and rehabilitation works, etc.;
- iv. Billing and revenue sections of the pourashavas will be strengthened and made efficient;
- v. Awareness creation by motivation will be emphasised at the community level so that the community will pay for the services provided; and
- vi. Private sector initiative will be promoted, especially in sanitation and solid waste disposal.

19.3.7 Water supply and sanitation in Dhaka and Chittagong cities: The metro-politan cities, particularly Dhaka and Chittagong, are facing acute problem of inadequate water supply and poor sanitation because of rapid increase in population, inefficient management, and faulty delivery system. Special emphasis has, therefore, been given to tackle the water supply and sanitation problems of these two cities in the Fifth Plan.

a. Objectives

- i. Increasing production and supply of piped water in Dhaka city from the existing 850 MLD to 1250 MLD by the terminal year of the Fifth Plan;
- ii. Increasing water supply coverage from the existing 65 per cent to 80 per cent of the population in Dhaka city;
- iii. Undertaking necessary measures to reduce the system loss of water supply;
- iv. Increasing coverage of sanitation facilities connected with sewerage system from the existing 35 per cent to 40 per cent of the population in Dhaka city by the end of the Plan period;
- v. Increasing water supply in Chittagong city from the existing 159 MLD to 318 MLD covering 90 per cent of the population by the end of the Plan period;
- vi. Providing water supply to the Export Processing Zones; and

vii. Extending sanitation coverage to 80 per cent of the city population in Chittagong.

b. Policies

- i. Emphasis will be given to surface water treatment rather than the development of ground water for water supply; and the possibility of increasing the water supply of Dhaka and Chittagong by bringing water from surface water sources in nearby areas will be explored;
- ii. The system loss of piped water will be reduced to 30 per cent from the present 47 per cent level by strengthening and modernising the management, meter reading, billing system, etc.;
- iii. Private sector will be encouraged to take up the responsibility for collection of bills and solid waste disposal, etc.; and
- iv. The city corporations will be empowered to raise funds for projects by floating bonds to supplement government grants.

19.3.8 Tourism: There is a good potential for development of tourism in the country as it has natural scenic spots/long stretches of sea beach and ancient mosques, temples, monuments, etc. Due to lack of integrated policy and programmes, infrastructure facilities as well as publicity, these potentials have not fully been exploited. In the Fifth Five Year Plan, emphasis will be given to the development of integrated tourism facilities to attract both domestic and foreign tourists. Attempts will be made to develop physical facilities in the hill tracts, coastal areas, peripheral areas of Mymensingh, Bogra, Dinajpur and Sylhet. The government will create an environment for the private sector to invest in development of physical facilities and resorts.

a. Objectives

- i. Development of low-cost integrated tourism facilities in the North-East areas, Chittagong Hill Tracts, coastal areas, hilly districts, etc.;
- ii. Implementation of priority programmes and projects according to the Tourism Master Plan already prepared ;
- iii. Encouragement of private sector participation in tourism;
- iv. Undertaking joint venture projects;
- v. Training of personnel for the tourism industries;
- vi. Projection of the natural and cultural image of the country to promote tourism both within and outside the country;
- vii. Enhancing foreign exchange earnings from tourism ;
- viii. Public investment in the areas where private investment is lacking; and
- ix. Emphasis on the preservation of heritage and archaeological buildings and renovation of old buildings of historical significance.

b. Policies

- i. Tourism sites will be developed in collaboration with other sectors such as transport and communication, hotels, motels and catering establishments, etc.;
- ii. More 4 and 5 Star hotels will be set up in Dhaka and Chittagong;
- iii. Private sectors/NGOs will be encouraged to develop and run tourism sites and other facilities;
- iv. Low cost tourism facilities will be developed for the domestic tourists;
- v. Special recreational facilities will be created for expatriates working in the Export Processing Zones;
- vi. One or two coastal islands will be leased to private enterprise for development as exclusive tourist resorts;

- vii. Tourism Training Institute will be expanded;
- viii. Entertainment, recreation and transport facilities to be provided alongside accommodation in all tourist centres;
- ix. Regional development authorities, district authorities and local councils will be associated with tourism development and promotional activities; they will be encouraged to undertake projects locally for developing domestic tourism;
- x. Wild life will be preserved through parks, sanctuaries and game resorts on a national priority basis and wild life safari tours will also be organised for promotion of tourism; and
- xi. Preservation, conservation and development of the Sundarbans as a unique international wild life resort area.

19.3.9 Other services : Other services include fire, police, BDR, ansar and civil defence services, prisons, immigration and passports, etc.

a. Objectives

- i. Strengthening and expansion of physical infrastructures and other facilities for the fire service, police, ansar and civil defence, prisons, etc., to save valuable lives and properties, maintain law and order and create congenial living environment for the prisoners;
- ii. Modernisation and expansion of fire services and civil defence activities through procurement of communication equipment, ambulances, fire fighting equipment and vehicles, etc.;
- iii. Involvement of the ansars and the village defence parties (VDPs) with local government bodies;
- iv. Construction of residential/office accommodation for the ansars and provision for their training;
- v. Construction of cyclone shelters in coastal belts;
- vi. Reconstruction of dilapidated thana buildings on type plan basis, establishment of investigating centres and modernisation of police control rooms, border outposts, etc.;
- vii. Construction of district jails and a new central jail at Kashimpur in Gazipur district;
- viii. Improvement of sanitary conditions in district jails and sub-jails; and
- ix. Completion of the second phase of the Passport Head Office, 8 regional passport offices and computerisation of the Department of Immigration and Passports.

b. Policies

- i. Prioritisation of projects for the Department of Immigration and Passports, fire services, the ansars, the VDPs, the coast guards, the BDR, etc., will be effected in accordance with the availability of financial resources;
- ii. All the thana headquarters will be provided with civil defence ambulances and fire fighting equipment in phases; and
- iii. Local government bodies will be involved in the operation of fire fighting and civil defence facilities;

19.3.10 Projections for Fifth Plan period: The effects of the major public-sector programmes/projects of the physical planning, water supply and housing sector during the Fifth Plan as projected are shown in Table 19.3.

Table 19.3
Projections for Physical Planning Water Supply and Housing for
Fifth Plan in Public Sector

Major Programmes/projects	Unit	Benchmark of 1996/97 (Estimate)	Addition during Fifth Plan	Cumulative Total at Terminal Year of Fifth Plan
Housing:				
Rehabilitation of squatter families	Nos.	10,260	23,000	33,260
Distribution of sites and services plots for the low and middle income groups of people	"	22,398	34,916	57,314
Government Flats/Offices:				
Construction of Flats	No.	20,528	6,100	26,628
Construction of Office Building	"	1,245	75	1,320
Construction/Reconstruction of Union Tahsil Office	"	2,696	1,000	3,696
Construction/Reconstruction of Thana Land Office	"	422	38	460
Rural Water Supply and Sanitation:				
Shallow hand tube-wells	"	849,233		
Deep tube-wells	"	108,135	529,000*	1,561,991*
Tara Deep-set tube-wells	"	75,623		
Choked up tube-wells	'	179,730	150,000	329,730
Water Supply Coverage in the Rural Area	Persons per tube-well	105	-	80
Distribution of water-sealed latrines	Nos	2,557,749	2,815,000	5,372,749
Sanitation coverage in the rural areas(including home-made latrines)	Percent of population	36	34	70
Urban Water Supply and Sanitation:				
a. Dhaka and Chittagong cities				
Dhaka City Water supply	MLD**	850	400	1,250
Water Supply Coverage in Dhaka City	Percent of population	65	15	80
Sanitation Coverage in Dhaka City through sewerage system	Percent of population	35	5	40
Chittagong City Water supply	MLD	159	159	318
Chittagong city water supply coverage	Percent of population	50	40	90
b. Pourashavas and thanas				
Water supply	MLD	543	221	764
Water Supply Coverage	Percent of population	49	21	70
Thana piped water supply	Percent of population	5	20	25

* Sum for Shallow, Deep and Tara Deep-set tube-wells. ** MLD: million litres per day.

19.3.11 Programmes for Fifth Plan: In order to achieve the objectives set for the Fifth Plan, the following major programmes/projects are planned to be implemented under various sub-sectors:

a. Physical planning

- i. The basic physical facilities for the metropolitan cities, district towns and pourashavas will be enhanced and strengthened during the Plan period as per Master Plan prepared for Dhaka and Chittagong cities and other studies;

- ii. Preparation of Master Plans for Khulna and Rajshahi cities will be completed and the Land Use Master Plan for thana and district towns will be updated;
- iii. Preparation of land-use plans including human settlement at union level will be initiated; and
- iv. Development of infrastructure services such as roads, water supply and sanitation, drainage and flood control, solid waste management, slum improvement, including provision of basic services and community centres for thana and district towns will be implemented.

b. Housing

- i. Construction of condominiums for settlement of at least 20,000 slum dwelling families of Dhaka city will be taken up;
- ii. Private enterprise as land developers and builders will be encouraged and given incentives to develop and extend housing facilities;
- iii. Residential plots of various sizes numbering 34,916 will be developed for the low and middle income groups of people and the disadvantaged ones living in urban areas;
- iv. Low-cost flats numbering 9,164 for the low income group and 9,920 for squatters living in the urban areas will be constructed for sale on hire-purchase basis;
- v. Construction of low cost houses by the public sector for sale to wage earners abroad will be taken up;
- vi. Construction of low cost rural houses following the Grameen Bank model, will be taken up for solving rural housing problem by creating a special fund;
- vii. Multi-storied flats numbering 5,100 in Dhaka city and 1,000 in Chittagong city will be constructed for the government employees;
- viii. Construction of flats for hire-purchase by the government servants living in the 4 city corporation areas will be undertaken;
- ix. Construction of low cost houses in the coastal and selected rural areas will be taken up; 'Asrayon Prokalpa' will be pressed in for this purpose;
- x. Construction of houses for working women will be undertaken in the urban areas; and
- xi. Credit for house building, especially for the low and middle income brackets will be extended; savings and loans associations, housing banks as institutions and trust bonds and financial instruments designed for increasing contractual savings for house building will be encouraged in the private sector.

c. Office and institutional buildings

- i. Construction of Intellectuals Martyr Monument at Rayer Bazar, Victory Monument at Suhrawardy Uddan and Martyrs Monument at Kollaphather in Comilla will be completed;
- ii. Construction of National Secretariat building at Sher-e-Bangla Nagar, Dhaka will be undertaken; and
- iii. Construction of multi-storied government offices and functional buildings at a rate of 70,997 square meters per year will be taken up.

19.3.12 Water supply and sanitation

a. Water supply and sanitation in rural areas

- i. In order to provide one tube-well for 80 persons at the terminal year of the Plan period, 529,000 tube-wells will be installed by the public sector and 400,000 tube-wells by the private sector;

- ii. Emphasis will be given on improving water supply in the northern and hilly districts and coastal areas;
- iii. Sanitation, hygiene and water supply in the rural areas will be extended widely and a study of groundwater of the arsenic affected areas and remedial measures will be undertaken;
- iv. Rural sanitation and social mobilisation programmes for sanitation will be geared up during the Plan period;
- v. Sanitation facilities in the haor areas will be extended on a priority basis to avoid water pollution;
- vi. About 80 percent of all rural households will be brought under the cover of sanitary disposal of excreta;
- vii. Water supply and sanitation facilities to the poor will be given free of cost, while the rich will be given tax concession for developing such facilities at their own cost;
- viii. Local manufacture of tube-wells will be encouraged through incentives; and
- ix. Special emphasis will be given on proper maintenance and operation of tube-wells and sanitary latrines.

b. Water supply and sanitation in Pourashavas and Thanas

- i. Urban water supply and sanitation programmes in the districts and pourashavas will be implemented;
- ii. Programme for piped water supply in thana towns will be undertaken;
- iii. Environmental sanitation, hygiene and water supply projects in urban slums and fringes will be implemented;
- iv. Water supply and sanitation projects for growth centres will be taken up; and
- v. Construction of community latrines at the district and thana headquarters will be initiated.

c. Water supply and sanitation in Dhaka City

- i. In order to increase the coverage of safe drinking water supply in Dhaka city to 80 per cent of the population by the terminal year of the Fifth Plan, the water treatment plant at Sayedabad along with distribution network will be completed and the interim water supply programmes based on groundwater within the city areas will be continued;
- ii. The BMRE of Chandnighat Water Treatment plant will be completed;
- iii. Necessary measures for the augmentation of water supply by constructing a well - field near Singair will be undertaken;
- iv. Appropriate sewerage system will be constructed in different parts of the city to remove water logging and keep the environment pollution free;
- v. Construction of a regulating pond near Kallyanpur Pump station will be undertaken; ponding areas within the city will be expanded to combat water logging;
- vi. Construction of sewerage treatment plant of North Dhaka will be undertaken; and
- vii. Construction of community latrines in slums, market places and at the fringe areas of the city will be undertaken.

d. Water supply and sanitation in Chittagong City

- i. To increase the water supply of Chittagong city to cover 90 per cent of its population by the terminal year of the Fifth Plan, the Second Interim Water Supply Rehabilitation Project and extension and expansion of Mohara treatment plant with ancillary works will be completed and water supply projects at Fatehabad will be undertaken;

- ii. The ongoing sewerage projects along with some new ones will be completed; and
- iii. Specific projects for drainage will be undertaken.

e. Tourism

- i. Development of tourism facilities at Madhabkunda, Kuakata, Mujibnagar, Sagardari and in scenic places in Chittagong Hill Tracts, coastal areas and historical places of the country will be undertaken;
- ii. Construction of low-cost hotels, one each at Teknaf and Cox's bazar will be completed; a 4 star hotel is projected for Dhaka to be developed in collaboration with the private sector;
- iii. Involvement by the private sector in major activities of tourism will be encouraged;
- iv. Integrated low cost tourism facilities in collaboration with concerned organisations will be developed;
- v. Herbariums, recreation and amusement centres will be developed;
- vi. Selected char lands in coastal islands will be developed as resorts; and
- vii. Riverine tourism facilities will be set up by the private sector.

f. Fire Service

- i. Modernisation and expansion of fire service and civil defence facilities through procurement of ambulances, fire fighting equipment and vehicles will be undertaken;
- ii. Construction of fire service and civil defence stations in all thana centres will be implemented in phases;
- iii. Training facilities of the Fire Service Department will be modernised and strengthened; and
- iv. Local government bodies will be associated in operation and maintenance of fire service and civil defence facilities.

g. Police Service

- i. Construction of thana bhabans will be implemented in phases;
- ii. Construction of 57 investigation centres at different places will be completed;
- iii. Modernisation of Metropolitan Police Control Room of Dhaka will be undertaken; and
- iv. Required vehicles and communication equipment will be procured.

h. Prison Directorate

- i. Construction/reconstruction of district jails will be undertaken;
- ii. Construction of Central Jail at Kashimpur in Gazipur district will be completed;
- iii. Sanitation and water supply in jails will be improved; and
- iv. Improved ovens and bio-gas plants will be set-up in all jails.

i. Other civil works and services

- i. Construction/reconstruction of union/thana land offices will be implemented in phases;
- ii. Construction of District Registries and sub-registries at thana level will be undertaken;
- iii. Residential accommodation for all district judges will be developed;
- iv. Construction of Supreme Court Annex Building will be undertaken;
- v. Judicial Training Institute will be established;
- vi. Building of union office complexes and auditoriums at district and thana centres and development of growth centres will be undertaken; and
- vii. Settlement of squatters in selected urban areas will be undertaken.

19.3.13 Financial outlay for Fifth Plan

a. **Public sector** : A total of Tk. 49,816.00 million at 1996/97 prices has been earmarked for the implementation of public sector programmes/projects under the physical planning, water supply and housing sector. The programme-wise breakdown of this outlay is shown in Table 19.4.

Table 19.4
Public Sector Financial Outlay for Physical Planning Water Supply and Housing
During Fifth Plan Period
(at 1996/97 prices)

(in million Taka)

Sub-sector wise Programmes	On going Programmes	New Programmes	Total
1. Physical Planning (urban infrastructure improvement activities like land use plans, urban roads, drainage, solid waste disposal, site & services, provision of basic services in the urban slums, etc.)	7,910.00	3,565.00	11,475.00
2. Housing & Institutions (construction of flats for government employees, low cost flats for low income people, office and institutional buildings, etc.)	1,600.00	2,200.00	3,800.00
3. Water Supply and Sanitation (water supply & sanitation activities in the rural and urban areas)	21,220.00	1,826.00	23,046.00
4. Other civil works and services(functional & residential buildings for Ministries of Land, Home, Finance, Commerce, Establishment, Law, Justice & PA, etc.)	9,175.00	1,940.00	11,115.00
5. TA projects	220.00	160.00	380.00
All programmes	40,125.00	9,691.00	49,816.00

Breakdown of projected public sector allocations for various Ministries/Agencies is given in Table 19.5.

Table 19.5
Public Sector Financial Outlay for Physical Planning Water Supply and Housing
During Fifth Plan Period
(at 1996/97 prices)

(in million Taka)

Ministry/Agencies	On-going Programmes/ Projects	New Programmes/ Projects	Total
A. Ministry of Housing and Public Works			
1. P.W.D.			
(a) Public Servants' Housing	800.00	800.00	1,600.00
(b) Govt. Offices and Institutional Buildings	-	800.00	800.00
2. H.S.D	800.00	550.00	1,350.00
3. RAJUK	1,000.00	205.00	1,205.00
4. C.D.A	450.00	205.00	655.00
5. K.D.A	50.00	205.00	255.00
6. R.D.A	300.00	205.00	505.00
7. U.D.D	-	50.00	50.00
8. H.B.R.I	-	50.00	50.00
B. Ministry of Establishment	3,000.00	250.00	3,250.00
C. Ministry of LGRD and Co-operatives (Local Govt. Division)			
9. D./WASA	7,600.00	900.00	8,500.00
10. C/WASA	120.00	280.00	400.00
11. DPHE	13,500.00	646.00	14,146.00
12. Dhaka City Corporation	1,300.00	1,200.00	2,500.00
13. Chitagong City Corporation	160.00	140.00	300.00
14. Rajshahi City Corporation	380.00	400.00	780.00
15. Khulna City Corporation	70.00	200.00	270.00
16. LGED	4,200.00	755.00	4,955.00
D. Ministry of Home Affairs			
17. F.S. and C.D	725.00	250.00	975.00
18. Police Directorate	600.00	150.00	750.00
19. Prison Directorate	3,750.00	190.00	3,940.00
20. Ansar Directorate	350.00	50.00	400.00
E. Ministry of Land	130.00	520.00	650.00
F. Ministry of Finance	-	200.00	200.00
G. Ministry of Civil Aviation and Tourism			
21. Bangladesh Parjatan Corporation	40.00	80.00	120.00
H. Ministry of Law, Justice and PA	580.00	100.00	680.00
I. Ministry of Commerce			
22. TCB	-	100.00	100.00
23. SBC	-	50.00	50.00
Sub-Total: (A+B+C+D+E+F+G+H+I)	39,905.00	9,531.00	49,436.00
TA Projects	220.00	160.00	380.00
Grand Total	40,125.00	9,691.00	49,816.00

b. Private sector : During the Fifth Five Year Plan period, larger involvement of the private sector including NGOs will be encouraged in all areas through necessary policy incentives. An investment of Tk. 180,017.61 million is projected for the private sector. The private sector participation in housing, water supply, sanitation and tourism will be encouraged through policy incentives like tax exemption, credit

support, land allotment, etc. The breakdown of the projected private sector investment in this sector is given in Table 19.6.

Table 19.6
Projected Private Investment in Housing Water Supply Sanitation and Tourism
During Fifth Plan

(in million Taka)

Item	Amount
Housing	160,017.61
Water supply	7,000.00
Sanitation	10,000.00
Tourism	3,000.00
Total	180,017.61

As the recent experience has it, investment in housing and tourist facilities by the private enterprises is likely to exceed the projection.

CHAPTER XX

EDUCATION

20.1 Introduction

20.1.1 Education is the basic need for socio-economic transformation and advancement of a country. It is the prime ingredient of human resource development. In Bangladesh educational development was not adequately geared to meet this human need. The overall literacy rate (7 years and above) in Bangladesh is about 44.3 per cent (1995), the female literacy rate being 28.5 per cent and the male, 50.4 per cent. The gap of literacy rates between the urban and rural areas is very wide – 36.6 per cent in rural and 63.0 per cent in urban areas. As a step towards increasing the literacy rate, universal primary education has been made compulsory. The Constitution of Bangladesh obligates the government to adopt effective measures for (a) establishing a uniform, mass-oriented and universal system of education and extending free and compulsory education to all children to such stage as may be determined by law; (b) relating education to the needs of society and producing properly trained and motivated citizens to serve those needs; and (c) removing illiteracy within such times as may be determined by law. Education plays the most important role for creating trained workforce for a nation. The educated and trained workforce can easily acquire new information and technology and apply them in new situations. In this respect, the contents of education in Bangladesh need some modifications in the context of present day situation taking cognisance of rapidly changing stock of knowledge, particularly in the field of science and technology. More emphasis on scientific and technical education as has been the case during the recent years, will go a long way in enlarging the technological base of economic development and laying foundation of a knowledge based society. To supplement government efforts, there is need for greater participation of the private sector, community and non-government organisations (NGOs).

20.2 Review of Fourth Five Year Plan

Primary Education

20.2.1 During the Fourth Plan, steps were taken for the improvement of primary education and the thrust was on introduction of Compulsory Primary Education (CPE). The major objectives were to ensure (a) optimum use of existing physical facilities and maintaining regional balance in respect of creating new educational facilities, (b) enhanced participation of women at the primary level as teachers, (c) establishment of an effective system of in-service training of primary school teachers, (d) development of primary school curricula, and (e) introduction of academic supervision and administrative inspection.

20.2.2 The original Plan allocation for primary education was Tk.14,281.68 million. The allocation, however, was increased to Tk.24,216.48 million through ADPs and the actual expenditure was Tk.20,307.40 million. The allocation for primary education was in the range of 50-52 per cent of total allocation made for the education sector in the ADPs. The year-wise position of allocation and expenditure is shown in Table 20.1.

Table 20.1
Allocation and Expenditure for Primary Education 1990-95

(in million Taka)

Year	Allocation *	Expenditure *	Allocation **	Expenditure **
1990-91	1,939.16	888.78	1,804.34	826.99
1991-92	3,445.73	1,885.49	3,059.07	1,673.91
1992-93	3,957.76	3,401.96	3,394.01	2,917.38
1993-94	6,285.87	5,817.59	5,315.14	4,919.18
1994-95	8,587.96	8,313.58	7,316.88	7,083.12
Total	24,216.48	20,307.40	20,889.44	17,420.58

*Current Prices

**Constant Prices (1989-90)

20.2.3 By 1995, a total of 59,894 primary schools were functioning. During the Fourth Plan, 9398 Ebtedayee madrashas, 394 NGO primary schools, 53 primary schools attached to PTIs, 1566 primary schools attached to secondary schools and 1628 kindergarten/ primary schools were set up. Year-wise number of government and non-government primary schools are shown in Table 20.2.

Table 20.2
Number of Government and Non Government Primary Schools 1990-95

Year	Total	Government	Non-Government.	
			Registered	Non-Registered
1990	47,241	37,655	6,266	3,320
1991	49,539	37,694	8,684	3,161
1992	50,280	37,706	8,885	3,689
1993	52,886	37,706	8,994	6,186
1994	56,165	37,710	14,807	3,648
1995	59,894	37,710	17,151	5,033

20.2.4 Enrolment in primary education increased from 12.1 million (5.4 million girl students) in 1990 to 17.3 million (8.18 million girl students) in 1995 along with the rise in completion rate from 41 per cent in 1990 to 60 per cent in 1995. Food for Education programme was introduced for increasing enrolment and reducing drop-out rates among the poor children. Year-wise enrolment is shown in Table 20.3.

Table 20.3
Enrolment of Students in Primary Schools 1990-95

Year	Total	Boys	Girls	Percentage of Girl Students (%)
1990	1,20,51,172	66,62,427	53,88,745	44.71
1991	1,26,35,419	69,10,092	57,25,327	45.31
1992	1,30,17,270	70,48,542	59,68,728	45.85
1993	1,40,67,332	75,25,862	65,41,470	46.50
1994	1,51,80,680	80,48,117	71,32,563	46.98
1995	1,72,84,113	90,94,489	81,89,624	47.38

20.2.5 For overall development of primary education, three major aided projects, namely, (a) Development of Primary Education in Dhaka, Rajshahi and Khulna Divisions, (b) Development of Primary Education in Chittagong Division, and (c) Development of

Curricula and Text Book Board at the Primary Level of Education were implemented under the General Education Projects (GEP). Under these projects 1,134 low cost schools were constructed, 5,082 government primary schools reconstructed and 3,932 primary schools and 53 existing Primary Teachers Training Institutes repaired. Besides, 2,517 flood damaged and 5,847 cyclone damaged schools were reconstructed and repaired respectively.

20.2.6 In addition, the government with its own resource reconstructed 7,232 and repaired 580 non-government primary schools.

20.2.7 Satellite school: An experimental satellite school programme which was launched with grades 1 and 2 nearer to the door steps of the younger children achieved marked success. These two-class schools staffed by local female teachers and managed by local school management committees accounted for about 100 per cent attendance.

20.2.8 Text books: Text books were and are still being supplied free of cost to all students of the primary schools. During the Plan period, a total of 77.29 million sets of books were distributed to the students.

20.2.9 Training: Provision was made for in-service training of the primary school teachers with a view to developing their professional skills. The cluster training programme was in operation for primary school teachers under direct supervision and guidance of the Assistant Thana Education Officer. A nation-wide curricula dissemination training programme, covering orientation of both government and non-government primary schools, was implemented with the purpose of providing adequate exposure to the teachers so that they could translate the newly introduced curricula objectives into reality.

20.2.10 NGO activity: A total of 3,10,000 persons were given non-formal education through NGO-run centres and 400,000 children benefited under the school attractiveness programme upto June 1995. These were managed by NGOs and local school management committees (SMCs). These programmes have been under implementation in 689 schools in 10 thanas.

Non-formal/Mass Education

20.2.11 One of the objectives of the Fourth Plan was to reduce mass illiteracy. Allocation for the non-formal education was Tk.1,235.70 million while Tk. 827.30 million only could be provided through ADPs. Four projects were undertaken, of which two were completed and one was dropped. A sum of Tk.525.90 million was spent during the Plan period. The Plan inherited a project titled "Mass Education Programme" as a spill-over project. One of the objectives of the project was to increase literacy rate of 11-45 years age group from 30 per cent to 60 per cent by the year 2000 in the project area. Under the project, a total of 3,67,660 illiterates were made literate during the Plan period. Another project titled "Expansion of Integrated Non-formal Education Programme" was launched and the objective was to institutionalise a comprehensive non-formal education system in the country. The programme was implemented in 69 thanas of the country. Under the central organisation of Integrated Non-formal Education Programme (INFEP), a post of district co-ordinator was created at the district level to monitor and supervise field programmes in each district. About two-thirds of the non-formal education programme was implemented through NGOs and one-third under the direct control of district co-ordinators. A total of 192 NGOs were involved in implementing the non-formal education programme. Besides this, under the aegis of district administration, a programme named 'Total Literacy Movement (TLM)' was initiated in Lalmonirhat and Bhola districts. Other activities of the project were development of primers,

teacher's guide, teacher's training manual, and supervisor's training manual. Training programmes were undertaken for the centre supervisors, teachers and librarians.

Secondary Higher Secondary University and Technical Education

20.2.12 The Fourth Plan allocated a sum of Tk.11,062.70 million to finance various programmes of secondary, higher secondary, university and technical education under the Ministry of Education (MOE) and the amount spent was Tk.13,413.20 million at current prices. The break-up of allocation and expenditure is shown in Table 20.4.

Table 20.4
Fourth Plan Allocation and Expenditure on Higher Education

(in million Taka)

	Plan Allocation (base year prices)	ADP Allocation (current prices)	Expenditure (current prices)
Secondary education / Higher Secondary education	5,868.70	9,521.00	9,375.60
University education	3,279.90	2,303.20	2,289.10
Technical education	830.00	1,232.51	8,04.40
Others	1,084.10	1,394.20	9,44.10
Total	11,062.70	14,450.91	13,413.20

20.2.13 Large scale expansion programmes at the secondary and higher secondary levels were undertaken to accommodate increased number of students resulting from the introduction of compulsory primary education, and subvention to girl students. The enrolment at the secondary level increased from around 3.0 million in 1990 to 4.4 million in 1995 and the number of institutions increased from 10,448 to 13,255 during the same period. Enrolment at the college level also increased from 0.9 million to 1.46 million and the number of colleges increased from 848 in 1990 to 1,667 during this period.

20.2.14 The Fourth Plan also included educational projects of the Ministry of Defence. These were: (a) development of Bangladesh National Cadet Corps (BNCC), (b) expansion and development of 10 Cantonment Public Schools and Colleges and (c) establishment of Dhaka (for girls only), Rajendrapur, Mymensingh and Sylhet Cantonment Public Schools and Colleges. The projects were not completed in full in the Plan period.

University Education

20.2.15 This sub-sector received an allocation of Tk.2,303.20 million through ADPs as against a Plan allocation of Tk.3,279.90 million. The actual expenditure amounted to Tk.2,289.10 million (at current prices). The programme of work was tilted towards construction rather than academic improvement. Enrolment at the university level increased from 34,902 in 1990 to 60,000 in 1995. The academic activities at the Khulna University and the Shahjalal University (Sylhet) got underway with the targeted enrolment of 890 and 1800 respectively during the Fourth Plan. Both the universities could achieve the target by June 1995. For other general universities, there were nominal increases in the enrolment while in the two technical universities (Bangladesh Agricultural University and Bangladesh University of Engineering and Technology), the number of students remained as they were. The National University was established during the Plan period with a view to reducing pressure on the general universities. It was mandated for conducting examinations/awarding degrees,

inspection, supervision and evaluation for raising the quality/standard of education at the university level.

Technical Education

20.2.16 In order to develop skilled technical manpower through the implementation of technical and vocational education (TVE) programme, the Directorate of Technical Education implemented 13 projects during the Fourth Plan. An amount of Tk.804.40 million was spent at current prices against the ADP allocations of Tk.1,232.51 million. The projects, following their completion, created employment opportunities for the technical/trade graduates both in the domestic and overseas markets.

20.2.17 The intake capacity of students in the SSC (vocational) courses increased from 2,620 in 1990 to 7,260 in 1995, while that at the diploma level courses increased from 3,920 to 4,460. Enrolment capacity at the degree level, however, remained unchanged (in textile 50, leather 25 and technical teacher's training 120).

Religious Education

20.2.18 A total of eight projects were taken up for implementation at a cost of Tk.817.43 million. Allocation in the Fourth Plan for this sub-sector was Tk.370.00 million and an amount of Tk.338.40 million (at current prices) was actually spent. During the Plan period, the Imam Training Project was implemented under which 7,020 Imams were trained. Under mosque-based integrated non-formal education (mass literacy) project, as many as 1,152 centres were established and the number of learners rose to 94,590 against a target of 69,120. Besides, 2,645 mosque libraries were set up against a target of 3,200 and 4 volumes (12-15th) of the Islamic Encyclopaedia were published. Under the Islamic Cultural Centre project, a total of 18,418 programmes (seminars /symposia) were arranged, and 1,720 book clubs having 47,988 books were established in various districts.

20.3 Two Years Between Fourth and Fifth Plans (1995-97)

20.3.1 The 1995/96 ADP included as many as 63 on-going/spill-over projects of the Fourth Plan and 25 new projects making a total of 88 projects. Total allocation for the year was Tk.14,024.23 million and an amount of Tk.13,050.00 million was spent. In the ADP 1996/97, an allocation of Tk.15,836.80 million was made for 98 projects. Programmes for primary, secondary and vocational/technical education were accorded priority. A project for setting up six Science and Technology Universities was also included. During the year 1996/97, as many as 49 projects were expected to be completed, while 48 projects might spill over to the Fifth Plan.

20.4 Fifth Five Year Plan

20.4.1 The programmes for primary and secondary education will be continued in the Fifth Plan with the ultimate aim of raising the literacy rate and the quality of education at all levels. The government is committed to raise the literacy rate to 100 per cent within about ten years beginning from 1995 with a mid-term target of achieving about 70 per cent by the year 2002. To this end, compulsory primary education programme will be made more effective through local government and community support. The organisation and management of schools at local level will mean creation of a participatory role forging working links between home, school and community along with developing community services with commitment of resources. Besides, more emphasis will be given on technical and vocational education programmes at secondary/higher secondary levels and also at the university level to enlarge the technological base of economic development.

20.5 Objectives of Fifth Plan

20.5.1 The objectives of the Fifth Plan pertaining to education are to:

- a. attain about 70 per cent literacy rate by the year 2002 in order to achieve 100 per cent within 10 years;
- b. bring all children of age group 6-10 under the formal primary educational stream within shortest possible time;
- c. make institutional arrangement for imparting technical and vocational education at the thana level;
- d. enlarge and upgrade the base of general/science/technical/vocational education at all levels of the education system and lay the foundation of a knowledge-based society so as to address development challenges more effectively;
- e. make the functional character of technical/vocational education and training more job-oriented through constant and appropriate linkages with the job market, both within and outside the country; turn knowledge into action in agriculture and industry and in other fields of production;
- f. ensure optimum use of existing educational facilities at all levels;
- g. develop higher institutions of learning, viz., the general and professional universities and the institutes of technologies as centres of excellence;
- h. utilise the multi-sectoral potentials of education with respect to other objectives: social awareness, entrepreneurship and community feeling;
- i. maintain regional balance in respect of development of educational facilities with particular attention to the northern region and the hill tracts areas;
- j. enhance participation of women in every sphere of education as well as to reduce the gap between facilities provided for male and female education;
- k. encourage private sector and community participation in setting up educational institutions;
- l. review the policy of nationalising secondary schools;
- m. improve management of educational institutions through involvement of local bodies;
- n. modernise and improve religious/madrasha education with science and technology bias;
- o. improve physical and health education at primary and secondary levels;
- p. inculcate social consciousness among the students about their duties and responsibilities as good and productive citizens;
- q. review the system of public examinations conducted by the Boards at secondary and higher secondary levels;
- r. make admission in the higher education means-blind and merit-based as well as cost-effective; and
- s. expand specialised/professional education and training in all relevant fields.

20.6 Strategies for Fifth Five Year Plan

20.6.1 For attaining the above objectives, the following will be the main strategies:

- a. the highest emphasis will be on primary education; to bring all villages and mahallas (in urban areas) under the cover of compulsory, uniform and free primary education; simultaneously, with building of permanent schools, the black-board/satellite school approach based on provision of teachers and community support will be followed so that a village or a mahalla does not have to await construction of school buildings before its children receive primary education;

- b. a national movement for total literacy will be undertaken; government resources will be supplemented in this process by efforts of NGOs, communities and beneficiaries;
- c. education at secondary and higher levels will be attuned towards science and technology and vocationalisation; to this end, changes in curricula, building of laboratories and related teaching fixtures and equipment and merit-based admission will be ensured;
- d. massive and continuous training of teachers at primary and secondary levels within the country will be undertaken;
- e. local government bodies will be increasingly involved in management of primary and secondary schools and institutions;
- f. the National Curricula and Textbook Board will be professionally strengthened in order to enable them to update the S.S.C and H.S.C level syllabi, continuously keeping pace with the constant change and modernisation trends of course contents;
- g. education extension and management training for teachers and educational administrators will be organised on strong footing;
- h. higher seats of learning such as universities will develop themselves into important centres of fundamental and applied research; all these are essential in the interest of discharging their national responsibilities for the development and acquisition of technology and advanced skills; accountability of performance of higher seats of learning such as universities and institutes of technologies will be established and sustained;
- i. research and development in the universities, particularly in the science and technology universities, will be linked with the productive sectors; six new universities will be set up exclusively for advancement of science and technology in the country; massive training of the university teachers in centres of excellence outside the country will be undertaken;
- j. various professional education and training programmes will be developed through proper management and expansion of the existing facilities of Flying Club, Seamen's Training Institute, Institute of Cost and Management Accountants, Institute of Chartered Accountants, Institute of Hotel Management, Institute of Engineers of Bangladesh (IEB), Bangladesh Institute of Administrative Management (BIAM) and Bangladesh Institute of Management (BIM); besides, training on computer aided design and production (CAD/CAP) will be introduced;
- k. performance of institutions and teachers will be evaluated and linked to government's financial support;
- l. at primary level, consideration will be given to optimum utilisation of existing facilities as much as possible through proper planning;
- m. appropriate steps will be taken to reduce drop-out rate and minimise its incidence at the primary and secondary levels;
- n. colleges in the greater district centres will be developed for imparting post-graduate level education, especially in science and technology;
- o. there will be a multi-directional approach to combat illiteracy; non-formal education will be expanded along with strengthening the government mass literacy centres, mobilising NGOs and utilising the skill development/income generating efforts of the agencies outside the Primary and Mass Education Division; NGOs and private organisations will be involved in a bigger way for the improvement of primary education which will include setting up of Ganobidyalayas/community schools at village level;

- p. secondary schools and colleges will be required to develop and adhere to a minimum standard of laboratory and library facilities as well as qualified teaching staff; such minimum standards will be laid down by the educational administration through appropriate academic and institutional arrangements; and
- q. academic supervision and administrative inspection over the schools and colleges will be strengthened and streamlined through restructuring of relevant organisations in order to bring about a qualitative impact on secondary and college education.

20.7 Some Policy Issues

20.7.1 Some policy issues concerning development of education at all levels will need to be debated and decided upon in the Fifth Plan period. These are:

- a. **Resource availability:** Resources available for education are still inadequate compared to the requirement, particularly the commitments made for compulsory primary education, enlargement of the base of science and technical/ vocational education. Efforts should be made to involve NGOs, private sector and local communities in education programmes to bridge the resource gap as much as possible.
- b. **Community participation:** Development of primary education hinges on the positive response from the community which can be best administered through local government supervision and management. The responsibility in this respect should be entrusted to local government bodies. Likewise, management of secondary/higher secondary schools and colleges should be entrusted to the Thana Parishads and Zila Parishads respectively.
- c. **Excellence and equity:** Continuance of highly subsidised higher education coupled with unrest and indiscipline in campuses needs to be contained in national interest. To this end, in addition to delinking student organisations from the political parties, means-blind, merit-based admission supported by extensive financial support for the needy will have to be taken up. Loan for higher education from nationalised and/or private banks will be explored.
- d. **Gender specificity:** In view of co-education existing at the primary level and widespread at the secondary level, sporadic programme for setting up gender specific higher educational institutions will be reviewed.
- e. **Job orientation:** Technical and vocational education should be so restructured that it becomes job-oriented and thereby, the beneficiaries can get employment inside and outside the country. The base of technical and vocational education should be widened in conformity with the market demand.
- f. **Female teachers:** Recruitment of teachers in primary and secondary schools should be merit-based. At least 70 per cent of the primary level teachers will be female and recruited locally.
- g. **System balance:** The imbalance of teacher-student ratio at all levels and the shortage of science/trade teachers should be removed for ensuring quality education. Likewise, steps should be undertaken at the institution level to optimise the ratio of engineer-technician and doctor-nurse.
- h. **Modernisation of madrasa education:** The mode of madrasa education at Dakhil and Alim levels need critical review for its modification with science and technology bias in line with S.S.C/ H.S.C levels so as to ensure a minimum acceptable standard of education.

- i. **Food for education:** Of late, Food for Education Programme has been undertaken to cover the poor section of the people who cannot send their children to school. Management of the programme demands critical review before further expansion.
- j. **Equity and equality:** For developing merit-based quality education at secondary and higher levels, means-blind and merit-based admission, coupled with extensive financial support for the needy, will have to be undertaken in case of education in cadet colleges, reputed university colleges and similar institutions.

20.8 Primary Education

20.8.1 The government has adopted a national plan of action for 'Education for All' in Bangladesh. Primary education has been made compulsory with the target of (a) increasing gross enrolment to around 110 per cent and (b) ensuring the completion rate upto at least 75 per cent by the end of 2002. Adequate physical facilities will have to be created to make the programme successful. Efforts will be made to set up facilities at the village level involving the community and NGOs along with the government programmes at local level. In order to bring every child in the educational stream to achieve the national objective by the year 2002, it will be necessary to establish a primary school in each and every village as per requirement.

20.8.2 Problems: The programme for bringing all primary age group (6-10 years) population under the cover of primary education and to retain them for completion of the five year cycle are beset with a few problems. These are:

- a. shortage of schools within accessible distance;
- b. shortage of class rooms and over-crowding;
- c. lack of proper teaching aid;
- d. shortage of furniture and other supplies;
- e. lack of equipment, books and supplies for students;
- f. lack of professional skills of teachers;
- g. weak community involvement and lack of awareness and interest of parents;
- h. unattractive teaching/learning environment;
- i. shortage of teachers; and
- j. teacher absenteeism.

All these problems will have to be solved in a co-ordinated way.

20.8.3 Objectives: For achieving the goal of Education for All (EFA), the steps will be to:

- a. increase gross enrolment to around 110 per cent (net 95 per cent) by the year 2002 with particular emphasis on girl enrolment;
- b. increase completion rate of primary education to at least 75 per cent by the year 2002;
- c. improve the quality of teacher's training, supervision, management and monitoring system;
- d. revise and update curricula with a view to making them relevant to the needs;
- e. set up an effective information base at the thana level and develop appropriate linkage with district, division and central authorities;
- f. undertake innovative programmes and conduct research and evaluation;
- g. enhance capability of National Academy for Primary Education (NAPE), Directorate of Primary Education (DPE) and Primary and Mass Education Division (PMED);
- h. reduce gender gap and regional imbalances; and
- i. inculcate social consciousness among the children about their duties and responsibilities as good citizens.

20.8.4 Strategies: In order to achieve the objectives of primary education in the Fifth Plan period, the following will be the elements of an appropriate strategy:

- a. Every village will have a primary school. Till such time construction of primary school is completed by the government, the “Black-Board/Satellite School Approach” of teaching will be followed.
- b. Community will be encouraged/sensitised to establish satellite /feeder schools and new primary schools in the still unserved villages/areas. Community will provide land while the government will construct the school building and provide subvention. The community will appoint teachers and exercise the power of hiring and firing as and when necessary.
- c. Double shifts will be introduced in every school where the number of students will be more than 500 and at least 150 more students remain to be enrolled.
- d. Schools established by the community on their land and having minimum enrolment of 150 students will receive provisional registration as a matter of course.
- e. Textbooks will be supplied free of cost to all children at primary level.
- f. Food for Education or its effective alternative will continue and will be extended after careful review of the disadvantaged areas in a phased manner.
- g. Learning materials, e.g., exercise books, pencils, etc., will be distributed to the children in a phased manner.
- h. Resource Centres at thana level will be established to make the teacher's training and other training programmes cost-effective and sustainable.
- i. The National Academy for Primary Education (NAPE) will be professionally strengthened for undertaking policy research as well on primary education.
- j. For improving the quality of primary school teachers, a system of distance education programme will be developed with a view to imparting in-service training within the minimum time. Teachers of registered non-government primary schools will also be covered by the training programme.
- k. Mass media will be used extensively for social mobilisation for the cause of primary and mass education.
- l. Inspection, supervision and accountability will be strengthened by involving local government bodies, especially Upazila Parishads.
- m. Programmes for physically handicapped and mentally retarded students will be expanded.
- n. Nutritional and health care programmes will be introduced and expanded.
- o. NGOs/private sector will be encouraged to set up innovative programmes at their own cost.

20.8.5 Programmes: The following programmes have been identified to achieve the objectives set for primary education:

- a. A primary school will be established in each village as may be required.
- b. A total of 47,000 additional classrooms in the existing government primary schools are expected to be built. Additional classrooms will be provided depending on the number of students. The ultimate aim is to have at least five class rooms in each school.
- c. A total of about 20,000 satellite schools are expected to be established for teaching in classes I and II with community female teachers within the catchment area of each government primary school. Some of the satellite schools will be developed later into primary schools in consideration of local needs.

- d. About 5,000 community-based non-government primary schools are expected to be established in areas without school with direct participation of the community; the government subvention to the teachers' salary will be given for these schools.
- e. Nearly fifteen thousand government primary schools are expected to be reconstructed/ renovated/ repaired.
- f. Five thousand registered non-government primary schools are expected to be reconstructed/ renovated/ repaired; government support to teachers' salaries will be continued.
- g. For obtaining reliable and dependable data on various activities on primary education, an effective system of information base will be established in each thana, district and division.
- h. Expedient recruitment of required teachers will be made. Recruitment of teachers will be from amongst the qualified females to reach at least 70 per cent share. The cluster or sub-cluster based training of teachers will be conducted and reviewed periodically. Every district will have a PTI for training of teachers. Thana Resource Centres will be used for refresher courses and continued training.
- i. A Distance Education Unit will be set up in the Directorate of Primary Education (DPE) for development and production of audio-visual materials to supplement the training activities of primary education sub-sector.
- j. National Academy for Primary Education will be strengthened and additional facilities will be provided to conduct research, training and evaluation in the field of primary education.
- k. Coverage of the Food for Education or its desirable alternative programme will be increased.
- l. One room at Thana Training and Development Centre (TTDC) will be constructed for setting up a resource centre for primary education.

20.8.6 Financial outlay: The above programmes will be carried out through a number of projects. There will be one umbrella project, named, Primary Education Development Programme (PEDP) which will support major schemes. In the Fifth Plan period, the estimated outlay for the primary education is Tk.68,594.20 million including a spill-over requirement of Tk.1,714.00 million. Under the revenue budget, it is estimated that an amount of Tk.66,800.00 million will be required to meet the cost of subvention to teachers of non-government primary schools during the Plan period.

20.9 Mass Education

20.9.1 It is difficult to bring everyone within the net of formal schooling system and education should not be confused with schooling per se. The total educational system consists of a series of institutions, functionally linked to each other, which are engaged in imparting knowledge, skill and competence. The educational needs of illiterate adults and out-of-school youths and children are different. There are still about 30 million adult illiterates in the country, even after organising major mass literacy programmes/projects during the last six years.

20.9.2 The purpose of non-formal education, besides empowering the learners with skills related to literacy, numeracy and communication as well as internalising socio-cultural traits, should extend to such areas as emotional and physical well-being, self-realisation, creative and aesthetic expression, basic technological skill and orientation, entrepreneurial traits and leadership skills. Primary and Mass Education Division (PMED) has already drawn up programme schedules and standards accordingly for implementation involving the local

administration and NGOs under the aegis of the Directorate of Non-formal Education (DNFE). The on-going major projects/programmes with a target of 34.34 million adults will be continued with due emphasis on area-based Total Literacy Movement (TLM) type cost-effective approach. In addition, some other new projects during the Fifth Plan for adult literacy will be taken up to reach the Plan target.

20.9.3 Objectives: The objectives of mass education during the Fifth Plan will be consistent with the overall objective of achieving the goal of 'Education for All' (EFA). The objectives are to:

- a. increase literacy rate of adults (15 years and above) to 80 per cent by the year 2002;
- b. empower learners with technological skill, entrepreneurial traits and leadership skill;
- c. empower learners with skill related to literacy, numeracy and communication;
- d. reduce gender gap in literacy rate in both rural and urban areas;
- e. develop continuing education programme for the neo-literates; and
- f. reduce disparity in literacy rate between different areas.

20.9.4 Strategies: These objectives will be achieved by adopting the following strategies:

- a. A massive social mobilisation programme will be initiated; among others, social workers and political activists will be involved in the process.
- b. Area-based Total Literacy Movement (TLM) approach will be adopted by involving people from all walks of life including school teachers, college students, community leaders, extension workers and professional groups; local government bodies will be involved effectively in this approach; this will strengthen the foundation of knowledge in the society and put that knowledge into action.
- c. Non-government organisations will be involved in eradicating illiteracy.
- d. Local community/voluntary organisations will be encouraged to participate in the literacy drives.
- e. Wide publicity and extensive use of mass media will be ensured.
- f. Literacy programmes will be integrated with income generating activities/micro-credit programmes of other ministries/divisions/directorates/ agencies.
- g. A National Council for Primary and Mass Education will review the progress of implementation of mass education programme.
- h. Unemployed educated youth, retired personnel, members of VDP/Ansars, teachers and community leaders and other agents in the society will be recruited as literacy teachers.
- i. Students passing leisure time after public examinations will be involved in mass literacy programme.
- j. Efforts will be made to generate funds for non-formal education by mobilising local financial resources.
- k. Monitoring, inspection and evaluation will be strengthened for ensuring quality.
- l. Performance audit will be introduced to make the programmes transparent.
- m. Local government authorities/institutions will be involved in enhancing the coverage of mass literacy programme with target population as parts of their annual development activities.
- n. For ensuring accountability of the field level officials in mass literacy programme, the responsibility will be given among others to the DCs and the TNOs.

20.9.5 Programmes: To achieve the above objectives, following programmes will be undertaken during the Fifth Plan Period:

- a. The entire country will be brought under TLM spearheaded at district level.
- b. Literacy centres will be established in each village; accommodation may be provided in the primary school located in the village.
- c. Training programmes will be carried out by the teachers of literacy centres. Besides, supervisors and other personnel involved in planning and implementing the literacy programmes will be trained.
- d. MIS unit of the Directorate of Non-Formal Education will be strengthened.
- e. Existing facilities of Thana Training and Development Centres (TTDC) will be used as resource centres for non-formal education to be disseminated by various nation building departments/NGOs/CVOs/PVOs.
- f. Appropriate facilities will be created for proper management and administration of non-formal education.
- g. Competition will be introduced among the administrative units/communities.

20.9.6 Financial requirement: The estimated total outlay for non-formal education will be about Tk.14,000.00 million including a spill over cost of Tk.3,959.20 million. At least 10 per cent of public sector allocation, i.e., Tk.1,400.00 million is expected to be mobilised by the community/private sector in the literacy drive during the Plan period.

20.9.7 Regional co-operation for education for all (mass education): Regional co-operation for EFA has been emphasised in the framework of action within the SAARC countries. This is important not only for exchange of information, experience and expertise but also for technical and policy consultation and development of strategy. The recommended actions for regional co-operation for Education For All are:(a) formation of a literacy group comprising members from each country to review EFA programmes, (b) establishment of Regional Institutes for Adult and Non-formal Education, (c) holding annually a seminar on policy and programmes for EFA and (d) exchange of curricula and teaching materials for EFA. Besides, establishment of regional education information system has been recommended for exchange and dissemination of information and documentation of curricula contents, learning resource materials, test items, monographs on research findings, case studies and innovative developments. The recommended plan of action will be followed up during the Fifth Plan period.

20.10 Secondary and Higher Secondary Education

Secondary Education

20.10.1 Among the prevailing tiers of education, secondary and higher secondary schools and colleges are performing vital roles in developing human resources. At present 6.33 million students are enrolled in the government and non-government secondary schools and this number is increasing day by day. The existing poor physical facilities of the government and non-government schools cannot cope with the increasing number of students. As a result, the secondary level schools are facing acute problems of physical facilities such as class room accommodation, libraries and laboratories, science equipment and chemicals, books, etc. So creation of additional physical facilities along with development of teaching materials will be given priority during the Plan period to both the government and non-government schools. Since 1991, about 6,000 schools have been provided with 3 class rooms each along with furniture and teaching materials. In the Fifth Plan period, it is expected that 7000 more schools will be provided with 3 class rooms and teaching aids/materials. Realising the

practical difficulties posed by high enrolment at secondary/higher secondary levels, double shift of schooling will be introduced gradually both in the urban and selected rural areas. The system of double shift of schooling will ease the situation to a great extent. In addition, each secondary school will be developed for teaching at grades xi and xii in the fields of science and technology.

20.10.2 Further development of science education with improved science laboratory/multipurpose room endowed with equipment and books along with training of teachers will be continued. Courses on agriculture and computer science at grades ix and x will be introduced to make education at this level job-oriented. This will enable students to be self-employed if they drop out from schools.

20.10.3 The existing public examination system at the secondary/ higher secondary levels will be critically reviewed in the context of present problems and gradually reform measures will be introduced for qualitative improvement at these levels of education. In this context the role of the existing boards will be reviewed.

20.10.4 Objectives: The objectives pertaining to the secondary and higher secondary education are to :

- a. enhance the quality of education by updating the curricula and providing better teaching and learning materials;
- b. expand and improve the quality of science/English language education at secondary and higher secondary levels;
- c. improve the efficiency and standard of teachers through intensive training;
- d. reduce the gap in educational facilities between urban and rural areas;
- e. expand infrastructural facilities such as class rooms, laboratories, etc.;
- f. increase the enrolment in secondary and higher secondary education levels, especially of girl students;
- g. introduce suitable job-oriented subjects at the secondary level to enable students to be self-employed;
- h. improve supervision and management of secondary schools; and
- i. review the present examination system and introduce reforms.

20.10.5 Strategies: In order to achieve the above objectives of secondary and higher secondary education, the following strategies will be followed:

- a. efforts will be made for optimum utilisation of existing facilities through introduction of double shifts; if necessary additional facilities will be created;
- b. teachers training facilities, both in-service and pre-service, will be improved and modernised;
- c. equipment and teaching aids will be provided to improve the quality of teaching;
- d. efforts will continue to update curricula and syllabi and improve the quality of textbooks; and
- e. free tuition and stipend will be provided to unmarried girl students especially in rural areas.

20.10.6 Programmes: The following programmes will be undertaken to achieve the aforesaid objectives:

- a. nearly 7,000 schools are expected to be provided with 3 (three) additional class rooms and teaching aid/materials;
- b. double shift of schooling is expected to be introduced gradually both in urban and selected rural schools;

- c. laboratory facilities of secondary schools will be modernised/developed to facilitate teaching of science and technology;
- d. facilities are expected to be created for introduction of computer science in secondary and higher secondary level;
- e. non-government women colleges at district levels (where there is no government women college) are expected to be nationalised;
- f. free tuition and stipends for unmarried girl students of grades vi to x will continue along with the introduction of free tuition and stipend for girl students of grades xi and xii; and
- g. repair and renovation of secondary schools, madrasa and colleges will continue.

Madrasha Education

20.10.7 Soon after the liberation, steps were taken by the government to modernise the madrasa education. But much needs to be done for upgrading the standard to a desired level. There are about 5,000 madrasas in the country and these institutions have in their rolls about 18,00,000 students. Assessing the needs of madrasa education, 3 new projects for modernisation and improvement of madrasa education are expected to be undertaken during the Plan period. Moreover, 3 spill-over projects are expected to be completed within the Plan period. Under these projects, class rooms/science laboratory facilities along with teaching materials will be developed. Given the constitutional mandate, madrasa education at the primary level will adopt the curricula followed in normal primary schools. Appropriate steps will be taken to bring the madrasa system of education qualitatively at par with the rest of the education system during the Plan period.

College Education

20.10.8 In this tier, about 1,000 colleges are imparting higher secondary and higher education to about 5,00,000 students all over the country. Among these colleges, 233 colleges are government and the remaining ones are private. Since the liberation, a good number of projects were implemented for repair/rehabilitation and expansion of these colleges. However, the facilities provided are still insufficient to cope with the increasing number of students, particularly increased enrolment of female students following the female stipend programme. Projects will be undertaken for providing more infrastructural facilities to both the government and the non-government colleges within this Plan period. More and more emphasis will be given on education in scientific and technological discipline. In addition, 10 government colleges and 64 model schools are expected to be taken up for improvement of their standards as centres of excellence at par with the cadet colleges.

20.10.9 To encourage female students to attend colleges in large numbers, separate colleges for women will be set up in the remaining 20 districts of the country where no government women college exists. To this end, 20 non-government colleges in those districts will be nationalised during the Plan period in phases. Depending on the social need, these colleges may be transformed into co-educational institutions subsequently.

Female Education

20.10.10 To promote female education all over the country, extensive financial support for secondary level female students was introduced in 1994. The coverage under this programme was further extended during the last 2 years. The outcome of this programme is quite satisfactory. About half of all secondary students are now females. This programme will be sustained to raise female education and enhance the number of female graduates. As this programme is going on satisfactorily, stipend and free tuition for girl students upto grade xii

will also be introduced during the Plan period. One of the conditions of availability of stipends will be that the girl students will not marry before the age of 18 in conformity with the prevailing law. Along with the rise in the number of female students, recruitment of female teachers will receive preference in the secondary/higher secondary schools.

20.10.11 Scholarship and others: The cornerstone of educational support system will be need and performance based. To this end, while decreasing the extent of subsidy to the public education at post secondary levels, corresponding increase in financial support will be given to equalise opportunities for all.

20.10.12 Financial outlay: The government, at present, is giving high emphasis on improving the quality of education along with creation of physical facilities. Therefore, setting up of libraries with books and journals, procurement of laboratory equipment, etc., will be provided for. Besides, the female stipend programme and the existing scholarship system at different levels of education will be continued. Keeping these in view, the outlay for secondary/higher secondary level is estimated at Tk.31,204.40 million for the Plan period.

20.10.13 Physical programmes: Major physical programmes of the Fifth Plan for secondary and higher secondary level education are shown below in Table 20.5.

Table 20.5
Estimated Physical Programmes for Secondary and Higher Secondary Education

No.	Item	Position in 1990	Base Year 1997	Terminal Year 2002
1.	No. of secondary schools	10,448	13,526	16,686
2.	No. of students enrolled in secondary schools	29,93,730	63,30,325	89,68,450
3.	No. of intermediate colleges	367	766	925
4.	No. of students in intermediate colleges	1,43,304	2,05,421	2,49,790
5.	No. of degree colleges	481	768	924
6.	No. of students in degree colleges	2,55,451	3,72,489	4,59,958
7.	No. of students enrolled in degree colleges (intermediate section)	4,25,157	6,82,039	8,61,656

20.11 Cadet Colleges and Cantonment Public Schools and Colleges

20.11.1 In these institutions under the Ministry of Defence, students are enrolled at the rate of 50 annually in each of the existing ten cadet colleges (9 for boys and 1 for girls). These offer general education and limited para-military training from classes VII to XII. Under the Bangladesh National Cadet Corps (BNCC), para-military training is also imparted to the students of higher secondary and tertiary levels. Besides this, there are ten cantonment public schools and colleges where 30 per cent of students are the children of armed forces personnel and the remaining 70 per cent of others living in and around cantonment areas.

20.11.2 The programme during the Fifth Plan will include further expansion of the existing facilities of the cadet colleges, cantonment public schools and colleges. Necessary provision for additional intake of 150 students in each of 10 cadet colleges will be made. The cost of education per student in these specialised institutions is currently under review of the government. Appropriate steps for cost rationalisation will be undertaken and intake of students will be increased as far as practicable without affecting the quality of education. The cadet colleges will operate as centres of excellence and admission to these colleges will be open and strictly on merit basis. Adequate financial assistance will be provided to the poor

and meritorious students to equalise educational opportunities for all.

20.11.3 Financial outlay: To implement the aforesaid programmes during the Plan period, an estimated outlay of Tk.791.50 million (including a spill-over cost of Tk.291.50 million) has been proposed for educational institutions under the Ministry of Defence.

20.12 University Education

20.12.1 In Bangladesh, historically the universities, particularly general universities, have been developed on lines of the British universities and the engineering and agricultural universities on lines of the American ones. At present there are 11 universities in Bangladesh in the public sector with an enrolment of 2,04,717 students (including the Open University). Till date, 16 private universities have been permitted to operate and offer courses. The number of students and teachers of all these universities as on 31st December, 1996 are shown in Table 20.6.

Table 20.6
Students and Teachers of Universities of Bangladesh
(on 31st December 1996)

Sl.No.	University	No. of Students	No. of Teachers
1.	Dhaka University	29,351	1,326
2.	Rajshahi University	27,241	728
3.	Chittagong University	18,000	530
4.	Bangladesh Agricultural University	6,000	416
5.	Bangladesh University of Engineering and Technology	5,600	450
6.	Jahangirnagar University	5,325	359
7.	Islamic University	5,000	170
8.	Khulna University	1,200	116
9.	Shahjalal University of Science and Technology	2,000	203
10.	Open University	105,000	87
11.	Private Universities (16)	4,059	384

Note: National University is not included in the above Table.

20.12.2 The National University is entrusted with the responsibility of affiliating, supervising and conducting examinations of about 933 degree colleges all over the country. The present strength of students at graduate and post-graduate levels in colleges under the National University is more than 5,00,000. Some of the selected colleges under the supervisory control of the National University will be designated and developed as centres for post-graduate research and training in the Fifth Plan period. The National University will also have students in the campus at post-graduate level. In addition, the National University may set up a few institutes for specialised study, teaching and research.

20.12.3 Bangladesh Open University (BOU) which has the largest coverage in the country for imparting distance education is still at the growing stage. Its media centre is being set up and it will be made fully operational during the Fifth Plan period. Besides the main campus at Gazipur, the university will have 12 regional centres and 81 study centres all over the country. In order to facilitate transmission of BOU's country-wide programmes, the second channel of BTV will be used for this purpose which will be made operational during the Plan period.

20.12.4 The development and recurrent cost of university education is on the increase. Per student recurrent cost now stands at about Tk.35,000 per annum while average tuition and other fees figure at around Tk.500.00 only. This sort of inappropriate cost-sharing largely

benefit individuals of the better-off sections of the society. Besides, it should be recognised that the university system in Bangladesh has not been able to effectively accommodate the demand for higher education generated by demographic and developmental factors. The rigidity of the system, non-interaction with output users, imbalance in course planning, absence of adequate research opportunities, widespread student discontent and indiscipline and wastage in use of available resources have been the causes for lowering the average standard of education in the universities.

20.12.5 In order to hasten the process of development, the government has laid emphasis on expanding science and technical education at higher levels and accordingly, it has planned to establish 12 more science and technology universities in the country. To this end, construction of 6 universities is expected to be taken up in the first phase from 1997/98. These universities will start functioning, initially each with 5 schools of studies (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). Setting up of the new universities will have financial implication to the extent of Tk.1,127.00 million at current prices. Necessary professional manpower, books and equipment for the laboratories for quality education in these universities will be provided through mobilising both domestic and external resources and obtaining technical co-operation from foreign universities. Location of these universities will be determined in accordance with the needs of regional balance in the system.

20.12.6 University Grants Commission (UGC): University Grants Commission is primarily responsible for co-ordinating financial support relating to university education. It assesses the needs in the field of university education, formulates plans for development of such education and advises the government on the establishment of new universities including proposals for expansion of the existing ones.

20.12.7 While the UGC is enforcing discipline in the universities and channelling funds to different universities, its control over them is found to be less effective or it has little authority/ability to maintain discipline, efficiency and academic values in the universities. Besides, the Commission could not as yet explore funds for universities from non-government sources. During the Fifth Plan period, the role of the UGC will be reviewed in depth to make it more effective. Necessary measures will also be taken for further development of the UGC and the University Resource Centre.

20.12.8 Objectives of university education during Fifth Plan: Objectives in the field of higher education are:

- a. quantitative expansion on desired lines with emphasis on science and technology;
- b. consolidation and strengthening of existing development programmes of the universities;
- c. focus on quality, selectivity and excellence of higher education;
- d. rationalisation of enrolment into various disciplines;
- e. development of human resources for higher education, research and training and provision of increased training facilities abroad;
- f. review of present examination system and gradual introduction of semester system;
- g. updating and modernisation of syllabi and curricula;
- h. emphasis on development of modern libraries and laboratories;
- i. arresting deterioration of the law and order situation in the campus;
- j. ensuring congenial academic atmosphere;

- k. review of the roles of University Syndicates/Senates and UGC; and
- l. establishment of links with foreign universities and promotion of collaborative/exchange programmes.

20.12.9 Strategies: The following strategies will be adopted during the Fifth Plan in order to achieve the stated objectives:

- a. Universities will be made centres of excellence, especially in fields of science and technology and admission will be strictly on merit basis. Moreover, university admission will be made means-blind.
- b. To make universities centres of excellence, massive scholarship programme will be undertaken for improving the teaching quality of teachers. It is expected to train 300 teachers every year in universities of repute outside the country. Promotion of teachers will be made performance-based. Reasonable number of publications in recognised professional journals will be the main criterion for promotion. A regular system of performance evaluation will be introduced.
- c. Research and development will be promoted through setting up of modern laboratory facilities with equipment and the libraries will be equipped with books/journals on a continuous basis.
- d. Establishment of private universities specially in fields of science and technology will be encouraged.
- e. Private endowment/chairs will be encouraged to be established.
- f. Expansion and development of facilities in universities at public cost will be performance-based.
- g. Fees of university students will be raised in synchronisation with the provision of adequate financial support for the needy.
- h. Financial and administrative accountability will be brought in through efficient supervision of the activities of the universities by UGC and the Parliamentary Committees.
- i. Relevant statutes/rules of universities will be reviewed to make their operation more transparent and cost effective.

20.12.10 Programmes: For attaining the above objectives, the following programmes will be taken up for the development of university education during the Fifth Plan:

- a. Repair and renovation works for existing dilapidated university buildings will be undertaken. These will receive priority over creation of new physical facilities for ensuring consolidation.
- b. Teaching of, and research in science and technology will be encouraged, supported and expanded.
- c. Six new science and technology universities will be established.
- d. National University will be strengthened with a view to catering for the needs of 933 degree colleges in the country. The standard and quality of college education will be improved by providing necessary library and laboratory facilities and by offering appropriate training to the college teachers. National University will develop some of the colleges as centres of excellence through introduction of research and training at graduate and post-graduate levels.
- e. Bangladesh Open University (BOU) will be further developed with support from BTV for facilitating expansion of country-wide distant education programmes and on-the-job education/training of the outreach clientele.
- f. Massive programme for higher studies/advanced training locally and in foreign

- countries will be taken up for the university teachers.
- g. The University Resource Centre and the Computer Net-Work System among universities will be further strengthened.
 - h. All the universities will establish links with foreign universities and undertake collaborative/exchange programmes.

20.12.11 Private university: Private universities, particularly those emphasising teaching and research in science and technology, will be encouraged during the Fifth Plan in line with public sector plans and objectives. The UGC will scrutinise the proposals strictly on the guidelines /regulations provided by the government in order to maintain the quality of education and keep their social character, avoiding commercial motives. Experienced academicians and the interested citizens will be encouraged to set up such private universities.

20.12.12 Financial outlay: Higher education, specially university education, is highly subsidised. This subsidy will be rationalised by making admission means-blind and merit-based and giving adequate financial support to the needy. Education at this level will also be highly selective and account for higher benefit-cost ratio. Moreover, the private sector will be involved in setting up new universities and supporting programmes in the existing ones. Keeping these in view, the estimated financial public sector outlay for higher education is Tk.5,744.40 million in the Fifth Plan.

20.13 Technical Education

20.13.1 Directorate of Technical Education (DTE) is responsible for planning, development and implementation of technical and vocational education in the country. It organises technical and vocational education training at 3 levels. To make the programme of human resources development effective, the DTE will take the initiative and organise courses on scientific and technical education. At present, the technological base is not strong enough to produce sufficient technically trained manpower. In the Fifth Plan, the technological base will be widened and consolidated so that effective human resources development can take place.

20.13.2 Objectives: The objectives for accelerated development of human resources through technical education during the Fifth Plan period are to:

- a. produce educated, qualified and skilled manpower required for the socio-economic development of the country;
- b. increase the present enrolment capacity of the technical and vocational institutions from 3.3 per cent of the student population at secondary level to around 20 per cent by the year 2002;
- c. diversify technical and vocational education to meet the technical manpower needs in areas of emerging technologies such as information, genetic engineering, marine biology, bio-technologies, mining, instrumentation, electro-medical technologies, aviation and other industry-based knowledge, training and skills;
- d. strengthen the base of technical education through practical training following the experiences of Japan, Singapore and Korea;
- e. encourage private involvement and initiatives in the delivery of technical and vocational education programmes;
- f. develop and modernise farm technologies;
- g. initiate and conduct research on technical and vocational education and job market for creating adequate data-base for technical and vocational education policy formulation and implementation strategies;

- h. increase students' financial support by adopting need-blind and merit-based admission;
- i. strengthen staff development programmes at the Technical Teachers Training College and open up post-graduate diploma and masters programmes in technical education; and
- j. produce skilled manpower as required by population-poor countries.

20.13.3 Programmes: Number of students that has been estimated for enrolment in technical education during the Fifth Plan period is shown in Table 20.7.

Table 20.7
Estimated Enrolment of Students in Technical Education (except in BITs)

Institutes	1997		2002	
	No. of Institutes	Students Enrolled	No. of Institutes	Students Enrolled
1. Degree				
Textile	1	50	2	400
Leather	1	25	2	100
2. Teachers Training				
Technical Teachers College	1	120	2	400
Vocational Teachers Training Institute	1	120	2	400
3. Polytechnic Institutes (Govt. and Private)	20	4,460	68 + 7 *	20,000
4. Other Technical and Vocational Institutes (Govt. and Private)	51	2,620	64 + 500*	43,800
5. Basic Trade	51	12,788	64	30,000
6. H.S.C Business Management	--	--	200	8,000
7. Dakhil (vocational)	--	--	250	15,000

* No. of institutes expected in the private sector.

20.13.4 To put the technical and vocational education on a strong footing, the number of polytechnic institutes is expected to be increased from 20 to 68 (45 polytechnics in new districts and 3 polytechnics for women in divisional headquarters). In addition, 7 private polytechnic institutes are expected to be set up. Besides, one additional textile college, one new vocational teachers training college, one new institute of leather technology and one additional technical teachers training college will be set up during the Fifth Plan period. The monotechnic institutes like Glass and Ceramics, Graphic Arts and Survey Institute will be strengthened. Along with these, 13 more vocational training institutes are expected to be established raising their number to 64. More emerging trades in SSC (vocational) will be introduced. An Institute of Fashion will be set up for developing human resources for the ready-made garments industries.

20.13.5 In addition to the normal programme of technical and vocational education, the Directorate of Technical Education is expected to introduce:

- a. SSC (vocational) course in 500 private secondary schools with an intake capacity of 30,000 students per year;
- b. Dakhil (vocational) course in 250 madrasahs with an intake capacity of 15,000 students per year;
- c. S.S.C (vocational) and H.S.C (vocational) courses in 64 Vocational Training Institutes with a yearly intake capacity of 11,320 students; and

- d. H.S.C (Business Management) course in 200 Intermediate and Degree colleges with a yearly intake capacity of 8,000 students during the Plan period.

20.13.6 Financial outlay: The objectives of this sub-sector will be attained through implementation of about 29 projects of which 9 (nine) are spill-over. Estimated financial outlay for the Plan period is Tk. 5,088.30 million, including an amount of Tk. 2,430.00 million for spill-over projects.

20.13.7 Link between local government agencies and technical and vocational education institutions: The institutions that offer technical and vocational courses are mostly public ones with hardly any scope of intervention from the local government, private and NGO initiatives. As a result, the institutions suffer from isolation from the community. Institution-community linkage is vital for development of technical and vocational education and proper utilisation of the institutions and community resources. In order to establish the required linkage, the following steps will be taken :

- a. public institutions will draw required inputs and contents of activities from the work ambits in the surrounding areas;
- b. private institutions offering technical and vocational education programmes will be encouraged to grow in greater numbers;
- c. locally available resources will be utilised for implementation of technical and vocational education programmes;
- d. basic trade courses offered at present to the students of classes ix and x in some secondary schools at thana level will be extended to cover the entire secondary schooling system; to this end, technical teachers training institutes/colleges will be operated in 2 shifts;
- e. available facilities and institutions will be used for conducting short courses in different areas such as business management, design, engineering, hotel management and catering, computer technology, marine technology, mining, instrumentation technology, farm technology, electro-medical sciences, etc;
- f. programmes will be worked out jointly by the Directorate of Technical Education and the Bangladesh Open University to offer Bangladesh Open University courses in the evening using technical and vocational institution facilities to accelerate human resource development;
- g. employers will be encouraged to send their employees to the technical and vocational educational institutions for training them through formal and non-formal courses; cost of such training will be borne by the employers;
- h. arrangements will be made to operate institution-based sandwiched trade programmes in collaboration with the industries on need basis; and
- i. institutional mechanism will be evolved for associating local government bodies in the management of technical and vocational institutions.

20.14 Bangladesh Institute of Technology (BIT)

20.14.1 At present, there are five institutes (BUET and 4 BITs) which offer degree courses in engineering. The disciplines in the BITs are civil, electrical and electronic and mechanical engineering. Post-graduate courses are there at Khulna and Rajshahi only. The total yearly enrolment capacity of these institutes (BUET and BITs) is 1,370. The number of eligible candidates is more than ten times the number of seats available for admission. The project for “Renovation and Development of BIT Chittagong, Khulna, Rajshahi and Dhaka” involving Tk.222.5 million has been under implementation since 1995/96 and will continue till 2000.

20.14.2 Objectives

- a. The existing capacity of BITs will be doubled (presently 720 seats per year) and new departments/technologies will be opened based on the need of the country.
- b. Optimum utilisation of the existing physical facilities in BITs will be ensured; enrolment capacities will be increased; and additional teachers and class rooms in some institutes and laboratories for new departments/technologies will be provided.
- c. The existing BITs will be developed as centres of excellence on a priority basis; the teachers of BITs will be sent to BUET and abroad for attaining academic excellence.
- d. Technical teachers training programme will be given priority, and the teachers of polytechnic institutes will be sent to Technical Teachers Training Colleges (TTTC) and Islamic Institute of Technology (IIT) for post-graduate training.
- e. Considering future technological demands, courses will be diversified in BITs.
- f. Keeping in view the requirement of the country for the proper exploitation of natural resources and for its industrial advancement, four new Institutes of Technology will be set up with additional annual enrolment capacity of 720 seats.

20.14.3 Financial outlay: These objectives will be attained through: (a) extension and development of BITs in Chittagong, Khulna, Rajshahi and Dhaka and (b) establishment of new institutes of technologies. An estimated outlay for this purpose is to the tune of Tk.900.00 million including a spill-over requirement of Tk.200.00 million.

20.15 Agricultural and Medical Education

20.15.1 Agricultural education: University level education in different branches of agricultural science is offered at the Bangladesh Agricultural University (BAU) at Mymensingh and its affiliated agricultural colleges at Dhaka, Patuakhali and Dinajpur. The Institute of Post Graduate Studies in Agriculture (IPSA) which has recently been declared as Bangabandhu Agricultural University offers post-graduate education in agriculture. Bangladesh Agricultural University started with an enrolment capacity of 444 students in 1961/62. In 1985/86, the total enrolment increased to 3,990 (231 females) and the number of teachers employed was 410. In 1989/90, the total enrolment at BAU increased to 4,092. For extensive research and development activities directed towards diversification and modernisation of agriculture, these institutions will be strengthened and extended. Due attention will be given to improve the quality of teaching and training and student output so that the overall response of the system of agricultural education turns supportive of human capital and the science base for agricultural modernisation. In this process, closer links will be set up and sustained with other universities and organisations involved in the application and practice of technology at farm level.

20.15.2 Medical education: Medical education has many components. The prime component is the MBBS programme offered in the medical colleges. In recent years, the number of medical colleges have increased both in the public and private sectors. In 1985/86, the number of enrolled students in the medical colleges were 8,268 of whom 2,258 were females, and the number of faculty members, 768 of whom 108 were females. In 1993/94, the number of enrolled students increased marginally to 8,522 of which 2,884 were females and the faculty members increased to 1,054 of whom 219 were females. An Institute for Post-Graduate Medicine and Research (IPGMR) for specialised/higher medical education is functioning. The institute has recently been converted into a university and named as Bangabandhu Sheikh Mujibur Rahman Medical University. This will further be developed as a centre of excellence for medical education and research.

20.15.3 In 1985/86, there were 342 post graduate students in 8 specialised post-graduate institutes where 101 teachers were employed for hospital and teaching work. Enrolment remained more or less constant around 337 students in 1993/94. The annual intake in 13 medical colleges is 1,450. Enrolment in the dental college in Dhaka and dental colleges attached to Rajshahi and Chittagong Medical colleges is 110. The cumulative number of qualified doctors during the Fourth Plan stood at 24,638 against a population of 120 million giving a doctor-population ratio of 1:4,870. Priority will be given during the Fifth Plan for expanding the intake of students in different medical colleges in the country so as to raise the doctor-population ratio. More post-graduate doctors are being produced from the different post-graduate institutions. There will be more FCPS, MS, MD doctors from Bangabandhu Sheikh Mujibur Rahman Medical University. Besides, other post-graduate institutions like ICVD, RIHD and IDCH will be upgraded. Further development of medical education will be carried out by the Ministry of Health and Family Welfare under various development projects/ programmes.

20.15.4 There was only one nursing college where 150 students were taught by only four faculty members. The number of enrolled students and faculty members increased afterwards to 229 and 13 respectively. At present there are 38 Nurses' Training Centres (NTCs) with annual intake capacity of 1,135 students. The annual output on average is 800. In the Fifth Plan period, high emphasis will be given to expand nursing education to increase the number of qualified nurses.

20.16 Religious Education

20.16.1 The Ministry of Religious Affairs is responsible for assisting religious centres (mosques, churches, temples) and related academies and institutes in undertaking research and promoting religious culture, universal brotherhood and good citizenship. In the process, necessary financial support is given for proper upkeep and maintenance of the religious centres and construction of new places of worship as and when necessary. Islamic Foundation is the agency under the ministry which looks after implementation of the programmes relating to setting up of cultural centres, conducting mosque-based non-formal education and promoting studies/research in Islamic history, philosophy and basic Islamic ideals. One of the responsibilities of the Islamic Foundation is to involve imams/religious leaders in population/family welfare and other socio-economic activities through proper training at the Imam Training Academy. A publicly supported trust serves to meet the religious needs of the Hindu, Buddhist and Christian communities.

20.16.2 Objectives: The main objectives envisaged in the Fifth Plan in religious education sub-sector are to:

- a. promote and establish religious values in the society for promoting good citizenry, knowledge-based society and providing checks and self-restraints against corruption, dishonesty and malpractices;
- b. establish a well organised pre-primary stream for the children with a view to increasing enrolment and retention throughout the primary school cycle;
- c. establish Islamic Foundation Central Library as a modern national Islamic library and to construct Islamic Foundation Complex in Dhaka for effective management and co-ordination of various development activities at district level;
- d. construct a permanent haj camp at Dhaka with a view to providing required accommodation for about 1,552 Haj pilgrims;

- e. improve the monitoring and evaluation system of development activities being implemented under the Islamic Foundation;
- f. promote habit of savings and perseverance and other traits conforming to tolerance and communal peace and harmony; and
- g. provide grants to all communities to repair and renovate their places of worship like mosques, churches and temples.

20.16.3 Strategies: To attain these objectives, the following will be the major strategies:

- a. The programme for establishment of Islamic cultural centres at the district and divisional headquarters will be implemented.
- b. A total of 396 new cultural centres will be set up at the thana level to expand the existing network of cultural activities; these centres will be developed as conduits for acquiring virtues of equality , confidence, perseverance, savings, investment and fellow-feeling.
- c. Existing Imam Training Academy will be functionally strengthened and reorganised and 15 more centres are expected to be opened, one each at the old districts not yet covered.
- d. Mosques, temples and churches will be encouraged to take up literacy and family planning drives and hold discourses aimed at raising social consciousness.
- e. Wakf and trust properties will be more effectively managed for increasing their welfare activities.

20.16.4 Financial outlay: To achieve the above objectives, the Islamic Foundation will undertake implementation of 17 projects. Of these 17 projects, 7 will be spill-over and the rest, new ones. For spill-over projects, an amount of Tk. 659.30 million will be required. Total estimated outlay for this sub-sector is Tk.1,659.30 million.

20.17 Fifth Five Year Plan Outlay For Education Sector

20.17.1 Estimated financial outlay for the Fifth Plan for education sector is Tk.1,28,931.50 million. This includes the cost of spill-over projects amounting to Tk.27,141.30 million. The sub-sector-wise break-up is shown in Table 20.8.

Table 20.8
Estimated Financial Outlay for Education in Fifth Plan
(at 1996/97 prices)

(in million Taka)

SL. No.	Sub-Sector	Estimated Financial Outlay		
		Spill-over Projects	New Projects	Total
1.	Primary Education	1,714.00	66,880.20	68,594.20
2.	Mass Education	3,959.20	10,040.80	14,000.00
	Sub-total:	5,673.20	76,921.00	82,594.20
3.	Secondary and Higher Secondary Education (including Madrasha and College Education)	15,410.80	15,793.60	31,204.40
4.	University Education	1,980.00	3,764.40	5,744.40
5.	BITs	200.00	700.00	900.00
6.	Ministry of Education	375.50	252.90	628.40
7.	Technical Education	2,430.00	2,658.30	*5,088.30
8.	Technical Assistance	121.00	200.00	321.00
	Sub-total:	20,517.30	23,369.20	43,886.50
9.	Cadet Colleges and Cantonment Public Schools and Colleges	291.50	500.00	791.50
10.	Religious Affairs/Education	659.30	1,000.00	1,659.30
	Grand Total	27,141.30	1,01,790.20	1,28,931.50

* This figure is exclusive of allocations for (i) BUET and universities of science and technology, (ii) Bangabandhu Agricultural University and agricultural colleges, (iii) vocational elements introduced in secondary schools

20.17.2 Private sector investment during Fifth Plan: With the massive investment envisaged in the education sector by the government, it is expected that private investment will be forthcoming in all the fields of education. The government will give supportive services for setting up of private universities and ensure quality of education. The government will also encourage setting up of primary and secondary schools by local communities. Private investment in education will be income tax-exempt. It is expected that private investment in education will be at least 10 per cent of the public sector investment, i.e., Tk.12,893.00 million. Likewise, in respect of religious education, private investment is expected. Philanthropic/voluntary organisations /NGOs will be encouraged to undertake programmes for establishing/renovating religious institutions, modernisation of libraries, expansion of mass literacy programme, etc. Private investment in religious education is expected to be around 30 per cent of the public sector allocation, i.e., Tk.498.00 million.

CHAPTER XXI

HEALTH POPULATION AND FAMILY WELFARE

21.1 Introduction

21.1.1 Bangladesh's population estimated to be 123.80 million in January 1997, is growing at the rate of 1.75 per cent per annum. In 1973, when the country launched its First Five Year Plan (1973-78), population was 74 million and the rate of population growth was then 3.0 per cent per annum. In a span of twenty three years, the population growth rate was reduced by 1.2 percentage points, while adding 49 million more people. Without any family planning and multisectoral population programmes, Bangladesh would have around 140 million people today. In the mid-seventies, Bangladesh was Asia's fifth and World's eighth most populous country. Now, it ranks as the sixth and ninth respectively indicating that the family planning programmes had a more than average success in Bangladesh. In 1975, contraceptive prevalence rate (CPR) was reported to be 8.5 per cent (BFS, 1975) as against the present estimate of 48 per cent, (DHS,1995) showing an average increase of 1.8 per cent per annum since then. In 1989, total fertility rate (TFR) and CPR were estimated at 4.9 and 32.0 per cent respectively (BFS and CPS, 1989). Corresponding figures for 1995 are 3.4 and 48 per cent respectively. Bangladesh has achieved this progress against the backdrop of low literacy rate, low status of women and low income per capita and so on. Despite this, one must note that due to past high fertility and falling mortality rates, Bangladesh's population has a tremendous growth potential built into its age structure. Still population below 15 years is around 43 per cent of the total population; and women of reproductive age (15-49 years) represent 46 per cent of the total female population. The maternal and infant mortality rates are reported to be 4.5 and 78 per thousand live births respectively. Life expectancy at birth has increased to 58.1 years for male and 57.6 for female compared with the 1991 level of 55 and 54.5 years respectively.

21.1.2 Providing medical care is the constitutional obligation of the government. The Constitution mandates that: "it shall be a fundamental responsibility of the state to attain, through planned economic growth, a constant increase of productive forces and a steady improvement in the material and cultural standard of living of the people, with a view to securing to its citizens- (a) the provision of the basic necessities of life, including food, clothing, shelter, education and medical care." The Government of Bangladesh, since Independence, has been investing substantially in the institution building and strengthening of health and family planning services in the country, giving special attention to the vast population that resides in the rural areas. The main thrust of the health programmes has been the provision of primary health care (PHC) services which has been recognised as a key approach to attain 'Health for All' by the year 2000 (HFA/2000 A.D.). Bangladesh has accepted the goal and reiterated firm political and social commitment to achieve it based on the Primary Health Care Strategy declared in Alma-Ata in 1978. The present government is committed to complete the unfinished health agenda of the government of Bangabandhu for establishing health complexes in each Union and modern hospitals in each Upazila. Modern medical care services will be expanded and made available at affordable cost for the welfare of the poor and protection of the vulnerable. Necessary and appropriate steps will be taken to modernise the indigenous medical system as well.

21.1.3 In response to the changing health situation of the country, reforms in the health sector particularly in the areas of management structure, service delivery mechanisms and utilisation

of both public and private sector resources are called for urgently. Major efforts will be required for health protection through appropriate legislation and effective enforcement.

21.1.4 The Government of Bangladesh is committed to achieve the overall objectives of the “World Summit for Children”, and the “Programme of Action of the International Conference on Population and Development (ICPD)” held in Cairo in 1994. Thus, the health and population sector vision will be to provide adequate basic health care for the people of Bangladesh and to slow down population growth and to be responsive to clients’ needs, especially those of children, women and the poor.

21.1.5 As with the global scenario of changes in health, the spectrum of health situation has also been changing in Bangladesh over time. Rapid population growth, increasing urbanisation and major shifts in disease patterns prevailing in the country contribute to these changes. Resurgence of malaria, kala-azar and other emerging and re-emerging diseases are a few examples of these changes, whilst the risks of STD, HIV/AIDS and other infectious diseases menacing public health are fast increasing. Increase in the incidence of cardiovascular diseases, renal disorders, mental illnesses, cancer and conditions related to substance abuse, smoking and alcoholism, increasing traffic and industrial accidents, etc., exacerbate the disease burden of the population. On the other hand, environmental degradation due to air, water and industrial pollution and deteriorating living conditions also pose significant adverse impact on public health. Increased concentration of arsenic in subsoil water reported recently in some areas of the country also poses a potential public health hazard. Bangladesh will continue to experience epidemiological transition witnessing the phenomenon of coexistence of both age-old infectious and emerging new diseases. Diseases related to metabolic disorder, malnutrition, tuberculosis, reproductive health, diarrhoea, respiratory tract, etc., will continue to exert major impact on the health status of the population.

21.1.6 In the field of population planning, there has been a considerable success which is now being acclaimed at home and abroad. However, even if the current programme momentum continues and NRR-1 in 2005 is achieved, the country will have to wait another 40-45 years to stabilise its population around 210 million. Any delay in achieving its demographic goal means a heavy time-penalty and serious implications for Bangladesh’s socio-economic development. Given the nature of the task that lies ahead, population continues to remain as the nation’s number one problem as well as the number one cause of poverty.

21.2 Implications of Population Growth

21.2.1 Due to a large base of young age population, future growth potential in Bangladesh is indeed very high. In the short run, even under the optimistic assumption of NRR-1 by the year 2005, there will be a net increase of 8.8 million people by the end of the Fifth Plan period over the 1997 level of 123.8 million; while in the long run, say, by the year 2020, there will be a net increase of 42.74 million people. Given the current status of economy, such an increase of population will have several adverse implications for our socio-economic development.

21.2.2 First, the most serious implication of population growth will be observed in the social sector. For instance, the number of enrolled students in primary education was 17.3 million in 1995 giving 92 per cent net enrolment rate while teacher-student ratio was nearly 1:70. The government is committed to ensure universal primary education and improve

teacher-student ratio to 1:50; it will require almost double the present level of resources to provide more teachers, class room facilities, equipment and institutions. Secondly a dismal scenario can be observed also in the health sector where both primary and specialised health care services are still inadequate. Here, a serious demand for services exists for doctors, nurses, medicine, hospital care, and so on. At present, doctor - population ratio is 1:5506; hospital bed-population ratio is 1: 3231 and per capita health expenditure is Tk. 135 per annum. If the existing facilities are to be improved upto a minimum satisfactory level, then per capita health expenditure to cover the entire population will have to be doubled. Thirdly, there will be an immediate impact on land. At present, population density is 850 persons per sq.km which will further increase to 913 persons in 2002 and 1,130 persons in 2020 per sq.km adversely affecting existing man-land ratio of 1:18 decimal. Due to population increase, this will further deteriorate which means that the number of landless people will increase tremendously further aggravating the poverty situation. Fourthly, the total land space of which only two-thirds is presently arable will be attenuated further. This will have an obvious adverse impact on per capita food production and food availability for the growing population. At present, the government's annual import bill for foodstuff is Tk. 5,600 million. If the targeted production level is not reached by 2002, the government's import bill for food items will increase substantially, which it will have to provide at the expense of development in other sectors of the economy. Fifthly, due to population growth momentum, number of working age population (15-59 years) is projected to increase from 66.6 million in 1997 to 80.2 million in 2002; 98.0 million in 2010; and 109.1 million in 2020. Hence, the economy will have to create more job opportunities to employ its working age population to generate income and thereby alleviate poverty. Lastly, increase in population will adversely affect both GDP and GNP growth per capita. In this backdrop, the nation has no other option but to pursue a population policy to achieve NRR-1 by the year 2005 .

21.3 Review of Fourth Plan

Health

21.3.1 At the dawn of Independence the health status of the population of Bangladesh was at a very low point having a life expectancy of mere 45 years with a crude death rate (per 1000 population) of 20.9. Out of every 1000 infants born, 150 of them would not have lived beyond the age of 1 year. There were very few health facilities and health professionals in the country.

21.3.2 Over the 25 years of independence, the health situation of the population has improved quite remarkably. Smallpox, malaria and cholera have been eradicated or are no longer major killers. Life expectancy at birth reached 58 years in 1995. Total fertility rate was reduced from 6.3 in 1975 to 3.4 in 1995. The crude death rate dropped from 12.0 in 1990 to 9.0 in 1995 and is expected to decline further. Due to the recent success in the EPI programme which had a coverage of over 66 per cent in 1995, infant mortality rate declined to around 78 per 1000 live births in 1995. Similarly, the under-5 mortality dropped from over 210 in the mid-1970s to 133 per 1000 live births in 1995. In terms of physical facilities, there were 897 hospitals (610 in the public sector and 287 in the private sector) of different categories with 34,786 beds (27,544 in the public sector and 7,242 in the private sector) with one bed for every 3,450 persons in the country in 1995. With regard to health and medical professionals, the country so far produced 24,638 graduate doctors by 1995 giving a doctor-population ratio of 1:4,870. The doctor-nurse ratio was 2:1. In case of nurse-population ratio, the position was 1:10,714.

21.3.3 Despite these positive changes over the last 25 years, much remains to be done in the health sector. Even after considerable decline in the infant mortality rate and maternal mortality rate, they continue to be unacceptably high compared even to other developing countries. The quality of life of the general population is still very low. Low calorie intake continues to result in malnutrition in a large proportion of the population, particularly women and children. Diarrhoeal diseases continue to be a major killer and the number one cause of morbidity. Communicable and poverty-related diseases, that are preventable, still dominate the top 10 causes of morbidity and over sixty-five percent of all morbidity cases in 1996 were caused by communicable and poverty-related diseases.

21.3.4 Evaluation of physical progress

- a. In order to meet the requirement of the overall objectives of the health sector, various programmes were undertaken during the past plans. One of the major programmes was the development of physical infrastructures like thana (now upazila) health complexes (THC), district hospitals, medical college hospitals and other specialised institutes and hospitals throughout the country. As a first referral centre for PHC, it was planned to establish a total of 397 THCs in the country of which 374 have now been completed. Of the total 64 districts, 60 district hospitals have so far been constructed. These hospitals have the bed capacity of 50-200 each. Some of them are already upgraded to 250-bed hospitals.
- b. **Thana health complexes (THC):** In order to bring the health service delivery system including the primary health care services, to the door step of the rural people, the programme for development of a comprehensive network of health infrastructure in rural areas through the establishment of one thana health complex in each thana was continued during the Fourth Plan period. Under the programme, 397 THCs were planned to be established of which altogether 390 health complexes had so far been made functional. Specialised services in the fields of medicine, surgery, gynae, anesthesia and dentistry are provided in each thana health complex. Supply of essential drugs and vaccines has further been improved and cold chain instituted in each THC to maintain the quality and effectiveness of drugs and vaccines.
- c. **Union health and family welfare centres (UHFWCs) :** The network of institutional facilities starts from the union level where there is a Health and Family Welfare Centre (UHFWC) for providing outpatient services. There are at present a total of 4,062 Union health facilities of which 2,700 UHFWCs are under the Family Planning Wing and 1,362 Union Sub-centres/Rural Dispensaries are under the Health Wing.
- d. **Hospitals and clinics :** The number of hospital beds has increased significantly over the years. At present, there are about 34,786 hospital beds giving a bed-population ratio of approximately 1:3,450. With the decentralisation of administration and upgradation of sub-divisions into districts, the existing hospitals required upgradation and modernisation with adequate diagnostic and treatment facilities as referral hospitals for primary health care. The programme included upgradation of 36 erstwhile sub-divisional hospitals into 50 bed ones and modernisation of nine 100 bed hospitals. The existing Medical College Hospitals, Rehabilitation Institute and Hospital for the Disabled (RIHD), Institute of Cardiovascular Diseases (ICVD) and Ophthalmological Institute were further developed. Hospitals at Comilla, Khulna, Jamalpur and Bandarban were completed. The Cancer Institute and the IPGMR were also completed.

21.3.5 Public health services : An expanded immunisation programme against major killer diseases, i.e., tuberculosis, diphtheria, polio, whooping cough and measles was undertaken for

implementation during the Fourth Plan. In the context of the objectives to immunise 85 per cent children under 1 (one) year of age and pregnant mothers in all thanas and municipal areas for attaining Universal Child Immunisation (UCI), an intensified vaccination programme was undertaken in 8 thanas during 1985/86 and subsequently in 460 thanas and all municipal areas during the Third and Fourth Plan periods. Acute diarrhoeal diseases are one of the leading causes of morbidity and mortality in children under 5 years of age. To combat diarrhoeal diseases, an average of 45 million packets of oral saline were produced in five centres, i.e., Dhaka, Comilla, Jessore, Rangpur and Barisal, annually. Besides, EDCL and others produce about 10 million packets annually.

21.3.6 Malnutrition is wide spread in Bangladesh. The major causes of malnutrition are lack of food security, deficits of protein, energy and micronutrients in the daily diet and lack of health and nutrition education. About 76 per cent of all households are deficient in calorie intake. Women and children are particularly affected by this chronic problem. Malnutrition in its severe form causes stunting and wasting in children and reduced capacity and productivity in adults. The malnutrition situation is very serious among pregnant women which contributes to low birth weight, malnutrition and severe iodine deficiency in a large number of new born babies. To enhance the nutritional status of mothers and children, several nutrition programmes such as, Bangladesh Integrated Nutrition Programme, Comprehensive Public Health Nutrition Programme, Co-ordinated Nutrition Programme of Bangladesh National Nutrition Council, etc., were undertaken during the Fourth Plan.

21.3.7 Manpower development : The health sector is one of the most labour-intensive sectors requiring a large variety of skills to support and manage wide range of services. Besides the medical, dental and nursing professionals and the health technologists (e.g., radiographers, laboratory technicians, etc.), Bangladesh also requires a number of health and paramedical professionals to work at the field level to support the health service programmes of the government. Presently, the medical colleges are facing shortage of qualified professionals. To improve the standard of the medical education, there is a need to develop the professional skill of the teaching personnel also.

21.3.8 While it is acknowledged that there is still a shortage of doctors in the country, there are even fewer employed nurses working in the sector. The current doctor- nurse ratio is over 2:1 which is a highly unsatisfactory situation. Moreover, many of those nurses who are employed are not adequately trained in their own profession. The situation for the health technologists is even worse. The number of laboratory technicians, X-ray machine operators, electro-medical equipment engineers and technicians who make up the bulk of the support services of hospitals and clinics is grossly inadequate.

21.3.9 A Human Resource Development (HRD) Master Plan, under preparation by the MOHFW, is urgently needed to identify both the short and the long term requirements of human resources in the health sector based on the existing and the projected disease burden and the demographic characteristics of the population.

21.3.10 Medical education : Some progress has been made in the field of medical education. The annual intake in 13 medical colleges and the dental college in Dhaka and two other dental colleges attached with Rajshahi and Chittagong Medical colleges are 1,450 and 110 with average annual output of 1,200 and 70 graduates respectively.

21.3.11 A number of private medical colleges have also been established in the country. The quality of medical education and the competence of the graduate doctors they produce leave

some room for improvement. Hence, the government should have an effective control over establishment and commissioning of new medical colleges with a view to restoring and maintaining the standard of medical education.

21.3.12 Nursing education : The role of nurses in the field of treatment is highly significant. The annual intake of the existing 38 Nurse's Training Centres (NTCs) is 1135 students and the annual output, on average, is 800. At the end of the Fourth Plan the total number of qualified nurses in the country was about 11,200 giving a nurse-population ratio of 1:10714. To meet the increasing demand for nurses, facilities for training of nurses were developed under two different schemes. Construction of 10 centres, out of 30 NTCs under these two schemes is nearing completion. Presently, training programmes in all other centres are being undertaken in hired accommodations.

21.3.13 Para-medical education : For comprehensive health care service delivery, several categories of para-medical professionals are needed along with physicians and nurses. To meet the expanding demands of these categories of personnel it is now of great importance to strengthen the Institute of Health Technology with a view to producing targeted number of para-medical professionals over the Plan period.

21.3.14 Resource allocation and utilisation during Fourth Plan : During the Fourth Plan, a total of Tk.10,600 million at 1989/90 prices was allocated to the health sector. This constituted 3.05 per cent of the total public sector development outlay. Against this allocation, a total of Tk.13,955.60 million, at current prices (Tk.12,103.50 million at 1989/90 prices) was made available through ADPs of which Tk.11,486 million at current prices (Tk.9,830.50 million at 1989/90 prices) was utilised representing an overall utilisation rate of 93 per cent. Implementation of a total of 140 projects was undertaken during the Plan period, of which 53 projects spilled over from the Third Plan and the rest 87 were new projects. A total of 92 projects were targeted for completion during the Plan period, against which 65 projects were completed, 9 were dropped and one was transferred to other sector.

Population

21.3.15 During the Fourth Plan, the government invested about Tk.19,000 million to implement various population programmes/projects pertaining to service delivery, information, education and motivation, training, infrastructural and multisectoral programmes dealing with women's development, skill training and poverty alleviation as well as research, evaluation and monitoring. A brief review of these activities in retrospect reveals that population sector has made a significant progress but encountered a number of problems in several fronts, which thwarted the process of speedy implementation.

- a. **Service delivery :** In mid-seventies, the family planning 'Dais'- village women for child delivery and contraceptive supplies, were replaced by the whole-time Family Welfare Assistants (FWAs) whose number is now 23,500. This kind of massive deployment of front-line female workers in the then-Bangladeshi cultural setting was indeed a bold step. It resulted in incremental favourable impact in terms of raising contraceptive prevalence rate and reducing fertility as well as changing societal attitude in favour of small family norm. Services and supplies were made increasingly available through Health and Family Welfare Centres (HFWCs), hospitals, rural dispensaries, depot holders and satellite clinics as well as the Social Marketing Company (SMC).

- b. Information education and communication (IEC) :** In Bangladeshi cultural milieu, characterised by low level of literacy and access to media, social inhibition in family planning acceptance and women's inadequate participation in development programmes, IEC activities play an important role. In transforming societal conservative attitude towards FP in the mid-seventies to the present level of almost universal support for it, IEC programmes which cut across the Ministries of Health and Family Welfare, Social Welfare, Women and Children Affairs, Education and Information, have played an important role. It has emerged from the stage of the traditional use of leaflets, pamphlets, bill boards and jarigan to the extensive use of electronic media like radio and television as well as news media, film show, mass rallies, holding of seminars and workshops in addition to the field workers' interpersonal communications and group meetings with eligible couples and community leaders at the village level. Use of radio has proved to be a powerful media for population IEC strategy.
- c. Training :** The training of the functionaries of all types of officers, field staff and paramedics such as medical assistants and family welfare visitors is a *sine qua non* for a social programme like the MCH-based family planning programme. During 1975-80, the National Institute of Population Research and Training (NIPORT) at Dhaka, 20 Regional Training Centres (RTC) for the field workers' training and 12 FWVTIs at the greater district centres for the training of the Family Welfare Visitors (FWVs) were established. In addition to providing pre-service training and basic courses to the officers, field workers, Family Welfare Visitors and Medical Assistants (MA), these institutes provide a variety of job related in-service management training. Besides, supervisors at various levels were also given short courses and long term training at MS/MPH levels abroad so as to enable them to provide appropriate leadership to the programme. However, NIPORT's faculty strength is weak. The quality of training is unknown, despite the built-in evaluation mechanism at the training unit of the NIPORT. It is yet to provide specialised subject-specific training.
- d. Research evaluation and monitoring (REM) :** It is a grey area and involves several organisations, each with clearly defined role. For example, the research unit of the NIPORT, which reportedly completed 20 research reports, was supposed to specialise itself in operations research and field testing of various programme elements and post-test and evaluation of basic-courses; Population Development and Evaluation Unit (PDEU), which reportedly completed 25 studies, is supposed to take up only the evaluative studies to find out the programme/project impact; and BIRPERT is supposed to concentrate on research on reproductive health and bio-medical research. Except the BIRPERT, both PDEU and NIPORT have overlapped their research undertakings. NIPORT conducted the second Bangladesh fertility survey (BFS) in 1989. Since the early eighties, one local NGO, with the assistance of USAID, has been doing contraceptive prevalence survey (CPS) in every consecutive two years providing useful information to monitor the programme performance on a regular basis. Besides, the Directorate of Family Planning monitors the programme performance by using service statistics.
- e. Involvement of NGOs :** Due to liberal policy of the government, the number of NGOs steadily increased. More than 200 NGOs participated in population activities during the Fourth Plan period. A large number of them were the beneficiaries of larger NGOs like (i) the Path Finder Fund, (ii) the Family Planning Service and Training Centre (FPSTC), (iii) the Swanirvar Programme, (iv) Family Planning Management Development (FPMD), and (v) Bangladesh Family Planning

Association (BFPA). Several studies show that the areas where both the government and NGOs are operating have higher contraceptive prevalence rate (CPR) and lower fertility rate compared to the areas where the government operated alone. It is widely believed that in the reduction of societal fertility to the present level of 3.4 and raising CPR upto 48 per cent, NGOs made a significant contribution.

- f. **Social marketing programme (SMP)** : Established in the mid-seventies, this programme operated outside the government and sold almost 40-50 per cent of condoms and pills through its commercial networks. With its sale proceeds, it is now becoming self-reliant to the extent of 75 per cent of its recurring budget.
- g. **Women's programmes** : Three women's programmes initiated in the Population Sector in the mid-seventies i.e., (i) Use of Women's Co-operatives of the Bangladesh Rural Development Board for Population Activities, (ii) Use of Women's Vocational Training for Population Activities, and (iii) Use of Mothers' Centres for Population Activities continued during the Fourth Plan. These programmes had three objectives, namely, (i) reduction in fertility of the programmes' direct and indirect beneficiaries, (ii) raising household income of the direct beneficiaries through skill training and credit programme, and (iii) raising women's social status. These programmes are not overlapped and cover 60 per cent thanas in Bangladesh. A series of evaluative studies conducted by PDEU clearly show that direct beneficiaries of these programmes have raised their income level moderately and reduced their fertility significantly. These programmes have set a trend in reducing fertility, raising women's status and alleviating rural poverty .
- h. **Infrastructural facilities** : In view of the massive maintenance works of previously established 2500 HFWCs, 20 regional training centres (RTC), 12 family welfare visitors' training institutes (FWVTIs), the MOHFW could establish only 200 HFWCs and 250 store rooms for contraceptives attached to the THCs. On the other hand, despite resource availability, MOHFW could not construct the Population Complex at Dhaka. Due to resource constraint and weak institutional arrangement, it could not achieve its planned target for establishing 1000 HFWCs at the unions and 464 store rooms at thana level . In order to provide better maternal and child health care, some experiment should be carried out by establishing a maternity unit having 10 beds in at least 20-30 Union HFWCs where doctors have been posted. In such HFWCs, child should be delivered by trained staff, followed by necessary postnatal care. As a result, both maternal and infant mortality rates can be reduced.
- i. **Programme performance and demographic impact** : It is now widely recognised that the demographic transition in Bangladesh has begun despite unfavourable social, economic and institutional constraints for reproductive changes. In this connection, the following demographic achievements during the Fourth Five Year Plan (1990-95) are worth noting:

Table 21.1
Demographic Achievements During 1990-95

Indicators	1990	1995 (Target)	1995 (Estimated Achievement)
CBR (per 1000 pop)	33.50	28.90	27.50
CDR (per 1000 pop)	12.00	10.70	9.00
Population growth rate (%)	2.15	1.82	1.85
IMR (per 1000 live births)	94.00	80.00	78.00
MMR (per 1000 live births)	6.00	4.50	4.50
CPR (%)	39.00	50.00	48.00
TFR (per woman)	4.900	4.00	3.40
Life expectancy at birth	54.00	58.00	58.00

- j. Resource mobilisation :** Resource mobilisation for family planning and population control has increased significantly. The public sector investment in family welfare sector was Tk.8,700 million during the Third Plan period (1985-90). In view of the increasing dimension of the programme, it was increased to Tk.15,980 million during the Fourth Plan (1990-95). Against this Plan outlay, actual allocation through ADPs in 1990-95 was Tk.19,862.8 million (Tk.17,268.8 million at 1989/90 prices). The utilisation was more than 90 per cent by the end of the Plan period.

21.4 Two Years Between Fourth and Fifth Plans

21.4.1 Health : On completion of the Fourth Five Year Plan, 65 projects spilled over to 1995/96 and the major programmes continued with an allocation of Tk.4,172 million. The amount spent during the period was Tk.2,760 million (66 per cent). In 1996/97 the allocation was Tk.5,849.20 million and the expenditure, Tk.5,000 million. At the end of 1996/97 as many as 67 projects were likely to spill over to the Fifth Plan involving an amount of Tk.15,000 million approximately. Major spilled-over projects include the Establishment of Thana Health Complexes (Phase II), Establishment of Institute of Child and Mother Health, Second Health and Family Planning Services Project, Functional Improvement of Thana Health Complex (1st Phase 50), Establishment of Five Medical Colleges one each at Dinajpur, Bogra, Faridpur, Khulna and Comilla, Establishment of National Institute of Kidney Diseases and Urology at Dhaka, Establishment of National Institute of Cardiovascular Diseases at Dhaka (Phase II) and a number of projects under the Fourth Population and Health Project.

21.4.2 Population : During the two year period, 1995-97, the number of projects has shown declining trend with corresponding decline in resource availability. For example, out of 78 projects of the Fourth Plan, only 44 spilled over ones were included in the ADP 1995/96. Again, out of 50 projects in the ADP 1995/96, 46 were included in the ADP 1996/97, of which only 35 projects will spill over to the Fifth Plan . In 1996/97, the ADP allocation was lower than in the year 1995/96, which was due to the decrease in donor assistance. During this two year period, out of a total allocation of Tk. 9,692.89 million, Tk.8,328.20 million was spent.

21.5 Issues and Constraints Related to Fourth Plan

21.5.1 Though some laudable progress has been made during the Fourth Plan through implementing various development projects, the Plan was unable to achieve all of its targets in health sector, while achievement in population sector was well above the targets despite

various constraints. Some of the shortcomings in both health and population identified in the process of programme implementation are highlighted below.

21.5.2 The present structure of Ministry of Health and Family Welfare (MOHFW) with Population and Health Directorates (with separate cadres at all levels) does not adequately respond to the needs of child and maternal health care and clinical contraception and limits the potential for increasing the range, quality and effectiveness. Functionally, the separate structure impedes referrals, generates internal conflicts and contributes to the low utilisation of public facilities. In addition, current management systems provide few incentives to improve the quality of care and respond to the client's needs. The management culture in the sector needs to be changed so that the providers are motivated to serve the needs of the clients.

21.5.3 Health : In case of health care activities, the following constraints and inefficiencies were identified:

- a. **Managerial process:** An efficient project management system could not be established in many cases of the health system. The managerial process was not fully co-ordinated in the existing mechanism of project implementation. As a result, the issue of establishing an accountable and responsible system could only be partially addressed.
- b. **Project formulation and implementation:** Some projects took longer time in the process of preparation and approval. Some took more time for initial take-off after preparation due to delay in funding, etc. Some projects were constrained by delay in obtaining technical assistance.
- c. **Frequent change of project director :** Frequent changes of project directors (PDs) had been another cause of the shortfall in implementation of the health programmes. For various reasons (retirement, long-term overseas study, transfer, etc.), project directors were generally unable to stay long enough to understand and implement their respective projects. Moreover, frequent changes of project directors discouraged them from committing themselves wholeheartedly to their projects. Some PDs were entrusted with more than one project; as a result, they could not devote themselves wholeheartedly to all the projects which resulted in slow implementation.
- d. **Linkages and co-ordination:** In certain cases there had been inadequate inter-project linkages and poor institutional co-ordination and support within the sector. As a result there were incidents of duplication of efforts and/or inadequate utilisation of resources. Such weak co-ordination sometimes resulted in a failure to create a cumulative impact due to lack of synergism and complementary support between programmes.
- e. **Organisational structure:** While the health and family planning services were to be functionally integrated at the thana level and below, the supervisory controls continued to be bifurcated. Though there was a strategy agreement that the services provided by the personnel of the two Directorates, i.e., DGHS and DGFP, were to be effectively co-ordinated and integrated, the actual modalities of achieving this objective were not properly translated into action. Lack of modalities for integrating health and family planning services and lack of inter-sectoral co-ordination were responsible for inefficiency.
- f. **Management information system (MIS) :** An effective system of epidemiological surveillance and monitoring of outbreak of diseases of public health importance could not be established. A central data bank on disease surveillance as a part of the MIS could not be made available for utilisation. The system could not be modernised and linked to peripheral systems to provide support to strategic and operational planning.

Similarly, other sub-systems of laboratory services, school health, industrial health, indigenous and homeopathic systems of medicine, etc., did not have enough scope for development along with the national health care delivery system. Adequate attention was also not given to the enactment and enforcement of public health legislation.

- g. **Resources:** Most of the THCs and the HFWCs ran short of essential physical and logistic facilities. Similarly, many district hospitals suffered from inadequate equipment, supplies and manpower. An effective referral system with clearly spelt-out linkage and communication could not be established from HFWCs to the district hospitals and to specialised institutions. Some of the specialised institutes at the national level suffered from acute shortage of trained manpower, logistic support and financial assistance. Roles and responsibilities of these institutions are required to be followed properly for which the institutes were established and the professional skills to be developed in such a way that they could later be utilised for the actual and technical needs in the health sector.
- h. **Maintenance of facilities :** There had been a massive expansion in the physical health infrastructures throughout the country and more efforts are under way to build more health facilities for the public. However, very little attention has been given to the regular maintenance and up-keep of the existing facilities. Most of the health facilities have been running without any maintenance and renovation works for years together. The dilapidated conditions of many health facilities have not only shortened the longevity of the buildings, but have also created a negative impact on the quality of services.
- i. **Quality of health care :** Despite devoting a fair amount of efforts to improving the quality of both domiciliary and institutional health care, the resulting improvements have been less than desirable. A comprehensive plan to improve and to assure the quality of services in the health sector is still lacking. Specially, absenteeism practised in the rural areas, spread of private practice by public sector physicians, inadequate supervision over supply of drugs and medicine and poor administration of hospitals and clinics lowered the standards of the delivery system. Much less has been done to improve the overall quality of drug production and laboratory services. An essential component of quality service is the proper and regular maintenance of medical equipment and health facilities which has not yet received the deserved attention. A medical audit system will be introduced and practised to prevent misuse, wastage and under-utilisation of human resources and scarce resources.
- j. **Trend analysis :** Based on the available demographic and epidemiological data, it is obvious that the global target of HFA by 2000 will not be fully met in Bangladesh unless greater efforts and reforms are undertaken. Encouraging interest in private sector involvement in health care has been generated in recent years. Private sector's participation needs to be streamlined based on an appropriate and precise policy. Privatisation of medical care on selective basis, particularly at the tertiary level, will be considered. Necessary steps will be taken to promote private sector investments in the health sector. The public and private sector "mix" will be taken as an opportunity to develop competitive quality services as well as an ability to share costs of services by the consumers. In recent years, a large number of private clinics have come up for providing health services to the general public, mostly in urban areas. Their contribution to the health sector will be enhanced if their services supplement/complement government efforts, particularly in areas where such services are not adequate.

21.5.4 Population : In case of family planning and population control activities, the following needs and deficiencies have been noticed:

- a. Existing service delivery system require reorganisation/restructuring to meet the need for providing cost effective service with quality and efficiency.
- b. Population factors are yet to be adequately integrated in macro and other sectoral plans to establish linkages between population factors and development variables.
- c. Poor performance in both sterilisation and IUD, partly due to deliberate non-participant- attitude of the field workers and their supervisors and partly due to improvement in the performance of oral pill and injectables needs to be corrected.
- d. The Health and Family Welfare Centres (HFWC) at the union level were largely under-utilised. Non-availability of doctors/medical assistants, shortage of medicine, poor quality of service and inadequate follow up care were reasons for this.
- e. Multisectoral institutions such as Mothers' Centres, Women's Co-operatives, Vocationally Trained Women and Swanirvar workers were not utilised by the Directorate of Family Planning for referral of clinical services. For this reason, the acceptance rate of clinical method was very low.
- f. Important institutions like the National Population Council, District and Thana Population and Family Planning Committees have not functioned as per expectations. These institutions should be immediately set in motion to play their full roles and discharge their full responsibilities.
- g. Frequent transfer of project directors, or holding of multiple charges by one project director, delay in project formulation, etc. led to delayed implementation of projects .
- h. Inadequate support for three multisectoral women's programmes i.e., (i) women's vocational training programme, (ii) women's co-operatives for population activities and (iii) mothers' centres for population activities stood on the way; skill training and credit facilities were found to be inadequate.
- i. NIPORT's training programme has not been evaluated; no course evaluation report based on pre and post-course training could be made during last seven years .
- j. Monitoring mechanism for different programme activities like IEC, temporary camps and clinics for service delivery, in-service training, supervision visits, and co-ordination committees were grossly inadequate; inadequate inter-projects linkage, poor institutional co-ordination or lack of it hampered programme progress .
- k. Supplies of instruments, medicines and contraceptives are dependent on donor assistance; there always remains an element of uncertainty in such donor-dependent imports.
- l. The community is hardly involved in programme planning and delivery of services through local need assessment.
- m. Field functionaries have not been putting up their best efforts owing to inadequate motivation and service conditions.

21.5.5 These needs and deficiencies will have to be taken into account while formulating appropriate policies and corrective measures. In addition a continuous evaluative process will have to be pursued to make all relevant progress cost-effective.

21.6 Objectives of Fifth Five Year Plan

21.6.1 Health : The main objective of the Fifth Plan is to ensure universal access for the people to essential health care and services of acceptable quality and to further reduce population growth to NRR-1 by 2005. Reduction of infant mortality and morbidity, reduction

of maternal mortality and morbidity, improvement of nutrition level and reduction of fertility with quality care will remain important basic objectives of the Fifth Plan.

21.6.2 Specific objectives: In specific terms during the Fifth Plan period, steps will be taken to:

- a. increase coverage of primary health care services for achieving 'Health for All' by the Year 2000;
- b. provide essential package of child health care, reproductive health, family planning, communicable disease control and limited curative care services for the people at one-stop service points with acceptable quality and equity;
- c. reform health and population sector to provide adequate basic and essential health and family welfare services to the population;
- d. develop behaviour change communication services in order to provide information, education and cross-communication services in support of access to and utilisation of the essential package services;
- e. ensure capacity development of the providers to facilitate provision of essential services both in quantity and quality with a realistic and appropriate human resource development plan;
- f. ensure regular monitoring, evaluation and research to determine current status of the programme, including future needs in a changing situation;
- g. improve the quality of services;
- h. promote a client-oriented reproductive health care delivery system;
- i. ensure universal access to basic health care and services of acceptable quality;
- j. improve medical, nursing and paramedical education with latest concepts and convention of medical science with emphasis on advanced studies/training of doctors/health professionals abroad and continuous in-service training;
- k. develop human resources deployable for health and medical care;
- l. improve the nutritional status of the population and to remove deficiency in micronutrients, particularly among mothers and children;
- m. prevent and control major communicable and non-communicable diseases;
- n. strengthen planning and management capabilities of the health system for utilisation and maintenance of existing facilities to the fullest extent with effective delivery system at different levels;
- o. promote and strengthen the Management Information System (MIS) and biomedical and operational research;
- p. promote adequate production, supply and distribution of essential drugs, vaccines and other diagnostic and therapeutic equipment, etc.;
- q. reduce health disparities between geographic, social, economic and gender groups in such a way that the overall life expectancy is increased;
- r. ensure survival and healthy development of children, particularly under-privileged children;
- s. improve the health and well-being of women living in rural and urban slum areas;
- t. reduce avoidable disabilities through appropriate preventive and rehabilitative measures;
- u. provide universal access to safe drinking water with proper sanitation system so as to create healthy environment and living conditions;
- v. create safe and healthy environment through prevention and control of environmental hazards;
- w. enable all people to adopt and maintain healthy life styles and healthy behaviour;

- x. encourage the private sector to invest and participate in health care facilities;
- y. provide health services on payment by the solvent ones so as to extend service coverage free of cost to those who are unable to pay;
- z. strengthen medi-care through setting up and operating nuclear medicine centres; and
- aa. follow slogans for the Fifth Plan: Health for All, Eradication of Polio, Reproductive Health Care for All Women, Eradication of Leprosy and Universal Child Immunisation, Virtual elimination of Night Blindness and Goitre at all operational levels.

21.6.3 Population : The main objective of the Fifth Plan is to create a greater degree of public awareness of the population problem through a social movement and country-wide approach and thereby, to ensure peoples' participation fully in order to achieve the demographic goal of NRR-1 by the year 2005. The Plan envisages to reduce the rapid growth of population through strong MCH-based family planning within the frame-work of reproductive health care and reorganised health and family planning service delivery system, provision of quality service, decentralised administration and inter-sectoral programmes, co-operation of all public bodies and resource mobilisation. The operational implications of the demographic goals in terms of changes in demographic and programme parameters during the Fifth Plan period are shown in Tables 21.2 and 21.3.

Table 21.2
Selected Sectoral Base Parameters and Their Projected Changes 1996-2010

Parameters	1996	2002	2005	2010
Population (million)	122.00	132.50	137.50	146.40
CBR per 1000 population	27.00	21.00	21.00	20.80
CDR per 1000 population	9.00	7.80	7.80	7.70
Population growth rate (%)	1.80	1.32	1.32	1.31
TFR per woman	3.40	2.60	2.20	2.20
IMR per 1000 live births	78.00	55.00	50.00	35.00
NRR per woman	1.50	1.30	1.00	0.93
Life Expectancy at birth (in years.) for Male-	58.10	60.00	62.00	64.00
Female-	57.60	59.00	59.40	64.00
Male Per 100 Female	105.00	104.80	104.40	104.20
Dependency Ratio(%)	79.00	62.00	46.00	40.00
Woman at Reproductive Age (15-49 years) (million)	27.50	32.60	39.20	43.10
Contraceptive Prevalence Rate (%)	48.00	60.00	68.00	72.00

Table 21. 3
Projected Changes in Selected Demographic Parameters in Fifth Plan (1997-2002)

Parameters	1997	1998	1999	2000	2001	2002
Population in January (million)	123.80	125.60	127.40	129.20	131.00	132.50
CBR per 1000 pop.	26.50	24.70	23.50	22.40	21.80	21.00
CDR per 1000 pop.	9.00	8.70	8.50	8.20	7.80	7.80
NGR (%)	1.75	1.60	1.50	1.42	1.40	1.32
TFR	3.40	3.20	3.00	2.80	2.70	2.60
IMR per 1000 live births	75.00	72.00	66.00	61.00	58.00	55.00
CPR (%)	48.00	51.00	54.00	56.00	58.00	60.00

21.6.4 The underlying assumptions of the projected changes are based on the most likely contribution of the government and multisectoral population programmes as well as efforts of

the NGOs. Another assumption is that the existing women's programmes will be intensified and expanded so as to enlist as many as 1.5 million women of reproductive age as members of the Women's Co-operatives and Mothers' Centres. NRR-1 among these women is expected to be achieved by the year 2002 .

21.6.5 Prospects for achieving demographic goal: In view of the current level of achievement in terms of total fertility rate (3.4), contraceptive prevalence rate (48%) and involvement of a large number of women through three women's programmes, Bangladesh is almost set on the road to achieving its demographic goal of NRR-1 by the year 2005. An enabling environment that is needed for the motivation of small family norm is also being created by the government and NGOs through increased investment in social sector programmes such as (i) education, (ii) primary health care, (iii) women's development, etc. Besides, all the FP and MCH service delivery programmes will be further strengthened within the framework of reproductive health care to meet the hitherto unmet demand, while new demand will be created through strong IEC programme, institutional supports and other appropriate means. Keeping all these in view, the following demographic goals and contraceptive users targets are set for the Fifth Plan period:

Table 21.4
Projected Total Fertility Rate (TFR) Contraceptive Prevalence
Rate (CPR) and Estimated Number of Users 1996-2010

Year	CPR (%)	Total Users (in million)	TFR per woman
1996/97	48.00	11.50	3.40
2002	60.00	17.50	2.60
2005	68.00	26.60	2.20
2010	72.00	31.00	2.20

21.6.6 Method-mix: Contraceptive-mix consists of all the methods which have been accepted by the people so far and will be made available through family planning field workers, HFWCs, hospitals, depot holders, local level volunteers and social marketing programmes. Keeping in view the current trend, the following method-mix is proposed for the next five years, 1997-2002.

Table 21.5
Projected Percentage of Contraceptive Users 1996/97 - 2001/2002

Method-Mix	1996/97	1997/98	1998/99	1999/2000	2000/2001	2001/2002
Oral pill	21.00	22.00	23.00	23.00	23.00	23.00
Sterilisation	7.00	8.00	8.00	9.00	10.00	11.00
IUD	3.00	3.50	4.00	4.50	5.00	5.00
Injectables	5.00	5.50	6.50	7.00	7.00	7.50
Condom	4.00	5.00	5.50	6.00	6.50	7.00
Others	8.00	7.00	7.00	6.50	6.50	6.50
Total	48.00	51.00	54.00	56.00	58.00	60.00

Table 21.6
Estimated Number of Contraceptive Users During 1996/97 - 2001/2002

	(in million)					
Method-Mix	1996/97	1997/98	1998/99	1999/2000	2000/2001	2001/2002
Oral Pill	5.03	5.48	6.38	6.20	6.46	6.70
Sterilisation	1.67	2.00	2.05	2.42	2.81	3.20
IUD	0.73	0.87	1.03	1.21	1.41	1.46
Injectables	1.22	1.36	1.45	1.88	1.96	2.20
Condom	0.95	1.25	1.38	1.63	1.83	2.04
Others	1.90	1.74	1.76	1.76	1.83	1.90
Total	11.50	12.70	14.05	15.10	16.30	17.50

21.7 Policies and Strategies

Health

21.7.1 Policies : The government has accepted the Primary Health Care (PHC) approach as a strategy to achieve the goal of HFA. Primary health care services will be provided through a four tier system: (a) community level-through community health workers; (b) ward level-through satellite clinics/health posts; (c) union level-through union health and family welfare centres (HFWC); and (d) Upazila level-through the Upazila Health Complex. The on-going programme for establishment of UHFWC and using voluntary community health workers/health volunteers will be geared up. All UHCs and HFWCs will be equipped with necessary diagnostic and treatment facilities to provide PHC services. At the HFWC, a basic laboratory will be established to perform simple tests such as albumin and sugar in urine, routine test of urine and stool, etc. At the UHC, a number of diagnostic tests are already being performed. In addition to the existing facilities, pregnancy test, blood grouping, AFB and some serum based tests like bilirubin may also be included. A comprehensive referral system will be developed to provide referral services.

21.7.2 A package of essential health services will be introduced on a pilot basis to meet the major needs of the people with minimum required services. On completion of the pilot phase the programme will be gradually expanded throughout the country. Integrated health and family planning services will be delivered in a packaged form through functional integration of the Directorate of Health Services and the Directorate of Family Welfare.

21.7.3 Much debate has taken place on the issues of decentralisation, local planning and management of health services, although no clear-cut policy on these issues has been made. As a strategy to foster community participation in the health sector, it is essential that major decisions pertaining to programme planning, cost sharing, service delivery, quality control, IEC, programme monitoring and supervision should be made at the community level. This will require transfer of more budgetary resources and management authority from the central to the peripheral level. In order to improve the management of upazila health complexes and district hospitals and to facilitate decision making and emergency response, the government will hand over the management authority of the government run district hospitals and upazila health complexes to the district councils and upazila parishads respectively.

21.7.4 As there is a large influx of migrants from rural to urban areas every year, urban primary health care services will be strengthened; primary health care programmes will be taken up with an aim to provide adequate quality health services to the urban population,

particularly inhabitants of the slum areas. Major renovations and construction of urban dispensaries will be carried out in the Fifth Plan period.

21.7.5 The immunisation and other related programmes such as health laboratory, epidemiological surveillance/health information system will be further expanded and strengthened to assist in controlling communicable and non-communicable diseases effectively.

21.7.6 Health manpower will be developed through development and implementation of appropriate curricula and basic in-service training of all categories of health service providers; the thrust will be on production of specialised manpower (technical and managerial) and of mid and grass root level health manpower; to further improve the current human resource situation, overseas training in specialised areas for post-graduate medical doctors and nurses will be intensified; in addition, in order to professionalise hospital management and administration, specialised training of health personnel in hospital management and administration overseas will be a priority in the Fifth Plan.

21.7.7 Medical education and health manpower development will be further expanded and strengthened to cater to the need for co-ordinating all training activities of health personnel working in different disciplines and sub-disciplines as per the Human Resource Development Master Plan of the Health Sector.

21.7.8 Production, deployment and utilisation of professional and para-professional manpower will be streamlined in accordance with the needs of the services. In order to optimise the doctor-nurse ratio in the country, the government will train and post more nurses so that there will be approximately 21,000 nurses available in the country to serve the people. The current training capacity in the country can only produce approximately 800-1000 nurses a year. Therefore, a significant expansion of the existing nurses training facilities in the country is being envisaged for implementation during the Fifth Plan period. In order to improve the doctor-population ratio for enhancing the quality of health services, the government expects to increase the number of doctors from the current 25,000 to 32,000 by the end of the Fifth Plan. To the end of production of dentists, there will be one dentistry department attached to each of the existing 13 medical colleges (public sector) so that more dentists can graduate to meet the needs of the country.

21.7.9 Health infrastructure throughout the country will be built/upgraded with special emphasis on development of facilities at lower level (union, upazila and district) linked with an effective referral system. Upazila health complexes will be strengthened in phases to provide first level hospital services. District hospitals will be expanded with increased number of beds for different specialities. Medical college hospitals and specialised hospitals and institutes will be strengthened to provide teaching facilities and specialised services at the tertiary level.

21.7.10 Supply of essential drugs, vaccines, sera, chemicals and reagents, rehydration fluids, condoms, disposable syringes and needles, etc, will be augmented by increasing their production and quality in the country. Bottlenecks experienced in the past will be cleared through decentralisation of the system and reorganising the supply depots and sub-depots at district/regional level and streamlining the distribution system.

21.7.11 Establishment/upgrading of blood banks and transfusion centres at district level and below will be given priority based on current and future needs. Correspondingly, the existing

manpower will be trained to upgrade their skills and to acquire new techniques. There are at present a total of 46 blood banks/centres where the facilities for proper screening are inadequate. Moreover, due to the new emerging/re-emerging diseases such as STD/HIV/AIDS, adequate infrastructure, equipment and laboratory appliances need to be installed to equip these centres to perform modern and more complicated tests backed up by trained manpower, counselling services, referral services and quality assurances.

21.7.12 Intersectoral co-ordination and interaction between health and other sectors will be fostered, especially in relation to such fields as reproductive health, nutrition, health education, safe water and sanitation and local production of essential drugs.

21.7.13 The entire health system will be restructured to improve programme management and service delivery. An efficient management system will be established based on function, responsibility and accountability at the individual and organisation levels.

21.7.14 Development of indigenous and homeopathic systems of medicine will be encouraged in public and private sectors. To this end, human resource development through education, training and research will be pursued so that these systems can play a complementary role to the modern system of medicine.

21.7.15 Adequate health care facilities including those for STD/HIV/AIDS/RTI for industrial workers will be developed through training of manpower in industrial health and setting up of appropriate infrastructure.

21.7.16 Rehabilitative and training facilities will be developed or further expanded for those who are physically and mentally handicapped. Mental health services will be improved at the existing mental health facilities. Psychiatric care will be developed in more secondary and tertiary hospitals while mental health will be promoted at the primary health care level.

21.7.17 To generate resources, various methods like cost sharing, health insurance and co-operatives will be adopted keeping in view the equity principle promoting equal access for all socio-economic groups, poor, destitute and disabled persons.

21.7.18 Medical and health research will be expanded to priority areas, particularly in development, operational and biomedical fields. Mechanisms and processes for dissemination and utilisation of research findings will be developed and adopted.

21.7.19 Involvement of the private sector and NGOs will be promoted with a view to achieving the spirit of participation and ownership in health development. Private sector and NGOs will be encouraged to set up hospitals, polyclinics, pharmaceutical industries and to develop human resources and produce equipment. Mechanism to enhance private sector financing will be explored through incentives for investors in the health sector. The role of the government will be mainly limited to policy setting, monitoring and control.

21.7.20 Concerning the provision of tertiary health care to the public, the government recognises its limitations in bearing the potentially huge costs involved. It, however, holds the view that this cost can be reduced by (a) promoting health care as a measure to promote health and to prevent diseases; (b) promoting the private sector to provide tertiary health services with the government playing a monitoring and regulatory role; and (c) in a limited scale, invest in areas of tertiary care where the private sector is unable to act e.g. training of personnel, provision of essential but very expensive equipment or services where private enterprise is unable to invest.

21.7.21 One feasible solution to the rising cost problem is to introduce, by the government, some mechanisms to share or to recover cost. Cost-sharing may take the form of having the entire community, through a revenue generating mechanism, contribute to the support of the health and family planning institutions and services in their locale. It may also take the form of having individual users to pay for a small amount of fees for the use of health services provided by the government. To discourage health service providers in the public sector to simultaneously take part in the private sector, either an extra billing mechanism or giving a portion of the revenue collected from the community and users to the providers may be considered. It is felt that with the decentralisation of decision making to the community level and the sharing of costs in the provision of health services, the sense of ownership by the public will be heightened. Through this process, the demand for services will eventually replace the supply driven services, leading to a more rational and sustainable health system.

21.7.22 In the area of reproductive health, continued efforts will be undertaken to reduce maternal morbidity and mortality. Areas that will be strengthened include services for safe pregnancy and deliveries, all pre-natal and ante-natal care, managing reproductive morbidity, managing maternal and adolescent health and prevention, control and treatment of RTI/STD/AIDS/HIV.

21.7.23 The basic health needs of the population, especially the need of children, women and the poor will be met. At all levels of services, the aim will be at quality of services, equity of access and efficiency of service delivery. Main focus will be given on an essential package of services. Within the essential package, priorities will be : (a) interventions that have public good character and (b) services related to maternal and child health.

21.7.24 Other health services will be expanded and improved through partnerships with or contracting out of services to NGOs and private not-for-profit hospitals and through a larger and better regulated role for the private sector.

21.7.25 Improvement of public sector hospitals will involve greater autonomy of management combined with local accountability.

21.7.26 The resource constraints for meeting future demand for health and family planning services will require improved efficiency and expanded cost recovery in the public sector. Attention will be given to equity impact of cost recovery, particularly for poor women.

21.7.27 Complementary measures will be generated in other sectors to increase the impact and efficiency of health and family planning measures.

21.7.28 Meeting the unmet demand and creating new demand for contraceptive use by providing quality services and pursuing aggressive IEC programmes and effective involvement of NGOs will be aimed at.

21.7.29 Decentralisation for programme planning, strategy formulation and resource mobilisation and for encouraging local level participation with ownership in programme planning and implementation will be pursued. In this process local leaders and opinion makers including religious leaders will be pressed in for population activities in the community.

21.7.30 Multi-sectoral approach for providing health and population programmes through involving other ministries/divisions such as Education, Local Government, Agriculture, Women and Children Affairs etc., will be pursued.

Strategies

21.7.31 Management and organisational reform : The future structure of MOHFW and its Directorates will depend on the redefined role of the government, as outlined above and will be fully supportive of essential services package delivery. As the services are rationalised and as the emphasis of government's role may change from the provision to the commissioning and financing of services, correspondingly the department's structure will also be reorganised.

21.7.32 Sector wide approach: Ministry of Health and Family Welfare will build up its capacity in strategic planning, programming and budgeting towards sector-wide management. The current capacity reflects an approach which is project-based and fragmented; it will be strengthened to take a sector wide view. Sector-wide approach will be implemented through annual operational programmes, budgets, and reviews of performance and resources. These annual operational programmes will provide flexibility in implementing the strategy.

21.7.33 Delivery of services : The main focus of the service delivery will be based on a package of essential services with particular emphasis on child health, reproductive health, including family planning and preventive, promotive and curative care. The delivery strategy for such a service will focus on client-oriented one-stop service. The delivery strategy will also involve the communities served in both planning and management. Population-based approach will be undertaken against the current practice of administrative unit-based approach in planning and allocating resources. Epidemiological and socio-economic factors will also be considered in this context.

21.7.34 Following elements will also be considered in providing the essential services package of health care :

- a. **Rural delivery strategy :** While the existing physical infrastructure is suitable to provide the essential package cost-effectively, the strategy will be to utilise this infrastructure qualitatively and quantitatively.
- b. **Urban delivery strategy :** There are no existing infra-structural facilities to deliver essential basic package in the urban areas. As such, the strategy will be to collaborate with the city corporations and municipalities, NGOs and the private enterprise for the service delivery in the urban areas.
- c. **Prioritisation criteria :** As the current allocation will not be enough to provide the full range of essential care, the adoption will be phased and the contents added gradually as per client's need and as funding will allow.
- d. **Support systems :** Capacity of the providers will be enhanced through training and creation of an enabling environment. The physical facilities will be renovated to address the issues of gender and also ensure that these are clean and attractive. Procurement and distribution of logistics will be prioritised keeping the essential package in view. Sufficient funds will be made available for research which is currently a neglected area of the health care delivery system. An efficient management information system that will cater to the need for analysis of resources, performances and expenditures has to be evolved.

21.7.35 Delivery of other hospital services: To increase the quality of hospital services primary, secondary and tertiary level hospitals will be appropriately equipped to enable them to provide the expected range of services. An effective referral system linked from thana to district to medical college and specialised hospitals will be established. The referral service will also consist of periodic downward visits of experts in a systematic manner. Establishment/upgrading of blood banks and laboratory-based diagnostic services through

self-sustained autonomous agencies will upgrade the quality of care. Sufficient autonomy, local accountability and decentralisation of administrative and financial power and authority to managers will be the main basis for efficient management of hospitals.

Population

21.7.36 Policies : In order to achieve the demographic goal and various physical targets, the following policies and strategies will be pursued during the Plan period:

- a. To accord top priority to population and family welfare programmes and build up national commitment and generate a social movement to promote two-child-family norm through community participation and nation-wide approach; all ministries and their agencies will have to participate directly and indirectly to combat the existing and potential sources of high rate of population growth through preventive programmes, advocacy and various population-influencing and responsive policy measures; as far as possible, all development programmes will have built-in population components.
- b. To provide reproductive health care services such as for family planning, maternal and child health (MCH), reproductive track infection, STD, HIV, etc., at appropriate level of service provision; special attention will be given to family planning for the under-served groups, newly weds and low performing areas .
- c. To meet the unmet demand and create new demand for contraceptive use by providing quality services and pursuing aggressive IEC programmes and effective involvement of NGOs .
- d. To decentralise authority for programme planning, strategy formulation and resource mobilisation and to encourage local level participation with ownership in programme planning and implementation.
- e. To reduce worker-population density and provide both family welfare and primary health care services more intensively; field workers of both family planning and health programmes will be utilised under the unified command of the Medical Assistant/ Doctor in charge of the HFWC/ Rural Dispensaries, who, in turn, will report FW activities to Thana Family Planning Officer and health related activities to the Thana Health Administrator.
- f. To pursue the activities of the multisectoral population programmes including the existing three women's programmes and to involve other ministries including those which have not been hitherto involved in population activities such as Local Government, Agriculture, Home Affairs, etc.
- g. To enhance collaboration between the government and NGOs delineating specific functional areas, where necessary, and to involve NGOs in a larger scale to help achieve demographic goals and other social objectives.
- h. To include "reproductive health care" in the syllabi of the training institutions for medical and paramedical personnel.
- i. To review and update population education and implementation of a comprehensive human resource development plan for the entire population sector.
- j. To take effective measures for appropriate regional distribution of population to prevent influx of population to the major cities in Bangladesh; for this, the government and its relevant agencies should be informed of the consequence of the imbalance in the distribution of population and its adverse effects on economy, environment and society.

- k. To use Union Parishad and the Ward Committees as nucleus of all population activities involving local community leaders and personnel for better horizontal interaction, co-ordination and people's participation.
- l. To design special programmes for low income groups having large family size; urban slum dwellers should also receive special attention for services ; and
- m. To use local leaders and opinion makers including religious leaders for population activities in the community.

21.7.37 Strategies : The strategies to be pursued to translate these policies into realities will be as follows :

- a. Attaining time-bound demographic and MCH/FP goals by fulfilling programme objectives with quality care.
- b. Promoting the use of clinical methods like sterilisation, IUD and injectables and incrementally implementing reproductive health care components through appropriate level of service outlets.
- c. Strengthening programmes for IEC and community mobilisation with definite plan of action and mechanism for regular review and monitoring.
- d. Activating the co-ordination committees of population programmes at national, district, thana and union level to enlist public support and monitor the progress of implementation.
- e. Pursuing short-term action plan with result-oriented-interventions, especially in places where programme performance is relatively low.
- f. Addressing the need for programme sustainability through resource mobilisation and people's ownership.
- g. Popularising clinical methods of contraception by utilising multi-sectoral workers, FWAs, community leaders, religious leaders and various social institutions.
- h. Capacity building for in-country production of contraceptives and equipment.
- i. Ensuring evaluative research and operations research; an appropriate central co-ordination mechanism should be established outside the research organisations, preferably by the MOHFW/ Planning Commission.

21.8 Programmes

Health

21.8.1 In addition to strengthening of the on-going programmes, a number of new programmes at all levels (primary, secondary and tertiary) of health care will be undertaken during the Plan period. In the Fifth Five Year Plan, important programmes that will be implemented on a priority basis include eradication of polio, elimination of measles, leprosy and neo-natal tetanus, improvement of nutrition, strengthening of school health programmes and setting up of a Centre for Emergency Preparedness and a National Health Training Centre for practical and refresher training of medical and para-medical personnel. On the other hand, some of the projects that were taken up later in the Fourth Plan will be intensified. They include the quality assurance programme, intensified control of TB, control and prevention of HIV/AIDS and sexually transmitted diseases (STD) and the improvement of medical education programmes. In addition, programmes such as urban health care and environmental health will also be given importance.

21.8.2 Various human resource development programmes for technologists, nurses, health professionals (e.g. physiologists, occupational therapists, etc.) and other supportive hospital

service workers will be introduced/intensified. Expansion, up-gradation and functional improvement of secondary and tertiary level health facilities will be intensified. Efforts are already underway for upgradation and expansion of the Institute of Post Graduate Medicine and Research (IPGMR) as Bangabandhu Medical University and converting it into a Centre of Excellence of international standard. Similar expansion programmes have already been undertaken for upgradation of the National Institute of Cardiovascular Diseases (NICVD) with added physical facilities, equipment and personnel. The NICVD will also be developed as a Centre of Excellence during the Fifth Plan period. Besides, an Institute of Health Sciences will be established under BIRDEM. Two dental colleges and hospitals, seven regional diabetic centres (at district level), one mental institute and one kidney institute will be established during the Plan period. With a view to improving the nurse/doctor ratio, the existing nurses' training programme will be expanded and revamped.

21.8.3 From the system perspective, major endeavours will be introduced or strengthened. These will include improvement of referral and emergency services, implementation of the human resource development master plan, the health programme reorganisation plan, and the health financing programme. The health management information system which will comprise of the services, logistics, financial, personnel and infrastructure information sub-systems is expected to be completed by the end of the Fifth Plan period.

21.8.4 The issue of sector sustainability has been given much consideration by all concerned. The government has taken up steps to address this issue by increasing its investment in the sector and by integrating various health activities into its revenue programme. It is envisaged that, in the immediate future, efforts will be made for capacity building in the health sector. This will include (a) strengthening and expansion of capacity and capabilities of local production of essential drugs and other medical commodities and (b) strengthening the planning and management of programme activities.

21.8.5 The existing physical facilities that are extended from national to union levels are not adequately designed to meet the demand of the people, especially of women, children and the poor. These facilities will be improved to provide privacy for women, separate toilets, appropriate beds on gender ratio, etc. Clean and attractive physical and social environment will also be created.

21.8.6 Essential service package (ESP) : Due to existing resource constraints, it is not possible to provide various services needed by all segments of the population. So it is necessary to prioritise those interventions in health and population sector which will have the greatest health impact per taka spent. Services for all interventions need US \$ 12 per capita whereas we have only \$ 4 to \$7 per capita to spend. Therefore, it is necessary to prioritise most urgently needed services, particularly for the most vulnerable groups of population and those prioritised services are named as essential package of services. The ESP is a set of interventions that have been selected to address the most important health needs of the population in both rural and urban Bangladesh.

21.8.7 Contents of ESP :The programme areas to be covered by ESP are described below:

- a. Child health care :** It will comprise the following activities:
 - i. basic preventive and curative care;
 - ii. control programme for diarrhoeal diseases, ARI, CDD vaccine preventable diseases (EPI) and Vit-A supplementation;

- iii. intensive and extensive programme for combating malnutrition; and
- iv. integrated case management strategies.

b. Reproductive health care : It will aim at:

- i. avoiding unwanted pregnancies;
- ii. postponement of births;
- iii. services for safe pregnancies and deliveries, all pre-natal, ante-natal and neo-natal care;
- iv. fertility regulation;
- v. treatment of abortion patient;
- vi. managing reproductive morbidity;
- vii. managing maternal and adolescent health;
- viii. prevention, control and treatment of RTI/STD/AIDS/HIV;
- ix. provision of RH and comprehensive EOC at THC, MCWCs and district hospitals; and
- x. involvement of female education, employment and empowerment programme.

c. Communicable disease control : Under its aegis special attention will be given to prevention and effective management of infectious diseases with severe health impact e.g. TB, leprosy, malaria, kala-azar, STD/RTI including HIV/AIDS and also cross-border emerging diseases.

d. Behaviour change communication: The main aim under this head will be to provide information, education and cross-communication services. It is central to improving the health of individuals and based on the notion that information provided on the causes of ill health and the services available and what individuals and communities can do to improve their health contribute to improvement of health status.

e. Limited curative care: Care for common conditions and injuries to meet public expectation for these services will be included in this head. Basic first aid, treatment of medical emergencies, pain relief and advice for the poor are to be provided in a manner consistent with resources available.

21.8.8 Behaviour change communication activities (BCC) : The emerging of “new” or previously uncommon diseases in Bangladesh such as cardiovascular diseases, cancer, renal disorder, mental illness, HIV/AIDS, trauma and accidents are closely associated with personal life style or behaviour whose prevention requires a multi-dimensional intervention programme. One of the most cost-effective means to promote and to protect health is to introduce IEC (information, education and communication) programmes and activities. The current IEC capacity and facilities of the health sector are quite limited. There is a need to upgrade these facilities and programmes. On this backdrop BCC will aim at :

- a. changing attitudes and behaviour of people to improve their health status;
- b. creating demand for preventive and selected curative services;
- c. building effective community support for health seeking behaviours;
- d. changing attitudes and behaviour of service providers to provide client-centred services.

21.8.9 Reorganisation of health and population sector : The government is committed to ensure accountability and to make the government better serve the interest of the people. There is a growing consensus that sustained progress toward improving health and slowing

population growth rate requires improvements in both quality and availability of health and family planning services. The present organisational set-up with bifurcated population and health wings contribute to inefficiencies and duplication of functions in the delivery of maternity care and other reproductive health services. In this context, a structural reorganisation of the Ministry of Health and Family Welfare will be undertaken to provide effective and client-oriented ESP.

21.8.10 Human resource development : A human resource development programme will be undertaken in the Plan period to address issues such as quality of training, appropriateness of courses, community needs, on-the-job supervision, staff deployment, performance appraisals and suitable mechanism to ensure accountability. The programme will also contain an estimation of total manpower based on skill-mix needs in health and population sector for effective and efficient delivery of essential service package.

21.8.11 The human resource development of the health, population and family welfare sector will be implemented through the concerted efforts of the institutes and facilities of the Ministry of Health and Family Welfare. However, these institutes will also collaborate with those in the private sector or operated by NGOs.

21.8.12 Physical facilities : The existing physical facilities that are extended from national to union level is not adequately designed to meet the demand of the people, especially women, children and poor. These facilities will be improved to provide privacy for women, separate toilets, appropriate beds on gender ratio, etc. Clean and attractive physical and social environment will also be created. With a view to delivering quality services effectively and efficiently, some construction and renovation of facilities at different levels will be required. Hence necessary allocation is needed in the Plan. Besides, maintenance of existing infrastructural facilities of health and family planning sector will continue.

21.8.13 Logistics: Continuous supply of medical and surgical requisites, equipment, contraceptives and other biomedical supplies are essential for the smooth service delivery in this sector. Institution building and decentralisation of the logistics will be undertaken to develop a cost-effective logistic supply system. The systems will be strengthened by increasing the local production of medical and surgical requisites. The government may establish manufacturing plants for production of condom, IUD and oral pills in order to minimise dependence on foreign aid which is often fraught with uncertainty about their availability. For this purpose private sector's involvement will be given priority. Adequate allocation has been made for production, procurement and supply.

21.8.14 Monitoring research and evaluation : The current MIS suffers from a number of limitations. The existing MIS has poor linkage with supervision, monitoring and local level planning. The system is not tailored to suit different levels of programme managers. There exists need for improvement in the areas of electronic data processing capability, data validation, data sharing and dissemination. Moreover, the sector-wide programme approach will require re-organisation of the systems so as to improve management capabilities. During this Plan adequate resources will be made available for developing/strengthening and implementing the appropriate MIS which will support the sector-wide approach and the increased activities of the sector.

21.8.15 Operational research is an important tool for monitoring and evaluating the programme performance and results. The current allocation in this sector is highly inadequate for conducting research. Institutes that are involved in research are also not suitably

developed. For health care, basic, applied and other biomedical and operational researches are essential not only to improve health care delivery but also for monitoring the overall trend and assessment of disease control programmes. During this Plan period the existing research institutes (e.g., NIPORT, IEDCR, BMRC, NIPSOM) and their capabilities will be strengthened with necessary financial allocations. Collaboration of private organisation/institute and NGOs will be fostered and encouraged.

Population

21.8.16 The population sector activities can be thematically categorised into seven major components, namely (a) reproductive health with primary focus on MCH-based family planning service delivery along with necessary logistic supports; (b) information, education and communication (IEC); (c) training and manpower development; (d) infrastructural development; (e) research, evaluation and monitoring; (f) population related women's development programmes; and (g) policy planning, co-ordination and population development activities. Given this broad categorisation, the following programmes are specially identified for effective implementation:

21.8.17 Service Delivery

- a. Reproductive health care :** Services that aim at avoiding unwanted pregnancies and postpone births, services for safe pregnancy and delivery including fertility regulation and treatment of abortion patients, managing reproductive morbidity and mortality including STD/HIV and addressing maternal and adolescent health are the main elements of reproductive health care. To date, insufficient attention has been given to maternal care. Although the physical infrastructure is in place, the concepts of the Safe Motherhood Initiative and the provision of Essential Obstetric Care (EOC) are yet to be implemented. In rural areas, as has already been mentioned the government will introduce an essential package of services which will include (a) behaviour change communication, (b) reproductive health care, (c) child health care, (d) communicable disease control, and (e) simple curative cases. The essential package of services (EPS) will be provided increasingly in sophisticated manner at each level of the system . Fertility reduction efforts will continue, but the strategic focus will be on delaying the first birth, improving continuation rate and providing quality surgical contraception. This will require complementary action by other ministries, e.g., female education, employment and empowerment to create demand for services. This Plan will give emphasis to family planning programmes through building up national commitment and generating a social movement to promote a two-child family norm through community participation and multi-sectoral approach. All ministries and their agencies will participate directly or indirectly through preventive programmes and advocacy and adopt various population influencing and responsive policy measures .
- b. Implementation mechanism for integrated service delivery:** The existing Health and Family Planning Directorates date back to the 1970s. The current commitment to the reproductive health care approach requires integrated service delivery system . Delivering EPS will necessitate co-ordination of the existing delivery structure. The lowest operational units of such service delivery will be the union level Health & Family Welfare Centres (HFWC), MCWCs and upgraded HFWCs (i.e. conversion of erstwhile rural dispensary) under the overall supervision of the medical assistants(MA) and/or MOs, in charge of these units, as the case may be. Both MA and MO will be oriented with the new reorganised rural health and family welfare service structure which includes EPI , maternal and child health care , basic reproductive health services

including family planning, management of reproductive morbidity and mortality; safe delivery, primary curative health care services and referral of complicated cases to the THCs and other activities as may be deemed appropriate at that level. In order to reduce worker-population density, field workers of both Family Planning and Health Directorates will receive unified training and work under the supervision of the union supervisor as specified above. These field workers (e.g. FPI, FWA, Health Assistants etc.) will be known as the Health and Family Welfare Assistants, hereinafter called as the HFWA . They will have one reporting form showing the predefined common activities in which they will report their performances. The proposed reorganised programme will be implemented in phases starting from the unions where doctors have been posted. No implementation will take place without prior training of the functionaries.

- c. **Quality assurance:** Quality services will be ensured at all level service outlets. This will be done through better training and orientation of the providers during their pre-entry and in-service training in addition to on-the-job support by the technical supervisors and clinical supervision team as well as improving service - settings. Besides, quality of training will also be improved at NIPORT, RTC and FWVTIs by engaging appropriate teaching personnel.

21.8.18 Women's development activities: The existing population related women's programmes in three different agencies, namely, (a) Bangladesh Rural Development Board (BRDB), (b) Social Welfare Directorate and (c) Women's Affairs Department will be strengthened to intensify their activities in their respective jurisdiction. Skill training, functional education, reproductive health related education and credit facilities will be the major components to make these programmes more participatory and effective at the community level. Women exposed to these programmes will be motivated to reach NRR-1 by 2002. About 1.5 million women are expected to be directly exposed and brought under the purview of these programmes. Their exposure to these institutions will encourage them to delay marriage and first birth as well as to adopt birth-spacing. Since participants of these programmes belong to low income group, skill training and credit facilities to them will have bearing on their family size norm .

21.8.19 Policy planning: Policy planning of population and family welfare activities will be done by the Planning Commission along with the MOH&FW and other relevant agencies and institutions. The Planning Commission will ensure co-ordination with other multisectoral agencies. Besides, it will also ensure integration of population variables in sectoral plans and policies.

21.8.20 Regional population distribution: One of the major concerns in Bangladesh today is the rapid growth of population in urban areas, especially in the large cities like Dhaka, Chittagong, Khulna and Rajshahi. Urban population growth rate ranges from 6 to 7 per cent per annum which is largely due to influx of rural migrants. The government in this context will redesign its public policies for the development of regional cities and towns so that the influx of rural migrants can be contained. More income generating activities in rural areas will be undertaken so as to extend employment and support self-employment.

21.9 Role of Non-Government Organisations (NGOs)

21.9.1 Family Planning Programme in Bangladesh started at the initiative of the Bangladesh Family Planning Association - an NGO which spearheaded the family planning movement from late fifties through late sixties. With the introduction of the government's liberal policy

a number of donor supported NGOs came up with programmes on family planning. These NGOs, in collaboration with the Directorate of Family Planning, have been operating in many areas in Bangladesh. Their net contribution vis-a-vis the government in recruiting the contraceptive users is reportedly 2:8. In fact, during the Fourth Plan period (1990-95), they made a significant progress in raising contraceptive prevalence rate (CPR) and reducing fertility. In the Fifth Plan period, NGOs will be encouraged to play a larger role and ensure their presence in almost all the thanas.

21.9.2 The share of NGOs' contribution to the recruitment of total contraceptive users in the next five year is projected to progressively increase as follows :

Table 21.7
Percentage Share of Projected Government and NGOs'
Contribution to CPR During 1996-2002

	1996	1997	1998	1999	2000	2001	2002
Government	80	78	75	72	69	66	63
NGOs	20	22	25	28	31	34	37
Total	100	100	100	100	100	100	100

21.9.3 The implication of this physical target for the NGOs is that they will have to recruit 6.50 million contraceptive users in 2002 against the 1997 level of 2.60 million. The NGOs will pursue goal-oriented programmes addressed to direct beneficiaries. Their existing programmes should be strengthened and enlarged for wider coverage of population, while new NGOs should emerge with donor and the support of the government. However, the NGO programmes should be more transparent. The bonafide national and international NGOs will continue their works, especially in the under-served areas.

21.9.4 Role of private sector: Business organisations/institutions in the private sector should be encouraged to involve themselves in population sector activities. They can invest in production of FP/MCH commodities and equipment. They may alone or in conjunction with the government undertake area development programmes. The Investment Board and the MOH&FW will explore the prospect of attracting foreign investors. The Social Marketing Company (SMC) which is already in place will further extend its market for commercial sale of contraceptives. The private hospitals and clinics can provide reproductive health care and charge for services. In order to encourage the private sector to invest in this new field, they may be given a guaranteed assurance that the government will buy their products for several years, provided such products are of acceptable quality and price.

21.10 Population-Development linkages

21.10.1 Reduction in the rate of population growth has been faster in societies having conducive environment created through a series of social measures in favour of women's participation in development activities, wider opportunities of employment for the youth, promoting female education and vocational training, maternal and child health benefits, enhanced investment for educational opportunities and gender equality. Keeping in view Bangladesh's future population growth potentials and its social and cultural milieu, several social measures will be in order:

- a. Creation of enhanced opportunities for women, especially in the rural areas, through functional literacy and vocational training so as to enable them to participate in income-generating activities;

- b. Provision for equal access for both men and women to credit facilities for small scale production without any collateral by creating special social groups such as mothers' centres, producers' co-operatives, model farmers' association and so on;
- c. Promoting and pursuing population education and training as integral components of programmes of various ministries to keep the participants informed of the consequences of rapid population growth on their sectoral and investment plan; the needed directive to this end will be given from the highest level of the government;
- d. Promotion of social marketing of contraceptives and informed choices for these through all culturally acceptable media and institutional arrangements; and
- e. Provision for social security to childless parents in old age; necessary treatment should be given to couples having no child after several years of their marital union; such treatment and diagnostic facilities are proposed to be free.

21.10.2 Role of ministries in population activities: High rate of population growth and resultant increase in population size impede the process of achieving the objectives in various sectors of the economy which is why the burden of responsibility of population control and family planning must be shared by those ministries and agencies whose target population are directly affected by the menace of population growth. The relevant ministries and agencies can play their respective role within their normal strides and framework. What is needed of them is the highest level of motivation and a sense of responsibility in overcoming the difficulties imposed by the population problem. Outlined below is the role to be played by different ministries and agencies during the Fifth Plan period:

- a. Ministry of Health and Family Welfare will be the lead agency for population and family welfare activities and responsible for implementing reproductive health care programme including family planning and MCH service delivery through its existing and potential service outlets like Health Complex, Union level FWCs, MCWCs, clinics and field workers. It will also be responsible for policy formulation, co-ordination of population activities and more urgently, the formulation of "National Population Policy". It will establish the Secretariat of the National Population Council and monitor progress of implementation of all policy decisions and also, activate the District, Thana and Union Co-ordination Committees to review and monitor the progress of population activities. Besides, it will arrange training for the functionaries involved in population activities in the Ministry of Health and Family Welfare as well as other ministries and undertake operation research.
- b. Ministry of Education will update curricula on population education in their formal school system from four to twelfth grades and support and encourage the universities to introduce demographic/population training. It will support scholarship programmes to retain girls in schools beyond the secondary level.
- c. Ministry of Agriculture will introduce population education in its training institutes and colleges. It will make efforts to motivate farm population on small family norm through its extension workers.
- d. Ministry of Information will inform the people through television and radio by using appropriate themes and messages on population issues, family planning, maternal and child health to enhance people's motivation in favour of family size limitation. It should also telecast/broadcast other reproductive health related messages such as on STD, HIV, etc.
- e. Ministry of Local Government, Co-operatives and Rural Development will develop programmes involving the Union Parishad and local elites to orient them in population and development related activities. FP/MCH will be the important

elements of functional literacy, adult education and training programmes. About 50,000 poor women who work for the maintenance of the rural roads under the Local Government Engineering Department (LGED) will be utilised for population activities. The Union Parishad should also assume the responsibility of supervising Family Planning and Health workers.

- f. Ministry of Planning will be responsible for population policy planning, integration of population variables in the relevant sectoral policies and programmes, as well as co-ordination of resource allocation to various projects and programmes of the concerned ministries. It will also be responsible for assessing programme impact through evaluative studies. Bureau of Statistics will undertake decennial population census and undertake the required demographic studies.
- g. Ministries of Social Welfare, Women and Children Affairs, Youth and Sports and Cultural Affairs will continue to implement population related women's and youth development programmes focusing attention to skill training, credit to the trained women, FP/MCH education, functional literacy, reproductive health issues, women's rights and responsibilities. The institutions of mothers' centres should be further strengthened by enlisting more and more members from the village community and thereby, enabling them to avail themselves of these facilities.
- h. Ministry of Environment and Forest will pursue a policy to safeguard the natural environment, encourage people for tree plantation, reallocate human settlements in the forest areas, prevent air pollution by disallowing old and worn-out transports on the roads and undertake other measures to ensure better natural environment.
- i. Ministries of Defence, Home Affairs and Communication will provide reproductive health programmes in their hospitals and other service outlets and carry out educational programmes for their service men and employees.
- j. Ministry of Labour and Manpower will introduce reproductive health care programmes at the Labour Welfare Centres, tea garden clinics and other service outlets. The population of the industrial area should be the special target group for such services. It will develop surveillance system of the returnee workers to detect HIV/AIDS incidence.

21.10.3 Co-ordination : Population activities will have to be co-ordinated at all levels for necessary review, monitoring and guidance. At the national level, the recently constituted National Population Council (NPC) will continue to provide policy guidance. The NPC will have an executive committee headed by the Minister of Health and Family Welfare to implement various policy decisions. Its secretariat will formulate a national population policy with a long term perspective. It will have a monitoring unit consisting of the representatives of different agencies to monitor the progress of implementation and provide guidance on the relevant policy issues. Similarly, there will be District and Thana Population Co-ordination Committees which are presently dysfunctional and need to be activated under the chairpersonship of the elected representatives of the people with membership drawn from different relevant organisations. The Union Population and Health Co-ordination Committee headed by the Chairman of the Union Parishad will also be formed to oversee the works of the HFWAs and undertake such initiatives as to motivate the community in favour of better health and small family norm. Such a committee may also be formed under city corporations, municipalities and gram parishads. This approach will create massive awareness of health and population problems and help fuller utilisation of MCWs, HFWCs and THCs and make the local functionaries responsive to the community.

21.11 Scope for Further Development of Health Sector

- a. With the changing health situation in the country, new opportunities will be created to further develop the health services. During the Fourth Plan, two areas were not given priority attention, namely, environmental health and health emergency preparedness and response. With the environment deteriorating in both urban and rural areas in the country coupled with the threat of arsenic contamination in ground water reported in many districts, there is a need to give priority attention to environmental health programmes in the Fifth Plan.
- b. In addition to the need to continue to extend safe water and sanitation facilities, new areas of attention should include industrial and hospital waste disposal, air and water pollution in urban areas and chemicals and food safety.
- c. Continual medical education of the health personnel at different levels to become acquainted with new concepts and methods of medical and health services is of paramount importance. A mechanism for institution based on-the-job training of the service providers will be considered through the establishment of a National Health Education Institute during the Fifth Plan period.
- d. In the area of health emergency preparedness and response, some ground work was done during the Fourth Plan. During the Fifth Plan, this programme will be put into implementation and a National Centre for Health Emergency Preparedness and Response will be established to deal with the many natural and potential man-made emergencies /disasters which occur frequently in the country.
- e. Closely associated with the rising non-communicable diseases is the increasing prevalence of substance abuse in the country including consumption of tobacco, alcohol, betel nuts and narcotics. Tobacco related diseases have been identified by WHO as one of the most serious health problems of the next century particularly in developing countries. Priority interventions in the form of both health education and legislation will be required to arrest the deteriorating situation.
- f. Urban health care was accorded a relatively low priority during the Fourth Plan. With accelerated urbanisation and migration from rural to urban areas, the existing urban health services are not adequate to meet the ever increasing needs. Increased attention is, therefore, required to enhance the existing urban health services.
- g. There are also unfinished agenda from the Fourth Plan which must be continued in the Fifth Plan. It has been agreed that (i) poliomyelitis will be eradicated by the year 2000, (ii) leprosy will be eradicated by the year 2005, (iii) neonatal tetanus will be eliminated by the year 2010, (iv) measles will be eliminated by the year 2010 and (v) elimination of night blindness and goitre will be completed by 2000 and 2005 respectively. Strengthened efforts are required in the Fifth Plan in these areas so that these internationally agreed goals can be attained.
- h. Three major programmes have been implemented under the Fourth Plan to strengthen the existing tuberculosis and malaria control programmes. Malaria and kala-azar are fast re-emerging in the sub-continent. Under the Fifth Plan, the tuberculosis prevention and control programme will be expanded to cover the entire nation while programmes for malaria and kala-azar will be further intensified with increased co-operation with the neighbouring countries.
- i. Much preparatory work has been done in the health sector to combat emerging diseases such as HIV/AIDS and different types of hepatitis in the past two years. It is now high time to translate these planned intervention programmes into action. Resources will also be required to combat the less attended diseases such as rabies.

- j. Vaccines against hepatitis, meningitis and mumps will be added to the arsenal of EPI. Initiative will be taken for production of vaccines within the country. HDCL vaccine for rabies will be used instead of sheep brain. The facilities at drug testing laboratories (DTL) will be modernised and their capabilities will be expanded to meet the current and future demand.
- k. The emerging “new” or previously uncommon diseases in Bangladesh such as cardiovascular diseases, cancer, renal disorder, mental illness, HIV/AIDS, trauma and accidents are closely associated with personal life style or behaviour whose prevention requires a multi-dimensional intervention programme. One of the most cost-effective means to promote and to protect health is to introduce IEC (information, education and communication) programmes and activities. The current IEC capacity and facilities of the health sector are quite limited. There is a need to upgrade their facilities and programmes and the need will be met in the Fifth Plan period.
- l. With increasing urbanisation and industrialisation, the number of burn and trauma cases due to traffic and industrial accidents, unsafe use of chemicals, fire, etc., have been increasing every year. There is a need to establish trauma and burn units in hospitals of selected areas to treat such cases in time. Hospitals near major highways, traffic black spots and industrial areas are appropriate sites for establishing the first burns and trauma units. In addition, industrial and occupational health will be promoted through IEC activities so that those who are engaged in industries are aware of and protected from industrial hazards.
- m. The issue of equity in access of health care will continue to be addressed in the Fifth Plan. A number of vulnerable groups who were previously not provided with adequate services will be given priority attention. Some of these groups are industrial workers, fishermen and sea-farers. Many of them reside in remote and difficult/inaccessible places. The government is planning to further increase the number of satellite clinics and union health and family welfare centres and to establish zonal mobile clinics. Clinics at sea ports providing service to seamen and other sea-farers will be renovated.
- n. Under the Fourth Plan, numerous training programmes were held in almost every administrative and service level without giving adequate consideration to their possible duplications. Moreover, co-ordination was not properly maintained. While training is an indispensable component in almost any intervention programme, it should be carefully planned and properly co-ordinated. A mechanism should therefore be evolved to co-ordinate and prepare all training activities for various employees and professionals in the health sector. In addition to the existing health and medical education and training institutes, a permanent training facility will be established for providing both basic and refresher training to the field level health workers. Clinical economics will form an integral part of training programmes to be drawn up for public health personnel.
- o. The research component of the health sector has been quite under-developed due to lack of research funds and facilities. The importance of scientific research in health, particularly operational research has not been given adequate attention. Much needs to be done in the immediate future to promote research interests in various areas, upgrade research skills and facilities and to apply research findings to improve the health care.
- p. There are currently two dental colleges in three divisions namely Dhaka, Rajshahi and Chittagong, producing very small number of qualified dentists to serve the country every year. The current requirement is at least double of what is being produced every year. There is, therefore, a scope for further expanding the existing facilities and to establish more dental colleges in the country.

- q. As an inter-sectoral issue whose contributing factors are health, social and economic, the problem of malnutrition requires more than just intervention from the health sector. Rather, intensified co-operation from all sectors is needed to combat this problem. There is a wide scope to further strengthen the current nutrition programmes which are still facing problems of identifying the most affected groups, namely, the poor, single parent households, etc. An appropriate approach will be evolved to identify and locate the most vulnerable groups so that targeted interventions can be provided to mitigate the current situation.
- r. Introduction of ESP will play an important role in Bangladesh's poverty reduction strategy. First, improvements in the health and family welfare status of the population are important indicators of poverty alleviation. They also increase labour productivity, and thus support the economic growth component of the poverty reduction strategy. A second positive impact of ESP will be through targeting of under-served population groups. Access to subsidised curative care (low-cost or free-of-charge) significantly reduces the vulnerability of poor households to illness-induced income loss and expenditure crisis. Finally, improvements in health and family welfare status will be achieved more easily and in a more sustainable way if the government promotes complementary actions in other sectors, especially in education and employment for girls, water supply and sanitation, environment, infrastructure, communication, and with respect to the legal status of women.
- s. Numerous reports have been circulated in recent years about the rise of non-communicable diseases like cardiovascular diseases, renal disorders and cancer. A rise in the prevalence of these diseases is expected as both fertility and mortality are falling rapidly in recent years which will lead to the ageing of the population. It is foreseen that there will be a continued rising trend in geriatric and degenerative diseases as well as in diseases related to life style. Admittedly, little has been done to conduct scientific epidemiological surveillance to ascertain the extent of these problems and to formulate a strategy to deal with these emerging diseases based on scientific data. It is therefore necessary to improve this area and allocate resources to conduct the required activities and to introduce necessary interventions in this new Plan.
- t. Establishment and upgrading of blood banks and transfusion centres at district level and below will be given priority based on current and future needs. Correspondingly, the existing manpower will be trained to upgrade their skills and to acquire new techniques. There are at present a total of 46 blood banks/centres where the facilities for proper screening are inadequate. Moreover, due to the new emerging/re-emerging diseases such as STD/HIV/AIDS, adequate infrastructure, equipment and laboratory appliances need to be installed to equip these centres to perform modern and more complicated tests backed up by trained manpower, counselling services, referral services and quality assurances.

21.12 Food and Nutrition Policy and National Plan of Action for Nutrition

21.12.1 Malnutrition has been a major health problem in this country. Chronic energy deficiency, protein energy malnutrition, maternal malnutrition, low birth weight, micro-nutrient deficiency are all serious health problems in Bangladesh. While poverty, gender discrimination and inadequate food supply and distribution are major contributors to malnutrition, improper breast feeding and weaning practices aggravate the current situation. Women and children are the worst sufferers of malnutrition as shown in various statistical reports. Earlier this year, the government adopted the National Food and Nutrition Policy. Essentially, the policy is an attempt to significantly improve the nutritional status of the

people, particularly the vulnerable groups including the elderly, and thereby, contribute to the improvement in the quality of life and socio-economic development. The main national goals estimated to be achieved by the year 2000 are to: (a) provide average per capita energy intake of 2,279 Kcal, (b) alleviate moderate and severe malnutrition by 50 percent, (c) identify and treat all acute malnutrition, (d) reduce low-birth weight rates to 10 percent and prevent night blindness, and (e) increase vitamin A capsule coverage to 100 percent.

21.12.2 Based on this policy, the Ministry of Health and Family Welfare, in collaboration with the Bangladesh National Nutrition Council, developed the National Plan of Action for Nutrition. During the Fifth Five Year Plan, this national POA will be put into operation with the goal of raising the average per capita calorie intake to 2,300 Kcal by the year 2002. Of the four major strategies developed to improve the nutrition status of the population, two will involve the health sector directly. The first strategy will deal with the caring of children, women, the elderly and other vulnerable groups, sanitation and hygiene, disease control like deworming and control of iodine deficiency and improvement of health services including interventions for enhancing the nutritional status of children and women. The second strategy will attempt to enhance the level of awareness and knowledge of the general public concerning nutrition requirements of men and women at various ages. Activities will be conducted to train families, parents and other responsible community leaders and workers on nutrition. It is hoped that the implementation of the developed POA on nutrition and its further revision will lead to the achievement of the goals set for the Fifth Plan period.

21.13 National Drug Policy

21.13.1 Bangladesh is one of the first countries to develop and adopt a national drug policy in the year 1982. It was properly enforced and followed by all concerned. The country has a Drug Administration Directorate which ensures the quality of drugs through independent testing of randomly sampled drugs using government's own laboratories. The drug policy is regularly updated and revised. A number of programmes relating to the rational use, manufacturing, quality control and distribution of essential drugs are being implemented under financial and technical assistance of WHO and other development partners. Programmes like Rational Use of Drugs are progressively increasing the awareness of both the providers and users regarding use and abuse of drugs.

21.13.2 In the Fifth Plan, further review of the national drug policy will be undertaken with an emphasis on production of essential drugs. Actions on research and development including enhancing production and distribution of drugs and promoting their rational use in both public and private sectors will be translated into priority programmes during the Fifth Plan period.

21.14 Micro-credit Utilisation in Health

21.14.1 Improvements in the health status of the population are amongst the most sensitive indicators of poverty alleviation. Staying healthy is a key factor to help the poor to gain employment and retain it. Loss of daily wages due to sickness can have a catastrophic effect on the entire family. Promotion of safe water and sanitation may thus be considered as an integral part of the poor family groups when they unite together to receive micro-credit through organised efforts. Distribution of low cost sanitary latrines and subsidy for sinking hand tube-wells for drinking water will be considered in the Plan period. As is followed by some NGOs, an integration of income generation with health promotion activities in a package makes a destitute or poor family acquire and maintain basic personal health facilities. The government will strengthen this process by way of provision of small loans to the

vulnerable families. Other innovative approaches, especially for mothers' participation in income generation like homestead gardening, poultry raising, tree plantation, micro-savings, etc. may be considered; yields out these may be utilised for health care expenditures at times of need or promotion of healthy life style of the families.

21.15 Private Sector

21.15.1 The government is planning to further encourage the participation of private investors in the health sector. The current contribution of the government to the health sector, based on per capita expenditure on health, is approximately 35 per cent leaving the remaining to come from both the private sector and the individual households. The government will gradually promote private sector investment in health facilities with a view to eventually increasing per capita national expenditure on health up to an appropriate level and to introduce in phases, health insurance scheme for all employed persons.

21.15.2 There are two major issues that need to be addressed in this context. Firstly, the current private sector is mostly staffed by the public sector employees on part-time basis. This is due mainly to the shortage of medical and health professionals in the country and to the fact that public sector professionals are allowed to practice privately. Most of the facilities used by the private sector also come from the public sector. The private sector investment, with the exception of a few establishments, is in fact very limited. Secondly, the availability of private funds to invest in the private sector seems to be concentrated, recently, in two areas, medical colleges and relatively small clinics and laboratories with limited facilities. Laboratory and other health related services are still underdeveloped.

21.15.3 In order to address the above issues, a national HRD plan for the health sector will be required. To attract investors in areas which require very high costs or in areas that are less promising in terms of returns, government incentives in the form of grants, subsidies or tax incentives will be provided.

21.15.4 Recently, a number of privately run health institutions including Heart Foundation, Heart Research Institute, Institute of Child Health, BIRDEM and Dhaka Community Hospital have been provided with financial support by the government (Ministry of Social Welfare and Ministry of Health and Family Welfare) for their quality service to the community. For example, the Dhaka Community Hospital is a non-profit and self-sustaining institute aimed at providing low cost quality medical services to the less affluent. The hospital is operated under a trust whose services are financed through donations, fees and a privately run health insurance scheme. The services provided range from primary to tertiary health care. This form of collaboration between the private sector and the government will be further encouraged.

21.15.5 Private hospital fees: The number of private hospitals/clinics in large cities of Bangladesh has increased in recent years, in response to the strong demand for health services beyond the supply capacity of the government. Unfortunately, the standards of these private hospitals/clinics vary widely. The range of fees charged on the same service, by these private enterprises is also very wide. While the variation in charges may partially be accounted for by the differences in quality of service and the type of treatment provided, it cannot fully justify such big difference in charges. This issue needs to be addressed immediately, if the government decides to involve the private sector further as the majority of the population will not be able to afford cost of health care in private clinics.

21.15.6 In general, the government's authority over the fees charged by a private enterprise is quite limited as, in a free market economy, price is determined by supply and demand. On the other hand, it is the obligation of the government to protect the right of the consumer against any unwarranted levies. As such, the government may establish some guidelines on hospital service charges. Recognising the difference in quality of the hospital (accommodation) service component, the guidelines should govern the fees of the medical treatment based on the procedures required in each of the services provided. Obviously, there may be other approaches to deal with this issue and should be explored thoroughly.

21.16 Private Practice by Government Doctors

21.16.1 A large number of government employed doctors carry on private practice in the health sector. Hence, patients get less care in the government hospitals. Generally, the most vulnerable groups use the government hospital facilities. As a result of private practice of government doctors, this group is deprived of proper care from the government hospitals. The government will have to find out ways and means to address the present situation so that the vulnerable groups get proper treatment in government hospitals. Otherwise, investing in the public sector will not bring in the desired equitable services for the people. Moreover, if the situation continues, public investment in the health sector will not be cost-effective and sustainable. During Fifth Plan attempts will be made to introduce a system to attract government doctors to practice in the hospitals beyond their office hours. The fees charged by the doctors will be shared between the doctors and the government on a 30:70 share basis.

21.17 Participation of Local Government Bodies

21.17.1 While much has been debated about the merits of adopting a decentralised health system in the country, reversing the highly centralised government-dominated health system, the government has yet to decide the future of the health sector. To decentralise the health sector, some fundamental changes of the organisation and management of the health system will have to be made. The new dimension will be built on a participatory approach where all stake-holders will participate in the decision making process. Normally, in a decentralised health system, local bodies including local governments play a major role in decision making and resource generation and distribution. The local bodies for a decentralised health system may also exist in the form of a local health authority, health management committee, etc., which may originate from local governments. In this respect, placement of HFWCs with the Union Parishad, Upazila Health Complexes with the Upazila Parishad, and district hospitals with district council may be quite appropriate. Medical facilities at the tertiary level, i.e., teaching hospitals, should remain a central concern as centres of excellence providing overall guidance and services. These central facilities should ideally have management committees or bodies. Local level units, NGOs and private sector will be involved to a great extent for augmenting the level of service at local level units.

21.18 Health Insurance

21.18.1 To further improve the health status of the citizens, the government is well aware of the need to arrange for some form of social protection against health care expenses, so that access to health care will be secured. Given the complexity of a good health insurance scheme having desired population coverage, sound management, feasible benefits and re-imburement procedures, proper payment arrangement, appropriate cost-sharing, accurate information, etc., steps to this end need to be determined carefully. In view of successful operation of health insurance schemes in many countries, the government is keen to implement this idea and will

like to, at the first stage, study the feasibility of various health insurance schemes, through health simulation models and pilot studies in the Fifth Plan period.

21.19 National Policy on HIV/AIDS and STD

21.19.1 The government has already approved the National Policy on HIV/AIDS and STD related issues. In order to have a comprehensive programme to deal with this issue a national strategic plan has already been formulated, with stress on the following four areas (i) reduction of transmission of STD/HIV (ii) reduction of risk-generating environment (iii) reduction of personal/economic/social impact of STD/HIV/AIDS and (iv) mobilisation of national/regional/international response to the threat of STD/HIV/AIDS based on this strategy. All these will lead to formulation and undertaking of a full fledged project during the Fifth Five Year Plan.

21.20 Projections of Fifth Plan

21.20.1 The main projections of the Fifth Five Year Plan with respect to health status, health service delivery and human resources have been made in order to conform to the constitutional mandate and the commitments made by the government. Table 21.8 shows the major health indicators for the Fourth Plan period, subsequent two years and projections for the Fifth Plan.

Table 21.8
Major Health Indicators Targets and Achievements During Fourth Plan (1990-95)
Subsequent Two Years (1995-97) and Projections for Fifth Plan (1997-2002)

Sl. No.	Health Indicator	Unit	Status in 1970	Bench-mark (1989/90)	Target (1990-95)	Achievements of the Fourth Five Year Plan 1990-1995	Achievements of the Two Year Programmes 1995-1997	Target 1997-2002
1	Crude Birth Rate	/1000 population	48.00	33.50	28.90	27.50	26.50	21.00
2	Crude Death Rate	/1000 population	20.90	12.00	10.70	9.00	9.00	7.80
3	Population Growth Rate	% Year	2.70	2.15	1.82	1.85	1.75	1.32
4	Total Fertility Rate per woman			4.90	4.00	3.40	3.40	2.60
5	Infant Mortality Rate upto 1 Year	/1000 live birth	150	94	80	78	78	55
6	Neo-natal Mortality Rate 28 days after birth	/1000				46	44	30
7	Child Mortality rate	/1000 upto 5 years		110	90	133	116	5.50
8	Maternal Mortality Rate	/1000 live birth		6.00	4.50	4.50	3.60	3.00
9	Life Expectancy at Birth	Years at Birth	44.90	54	58	58	58.10 (male) 57.60 (female)	60.00 (male) 59.00 (female)
10	Population covered under Essential Health care	% of population		50	80	45	50	70
11	Immunization (under 1 yr.)	% Coverage (all)		75	85	66	66	85
	BCG	"		68	85	71.10	73	80
	DPT	"		50	85	75.90	80	90
	Measles	"		68	85	73.90	75	85
	Polio	"		45	85	75.90	80	90
12	Delivery assisted by trained persons:	% of preg. women		20	50	12	14	80
	Doctor					2.10	2.10	10
	Trained Nurse					1.90	2.20	30
	Trained Midwife/TBA					8.00	9.70	40
	Relatives & Others					88	86	20
13	Antenatal Care	% of preg women		45	60	35	40	80
14	Control of diarrhoea	% of use of ORS		90	90	66	70	90
15	Control of TB	% of cases found (sputum positive)		20	50	30	40	100
16	Nutritional status							
	Energy intake	Av intake (Kcal)	2061	1850	2100	1950	1950	2300
	Under 5 malnutrition	% Malnutrition				>45.7		<40
		Stunting				7.00		<5
	Prevalence of LBW	% of new born <2500g					25	15

17	Prevention of Night Blindness	% of <6 Children receiving VAC		66	90	85		90
18	Control of Goitre	% covered through Lipiodol Iodized Salt		70 10	100 100	40		100
19	Prevalence of Disability	/1000 Population					11.90	10.00
20	Prevalence of Leprosy	/1000 Population				0.24	0.24	0.05
21	Prevalence of Measles	/1000 Population					1.07	0.5
22	Prevalence of Polio	/1000 Population					0.70	0.01
23	Prevalence of Tetanus	/1000 Population					0.10	0.01
24	Prevalence of TB	/1000 Population					2.00	0.05
25	Hospital Beds Health Services Other Ministries & Privates	Cumulative		34,488 24,501 9,987	36,000 26,000 10,000	34786 27,544 7242	37,131 26,061 11,070	42,000 29,000 13,000
26	Upazila Health Complex	One in Each Upazila		351	397	374	390	397
27	UHFWC/RD	One in each union		3,375	4,325	4038	4,200	4,400
28	Lab. Diagnostic services Simple Lab. facilities at THC Simple Lab. facilities at district X-ray facilities at THCs	% coverage % coverage number		100 100 143	100 100 397	90 100 222	100 100	100 100 397
29	Blood Transfusion services Centres Safe Blood	number % of blood bag		46 0	71		46 5%	100 100
30	HIV among general population STD among general population RISK reduction for high risk pop.	/100 adult pop. /100 adult pop. /100 high risk pop.	- - -	- - -	- - -	- - -	- - -	<1 60% treated adequately 90% reached
31	Health manpower MBBS doctors Dentist Basic Nurse Medical Assistant Lab Technician Radiographer Pharmacist HA FWA	Cumulative		20,590 805 9,100 4,348 1,702 522 628	25,600 1,150 11,350 4,700 2,050 850 700	24638 1060 11200 2254 2250 731 700 21000 23500	26,000 1,200 1,3830 2,254 1,403 731 750	32,000 1,550 21,000 2,700 3,000 1,000 1,000 23,000 25,000
32	Ambulance Services	Cumulative ambulatory care					300	1,000
33	Financial Resources for Health Health expenditure	% of GNP, % of Total GOB expend. per capita					4 100	6 150

21.21 Estimated Public Sector Outlay for Health Care Activities During Fifth Plan

21.21.1 In the Fifth Plan Tk.62,272.40 million for the health care activities is projected to be made available as outlined in Table 21.9.

Table 21.9
Public Sector Financial Outlay for Health Activities in Fifth Plan
(at 1996/97 prices)

(in million Taka)

Sl.No	Programme	Outlay
1.	Primary level health care	34,249.84
2.	Secondary level health care	6,227.24
3.	Tertiary level health care	8,718.14
4.	Manpower Development	9,340.86
5.	Drug, biological and equipment	3,113.62
6.	Miscellaneous (programmes of general nature)	622.70
	Total	62,272.40

21.21.2 Private Sector: It is expected that the private sector will come in a big way to supplement the public sector efforts in health care. Total investment by the private sector for development of health care facilities in the Fifth Plan period is expected to be at least 30 percent of the public sector investment, i.e Tk.18,682 million. Besides, other NGOs and voluntary organisations will also contribute towards development of health sector and their contribution is expected to be 10 per cent i.e Tk.6,227 million. Investment by the private sector and NGOs is expected to be canalised for establishment of medical colleges, poly-clinics, hospitals, nursing homes, pathological laboratories, X-ray clinics, etc.

21.22 Estimated Financial Outlay for Population and Family Welfare Activities

21.22.1 The projected financial outlay for population and family welfare activities is given in Table 21.10.

Table 21.10
Estimated Financial Outlay for Population and Family Welfare Activities 1997-2002

(in million Taka)

No.	Programme services/Activities	Fourth Plan	Fifth Plan	
		Public 1989/90 prices	Public 1996/97 prices	Private 1996/97 prices
1.0	<u>Sectoral</u> :			
a.	Reproductive Health Care including Family Planning and MCH Service Delivery	10,530	17,000	3,000
b.	Contraceptive supplies and logistics	1,700	4,000	-
c.	Physical Infrastructure	2,000	3,000	250
d.	Information Education and Motivation	300	500	100
e.	Manpower Development (through NIPORT and other institutions including NGO.	600	1,000	150
f.	Contraceptive Manufacturing Plant	100	1,000	1,500
2.0.	<u>Intersectoral / Multisectoral</u>	750		
a.	Updated inter-sectoral review		10	
b.	Multi-sectoral programmes in selected upazilas involving GO, NGO and community leaders		750	
c.	Inter-sectoral programmes in Ministries of Education, Information, Environment, Labour and Manpower , Rural Development, Social Welfare, Women Affairs and other organised sectors		900	
d.	Inter-sectoral research / studies		40	
3.0	Block Allocation	-	390	
	Total	15,980	28,590	5,000

21.22.2 It is expected that private and community contribution to the nation-wide effort will be more than what is mentioned in this table. Specially, in the process of service delivery, more and more responsibilities will have to be borne by them .

CHAPTER XXII

SPORTS AND CULTURE

22.1 SPORTS

22.1.1 Sports is considered as one of the major elements for development of discipline, physical and mental health and moral character of a nation. It helps to build up citizens with a sense of participation enriched with national awareness and self-confidence. These qualities are required for achieving the desired goals and objectives both in individual and national spheres. With the spirit of total human resource development the public sector support in the field of sports will be extended and intensified in the Fifth Plan period.

22.2 Review of Past Plans

22.2.1 The First Plan laid the foundation for development of essential elements of physical education. During the Plan period development projects were undertaken mostly for repair and renovation of existing sports facilities to make them functional and creation of new physical facilities in the country. In this Plan period the incomplete work of National Stadium-1 in Dhaka with installation of flood light, construction works of Women Sports Complex in Dhaka, Mohammed Ali Boxing Stadium, Volley Ball Stadium and Basket Ball gymnasium attached to National Stadium-1 were taken up. These projects were completed during the Two Year Plan (1978-80).

22.2.2 During the Second Plan some measures were adopted for qualitative improvement as well as for quantitative expansion. During this period 14 gymnasium-cum-coaching centres at district headquarters and a National Tennis Complex at Dhaka were built. In addition 33 sub-divisional stadia were made functional in this Plan. Construction of stadia at Chittagong, Rajshahi and Khulna divisional headquarters and Bangladesh Krira Shikkha Protisthan (BKSP) were started during the Plan period.

22.2.3 During the Third Plan construction of 6 gymnasium-cum-coaching centres at district headquarters, National Stadium-2 with flood light and shifting of 7 clubs from National Stadium-1 area to other places (Motijheel) were completed. In addition, two physical colleges at Dhaka and Rajshahi were undertaken and completed during this plan period. Bangladesh Krira Shikkha Protisthan (BKSP) started its krira college and completed creation of further infrastructural facilities. Besides, some training programmes for coaches and players were also organised.

22.2.4 During the Fourth Plan measures were adopted for further qualitative improvement and development of sports and games. Projects taken up for infrastructure development included further development of 52 district stadia, construction of one international standard swimming pool and indoor stadium, vertical extension of Hockey Stadium with synthetic turf, laying of synthetic athletic tracks in national Stadium-2, modernisation of Gulshan shooting range in Dhaka and development of tennis complexes in Dhaka and Rajshahi. During the Plan period, the third phase of Bangladesh Krira Shikkha Protisthan (BKSP) was completed at a cost of Tk.150.00 million. For qualitative improvement some training programmes for players and coaches in different games were organised. The 6th SAF games were organised successfully in Dhaka during this Plan.

22.2.5 During the First, Second, Third and Fourth Plans, under different training and coaching programmes for qualitative development in all the recognised games, 3,960 players

and 3,216 referees, umpires, judges and sports organisers were given training. Nearly 900 coaches were given special training in different games and sports both at national and district levels. Sports gears were distributed to 3,550 youths and sports clubs and sports competitions for the children of 12-16 years age group from the thana to the national level were organised.

22.3 Resource Allocation and Utilisation During Fourth Plan

22.3.1 During the Fourth Plan, an amount of Tk.760.00 million was allocated for 28 development projects. Tk.976.89 million was spent and 20 projects were completed. Eight projects could not be completed and were spilled over.

22.4 Two Years between Fourth and Fifth Five Year Plans(1995-97)

22.4.1 During 1995-97, 21 projects were undertaken, of which 13 projects were spilled over from the Fourth Plan. An amount of Tk.187.50 million was allocated for 1995/96 against which Tk.192.31 million was spent upto June '96. The allocation for 1996/97 was Tk.373.9 million. All these projects spilled over to the Fifth Plan involving an amount of Tk. 2,500 million.

22.5 Issues and Constraints Related to Previous Plan Implementation

22.5.1 As was experienced in the course of the past plan periods, the following stood on the way of aspired expansion in the field of sports:

- a. inadequate financial allocation in the ADPs;
- b. unusual delay in land acquisition process;
- c. insufficient manpower in the project executing agencies;
- d. lack of trained and skilled technical and specialised hands;
- e. lack of proper monitoring and evaluation of development projects; and
- f. inadequate support from the local government bodies and communities.

22.6 Fifth Plan (1997-2002)

22.6.1 Objectives: The objectives of the sports sub-sector during the Fifth Plan are:

- a. completion of all on-going works of stadia and sports complexes at the divisional and district levels;
- b. construction of an international standard cricket stadium in Dhaka;
- c. encouraging wider participation of women in sports activities;
- d. providing adequate coaching and training facilities for sportsmen and sportswomen;
- e. creation of physical facilities in sports at union and thana levels;
- f. generation of more interest among masses, specially those in rural areas for participation in indigenous and less costly games;
- g. holding major 'international sports meets' in the country to raise the standard of our sportsmen by participating in these meets;
- h. giving maximum emphasis on sports activities ensuring best utilisation of available sports facilities/infrastructures;
- i. training up children in sports from the nursery level and making physical education and sports integral parts of educational curricula at all levels ;
- j. raising the standard of coaching in different games in the country ;
- k. strengthening physical education facilities in the educational institutions;
- l. encouraging production of adequate sports equipment in the country; and

- m. supporting private sector's participation in promotion of sports and physical education.

22.6.2 Strategies: In order to achieve the objectives of the Fifth Plan the following will be the strategic elements:

- a. measures will be taken up for the development of some selected indigenous, economic games for wider mass participation, especially in the rural areas;
- b. provision will be made to encourage and ensure participation of women in all areas of sports and games;
- c. existing physical facilities will be repaired, renovated and expanded to ensure their best utilisation;
- d. more women sports centres in all divisional towns will be constructed to facilitate their participation;
- e. training and workshop will be organised regularly at the national, divisional and district levels and arrangement will be made for publication of books, journals, etc., on national and international sports and games;
- f. different national sports federations will regularly hold national, zonal and regional competitions; private organisations will be encouraged for the purpose;
- g. sports talents, both male and female, from the younger groups will be identified and intensive training will be provided to them;
- h. development of sports facilities at union and thana levels by developing at least one existing play ground in every union of the country and construction of 'Thana Sports Complex' at every thana centres will be undertaken;
- i. intensive training will be provided in selected games;
- j. a cricket stadium of international standard with modern facilities will be established in Dhaka city;
- k. development of standard physical facilities in the existing sports complex of Dhaka city for holding regional/sub-international meets, namely, Asian Games, SAF Games, etc. will be undertaken;
- l. coaching programmes will be organised through Bangladesh Krira Shikkha Protisthan (BKSP) to train players of the national teams;
- m. existing colleges of physical education will be strengthened and more colleges of physical education will be established;
- n. Sports Science Department of BKSP will offer degree/diploma courses in sports and provide scientific sports training to students of BKSP, players, coaches, etc;
- o. participation in games and sports and attainment of a set standard in at least one recognised athletics or games will be required in all educational institutions at all levels;
- p. sports gears will be distributed to facilitate sports activities in the country, especially in the rural areas; and
- q. local government bodies will be involved in sports activities to complement the national efforts.

22.6.3 Programmes to be undertaken during Fifth Plan

- a. **Development of BKSP:** Newly created Sports Science Department of BKSP will be strengthened with facilities and manpower. Functional branches of BKSP will be established at the divisional levels and existing coaches of BKSP will be provided higher training abroad.

- b. Expansion of facilities of physical education:** More physical education colleges will be established in the country including one at Barisal division and one at Sylhet division with the required facilities for women during the Plan period.
- c. Development of stadia at divisional and district towns:** During the Plan period development works of all stadia at the divisional and district levels will be completed. Besides, an international standard cricket stadium will be constructed in Dhaka City.
- d. Development of sports facilities for women:** Development projects for construction of three women sports complexes, one each at Rajshahi, Chittagong and Khulna divisional headquarters, are under implementation. New projects for construction of women sports complexes at Barisal and Sylhet divisional headquarters will be undertaken.
- e. Development of play grounds at union levels and thana sports complexes:** During the Plan period at least one play ground in each union of the country will be developed. Besides, in each thana, one sports complex and a gymnasium-cum-coaching centre will be constructed.
- f. Construction of swimming pool shooting range tennis complex etc.:** During the Plan period, all necessary steps will be taken to construct swimming pools at the division and district levels and international standard shooting ranges at the division levels. Similarly, tennis complexes will be set up at all divisional towns/cities.
- g. Training and other facilities:** Intensive training programmes in different games and sports will be carried out for both male and female players as well as coaches at the national and regional levels. Emphasis will be given on swimming, shooting, football, cricket, hockey, athletics, volleyball, handball and table tennis, etc. To facilitate sports activities in the country, sports gears will be distributed free of cost to recognised schools and colleges, youth and sports clubs, etc. In the process, special attention will be given to the rural areas.

22.7 Role of Local Government for Sports Development

22.7.1 In order to ensure mass participation in sports development activities, local government bodies at the district, thana and union levels will be utilised effectively and efficiently. These bodies will be encouraged to mobilise people's participation in sports and games throughout the country.

22.8 Role of Private Sector in Sports Development

22.8.1 Private sector has a very important role to play in sports development. Initiatives from the private sector should come from:

- a. Individuals and sports entrepreneurs in the private sector;
- b. Non-government sports organisations;
- c. Community based sports organisations/clubs; and
- d. Private companies formed for promotion of sports.

22.8.2 In promoting, organising and supporting sports and athletics and sports persons and athletes, locally organised groups and clubs with private enthusiasts will play an important role.

22.9 Estimated Financial Outlay

22.9.1 An estimated financial outlay of Tk.3,167.30 million has been made for the programmes to be taken under the sports sub-sector during the Fifth Plan period. Tk.2,500.00 million will be needed for spill-over projects while the rest will be utilised for the new projects. Programme-wise outlay during the Fifth Plan is shown in Table 22.1.

Table 22.1
Projected Financial Outlay For Sports Sub-sector During Fifth Plan
(at 1996/97 prices)

Programme	Projected Financial Outlay (in million Taka)
Spill-over projects	2,500.00
New programmes	
Institutional facilities.	100.00
Development of play grounds, stadia, swimming pools etc.	300.00
Development of special sports facilities for women.	167.30
Training and other facilities.	100.00
Total	3,167.30

22.9.2 The private sector outlay for development of sports and athletics in the Plan period is projected to be of the same size.

22.10 CULTURE

22.10.1 The provision in the Constitution of Bangladesh in respect of cultural development is as follows:

Article 23. The State shall adopt measures to conserve the cultural traditions and heritage of the people and so to foster and improve the national language, literature and the arts that all sections of the people are afforded the opportunity to contribute towards and to participate in the enrichment of the national culture.

Article 24. The State shall adopt measures for the protection against disfigurement, damage or removal of all monuments, objects or places of special artistic or historic importance or interest.

Language and literature, library and book development, fine and performing arts, conservation, preservation and presentation of its folklore, history and heritage are some of the major ingredients contributing to the healthy growth of the culture of a nation. Planned development of all such ingredients in the right direction will largely help the nation in achieving desired progress with a view to sustaining its social, moral and economic build-up.

22.11 Review of Past Plans

22.11.1 During the First Plan, the importance of cultural development was recognised. Schemes were drawn up for development of Bengali language and literature. Board for Development of Bengali was amalgamated into the Bengali Academy. The Shilpakala Academy and the National Museum were set up. During the Second and Third Plan periods,

some infrastructural facilities were provided for qualitative improvement as well as quantitative expansion of cultural activities. Emphasis was given on (a) research on Bengali language and literature and publication of text books in Bengali for higher education; (b) book promotional activities; (c) construction and development of libraries at different levels; (d) promotion of national, regional and tribal cultures; (e) construction/renovation of museums; and (f) conservation of archaeological monuments. During the Fourth Plan a number of programmes/projects were undertaken. The physical achievements made during the period are summarised below:

- a. Language and literature:** The Bengali Academy published 346 research books and periodicals on Bengali language and literature and 318 text books in Bengali for higher education. The Bengali Academy press was modernised as per the Plan target. Training programmes were taken up for young writers to improve their writing skills. Under the book development programme of the National Book Centre, book fairs were held and 32 training programmes were implemented on different aspects of book promotion. Physical and infrastructural facilities for the National Book Centre and the Nazrul Institute were developed.
- b. Library and archives development:** During the Fourth Plan period development works of 9 government public libraries at district levels were completed, 554 library personnel of government and non-government public libraries were given training on library management and administration. Non-government public libraries at district, thana and rural levels were provided with books and financial grants for furniture, equipment, etc. Development of the National Library could not be started for delay in lining up of foreign assistance. Construction work of the National Archives building was also deferred due to delay in finalising design of the building.
- c. Fine and performing arts:** Some physical and infrastructural facilities for training on fine and performing arts were created. Shilpakala Academy buildings were constructed in 10 districts. Renovation and expansion of Shilpakala Academy buildings were made in 18 districts. Financial assistance was given to 12 district/thana level Shilpakala Academies.
- d. History and heritage:** The work of the Folk Art and Crafts Museum at Sonargaon was completed. The work for establishment of a divisional museum at Khulna was in progress. A museum was established at Bagerhat and conservation of Ghora Dighi was made to protect the monuments there. The work of the museum building at Paharpur was completed and preservation and conservation work of Paharpur Buddhist Bihar implemented.

22.12 Resource Allocation and Utilisation During Fourth Plan

22.12.1 Against the Fourth Plan allocation of Tk.700.00 million for cultural development, Tk.705.43 million was actually allocated through ADPs. Out of this, Tk.533.11 million was spent for implementation of the projects/programmes in this field. The utilisation attained was 75.6 per cent of ADP allocations.

22.13 Two Years Between Fourth and Fifth Plans (1995-97)

22.13.1 During 1995-97, a total of 29 projects were undertaken, of which 21 spilled over from the Fourth Plan. An amount of Tk.347.00 million (at current prices) was allocated in this period out of which Tk.298.70 million was spent upto June '97. By June, 1997, five projects were completed and the rest 24 projects spilled over to the Fifth Plan with a financial implication of Tk.2000.00 million.

22.14 Issues and Constraints

22.14.1 The projects/programmes taken up during the Fourth Plan could not be fully implemented mainly due to:

- a. unusual delay in land acquisition process;
- b. insufficient manpower of the project executing agencies;
- c. lack of trained, skilled and specialised hands;
- d. unusual delay in lining up of project aid; and
- e. inadequate community support.

22.15 Fifth Five Year Plan

22.15.1 Objectives: Cultural development sector during the Fifth Five Year Plan will aim to promote healthy growth of cultural activities throughout the country. In addition to promotion of literature and fine and performing arts, attention will be given to create and promote a culture attuned towards work, perseverance, confidence and creativity. The major objectives in this field are to:

- a. develop Bengali language and literature and create facilities to develop Bengali as the medium of instruction;
- b. help and promote production and publication of quality books and make them available to the masses at reasonable prices;
- c. undertake programmes for implementation of the national book policy;
- d. carry out research on the lives and works of great men and women of our nation;
- e. flourish the perception of 'Amar Ekushey';
- f. establish and develop a library network system from the national to the rural level and introduce modern technology to this end;
- g. promote and foster cultural activities throughout the country reflecting values, hopes and aspirations of the people;
- h. develop infrastructural facilities for fine and performing arts including drama and theatre and explore private and voluntary involvement in this area;
- i. preserve and present national history, culture and heritage;
- j. review the existing laws on drama/theatre;
- k. cherish and cement national unity and consensus in a pluralistic democratic society;
- l. promote good citizenship through conscientisation of rights, duties and responsibilities; and
- m. preserve and promote arts and culture of tribal areas within the framework of national unity.

22.15.2 Strategies: In order to achieve the above objectives, the following strategies will be adopted:

- a. a symbolic building named 'Ekushey Bhaban' will be constructed to preserve the memory of the great language movement as well as to accommodate physical facilities for development of language and literature;
- b. programmes for development of Bengali language and literature and reference books for higher education will be continued with greater emphasis ;
- c. programmes will be undertaken for book development and development of reading habits;

- d. Nazrul Institute will be involved with research on the life and works of our national poet Kazi Nazrul Islam; a memorial library and research centre will be established at Dorirampur and Kazir Shimla respectively;
- e. research programmes on lives and works of great people will be undertaken and memorial libraries and institutions will be established in respective areas;
- f. legislation for national and public libraries will be adopted and programmes will be undertaken to develop library network and services from national to the rural levels in order to meet the educational, recreational, cultural and information need of people at all walks of life;
- g. national institutions like National Theatre, National Art Gallery and National Music Centre will be established and necessary physical and institutional facilities will be created for their proper development;
- h. physical facilities of the Bangladesh Shilpakala Academy will be expanded and developed as per the master plan of the Academy for promotion of fine and performing arts;
- i. regional and tribal cultures will be promoted and preserved through various programmes;
- j. programmes for development of folk arts and crafts village and miniature Bangladesh at Sonargaon will be undertaken;
- k. physical facilities for the department of archaeology will be developed;
- l. historical monuments will be identified and preserved;
- m. programmes for further development of Bangladesh National Museum and other museums under it will be taken up;
- n. a memorial and a museum will be established to preserve the memory of the Father of the Nation Bangabandhu Sheikh Mujibur Rahman and to inspire the people to follow ideals of patriotism and sacrifice;
- o. a victory monument will be built at Suhrawardy Uddyan, Dhaka;
- p. cultural complexes at Dhaka and Mujibnagar will be developed;
- q. graves of freedom fighters will be identified, preserved and properly maintained throughout the country;
- r. works of art of the Bengali painters will be procured and preserved for display in important public buildings and missions abroad; and
- s. private sector as well as the local government bodies will be encouraged to contribute their resources and efforts for cultural development.

22.15.3 Programmes to be undertaken during Fifth Plan: The major programmes envisaged for the development of culture during the Fifth Plan period are as follows:

- a. Language and literature:** On-going programmes for research and development of Bengali language and literature will be continued and completed. Programmes for transformation of the National Book Centre into National Book Development Council will be taken up and book development programmes will be continued. New programmes for research on the lives and works of the great people including our national poet will be undertaken. Research and studies on the liberation war will be undertaken.
- b. Library and archives:** On-going programme for the construction of national archives building and the second phase of development programmes for district public libraries and assistance to non-government public libraries at district and thana level will be completed. Programme for further development of National Library and training programme for library personnel will be implemented. Programmes for development

of copyright office and Mahanagar pathagar will be undertaken. Programmes will be drawn up for protection of intellectual property rights.

- c. Fine and performing arts:** On-going programmes for the establishment of National Art Gallery, National Theatre and Music Centre, cultural centres at Rabindra Kachari Bari, Shahjadpur, cultural complex at Cox's Bazar, Tribal cultural institutes at Rajshahi, Khagrachhari, Monipur, Rangamati and Bandorban, a modern auditorium of the Bangladesh Shilpakala Academy and construction of Lalon Academy at Kushtia will be completed. Auditoriums in memory of the national leaders will be constructed. The Bangladesh Shilpakala Academy will be developed according to its master plan. Support will be given to private groups and organisations working in the fields of fine and performing arts. Programme for development of a cultural complex at Dhaka has already been undertaken. Another one at Mujibnagar will be taken up. Second phase programmes for development of Shilpakala Academies at district levels will be undertaken. Centres for fine and performing arts outside Dhaka will be established. Programmes for development of folk arts and crafts village and miniature Bangladesh (Ruposhi Bangla) will be taken up at the historic place of Sonargaon.
- d. History and heritage:** On-going programmes for establishment of Shilpachariya Zainul Abedin Art Gallery and Regional Museum at Mymensingh, preservation and conservation of historical monuments of Paharpur and Bagerhat (3rd phase), preservation and conservation of protected archaeological monuments, archaeological survey (2nd phase) and construction of Archaeology Bhaban will be completed during the Fifth Plan. Preservation and conservation of protected archaeological monuments including that at Paharpur and Bagerhat will be continued and archaeological laboratory will be set up properly. Bangladesh National Museum, Osmani Museum at Sylhet and Ahsan Manzil Museum will be further developed. Memory Complexes of Begum Rokeya at Pairabanda, Rangpur, Mir Musharaf Hossain at Rajbari, S.M Sultan at Narail and Madhupalli at Sagardari, Jessore will be constructed. Programme for research on the history of liberation war will be undertaken. The memorial for martyred intellectuals will be constructed. A museum and a memorial hall will be established to preserve and present the memory of our great leader and the Father of the Nation Bangabandhu Sheikh Mujibur Rahman. Victory memorial comprising a library and a museum will be established at the Suhrawardy Uddyan. "Shikha Chirantan" at Suhrawardy Uddyan will be its integral part. Ekushey Bhabon at Bengali Academy will be constructed.

22.16 Local Government

22.16.1 To the end of cultural development in the Fifth Plan period, local bodies will be involved. They will be encouraged to set up literacy club and cultural organisations at local levels and take up management of cultural bodies set up by the national government at local levels. The local government bodies will be encouraged to master community support for promoting a culture attuned towards work and productivity.

22.17 Estimated Financial Outlay During Fifth Plan

22.17.1 For the Fifth Plan period, an allocation of Tk.2,571.20 million in the public sector has been made for cultural development. Of this, Tk.2,000.00 million will be needed for the implementation of spill-over projects while the rest will be utilised for the new programmes/projects. Programme-wise outlay is given in Table 22.2.

Table 22.2
Estimated Financial Outlay For Cultural Development During Fifth Plan
(at 1996/97 prices)

(in million Taka.)

Programme	Fifth Plan Outlay
Spill-over Projects (24 Nos.)	2,000.00
New Programmes	
Language and Literature	100.00
Library and Archives	150.00
Fine and Performing Arts (including Tribal Culture)	250.00
Archaeological sites, Museums and others	71.20
Total	2,571.20

22.17.2 In addition to the public sector outlay, it is expected that the private sector will come forward in a big way for fostering cultural development. It is estimated that the private sector investment in the cultural field in the Fifth Plan period will amount to a third of the public sector outlay.

CHAPTER XXIII

SOCIAL WELFARE WOMEN AND CHILDREN AFFAIRS AND YOUTH DEVELOPMENT

A. SOCIAL WELFARE

23.1 Introduction

23.1.1 Traditionally, social service programmes assist and empower socio-economically disadvantaged people like the poor, the landless, the assetless, the unemployed and the distressed men and women, children in specially difficult circumstances, the old and the disabled and the vagrants and orphans. The Ministry of Social Welfare has shifted its policies and focus towards community-based sustainable programmes from institutionalised and temporary rehabilitation programmes. Services are created for the socio-economically disadvantaged classes to improve their quality of life and rehabilitate them in the society. Focus is being given to community based programmes. The social welfare programmes are designed and implemented to ensure effective participation of these disadvantaged groups in the national development process both as contributors and beneficiaries rather than being recipients of relief and charity. It is the policy of the government to create necessary development programmes and appropriate facilities for balanced socio-economic development both in urban and rural areas. The programmes are concerned with the active participation of the target population through establishment of village-based institutions. Moreover, in the implementation of a new approach “Social Security Programme for Old and Shelterless people”, the involvement of local government at the grass root level will be encouraged. With this approach these segment of people will be rehabilitated in their own area which will ultimately minimise their migration to urban area.

23.2 Review of Past Plans

23.2.1 During the First Plan (1973-78), an attempt was made to give due emphasis on the role of social welfare sector in the overall socio-economic development of the country with some programmes for the benefit of those who were unable to find a place for themselves in the society. Against the proposed total outlay of Tk.122.80 million for both on-going and new programmes in the social sector during the Plan period almost all the amount was fully utilised. An allocation of Tk.136.00 million was made under the Two Year Plan (1978-80) to complete the on-going projects of the First Plan. In the Second Plan (1980-85) an amount of Tk.590.00 million was allocated of which Tk.391.00 million was utilised to implement 32 projects. During this Plan period, Rural Social Service Programme (RSS) that was initiated in 1974 was undertaken to promote comprehensive rural and social development with special emphasis on the disadvantaged groups like school drop-outs, unemployed distressed youth, women and the landless in order to develop their potentials through education and skill. The programme covered 104 upazilas and established 196 community centres. Another project for the development and welfare of the urban poor and disadvantaged people including children and women initiated during the 1960s under Urban Community Development Programme (UCD) was undertaken during this plan period.

23.2.2 A total of Tk.750.00 million was allocated in the Third Plan for social welfare. The expenditure during the period was Tk.630.00 million representing 84 per cent of the allocation. The programmes undertaken during the Third Plan period emphasised provision of

institutional services for the rehabilitation of the orphans and the physically handicapped aiming at development of their socio-economic potentials and imparting new skills.

23.2.3 The major theme of the Fourth Plan was poverty alleviation and human resource development. A number of programmes/projects were undertaken of which four were community based comprehensive development programmes aimed at alleviation of poverty. The most important project of Social Welfare Department, "Rural Social Service" (RSS) included group organisation, skill development training, income generation through financial supports in the forms of interest free loans (revolving capital), promotion of self-supporting funds, motivational programmes for family development and population activities, social forestry, social education, etc. Approximately 1.5 million people benefited from this project. In the urban areas of 5 cities of the country (Dhaka, Narayanganj, Rajshahi, Chittagong and Khulna) a programme for welfare of the children in specially difficult circumstances was initiated through which about 15,000 children were benefited. Under institutional services, 11 projects were undertaken for the welfare of 4,000 orphans, 400 disabled, 150 juvenile delinquents, 2,700 vagrants and destitutes. Eight projects were implemented by the NGOs working for welfare of the disabled, diseased and distressed. The number of beneficiaries were about 1.00 million.

23.3 Resource Allocation and Utilisation During Fourth Plan

23.3.1 During Fourth Plan an amount of Tk.1100 million was allocated to implement 23 projects of which 11 projects were completed. Tk.1,317.55 million was allocated through the ADPs and an amount of Tk.1,149.90 million was spent. Almost all the projects that were completed during the Plan experienced cost and time over-runs.

23.4 Two Years Between Fourth and Fifth Plans (1995-97)

23.4.1 During 1995-97, a total of 30 projects were undertaken, of which 13 projects were spill-over from the Fourth Plan. An amount of Tk.395.00 million was allocated during 1995/96 and Tk.389.64 million was spent. During 1996/97 an amount of Tk.578.20 million was allocated out of which Tk.509.90 million was spent.

23.5 Issues and Constraints Related to Previous Plans

23.5.1 In the implementation of the past development projects, the following problems were identified.

- a. inadequate funding as per physical and financial schedule of projects;
- b. absence of district offices of the Department of Social Services in 42 new districts hindering timely and smooth implementation of the projects;
- c. unusual delay in executing construction works by the Public Works Department;
- d. lack of specific principles of social welfare projects involving private sectors;
- e. inadequate community support; and
- f. weak local government institutions.

23.6 Objectives of Fifth Plan

23.6.1 The major objectives of the social welfare programmes during the Fifth Five Year Plan are to:

- a. alleviate poverty and promote human resource development by creating gainful activities for the disadvantaged people, both men and women;

- b. improve functional, managerial and organisational capabilities of the poorest group through formation of groups and participation in rural/urban development programmes in respective areas;
- c. provide medical care, education, skill development training and revolving fund through institutional services to orphans, destitutes, physically and mentally handicapped and shelterless children to make them self-reliant and active citizens;
- d. create facilities through community-based preventive programmes with a view to providing treatment, care and rehabilitation to disabled juvenile delinquents and drug addicts;
- e. provide special/integrated education to physically handicapped and mentally retarded children and other persons with disabilities;
- f. motivate and encourage local people to lead more integrated community life and promote skill development training and income generating activities;
- g. improve existing rehabilitation programme of vagrants for their rehabilitation in the society through skill development training and other facilities;
- h. promote gender balance by implementing different programmes for poor women and encourage their participation in all development processes;
- i. rehabilitate families affected by cyclone, river erosion, devastating flood and fire;
- j. create more centres for helpless old age people with facilities for geriatrics;
- k. undertake special programmes for the socio-economic development of female headed families (widow, divorced and deserted women);
- l. prevent prostitution and provide programmes for the prostitutes' rehabilitation through skill development training with provision of loan for self-employment;
- m. initiate special programmes for socio-economic development of ethnic groups and tribal people of hill districts; and
- n. undertake social security programmes for persons who are under extremely difficult circumstances due to old age, shelterlessness, unemployment, disability, widowhood, divorce, abandonment and violence.

23.7 Strategies of Fifth Plan

23.7.1 To meet the aforesaid objectives the following strategies will be adopted:

- a. basic services will be provided to the target groups through appropriate mechanism. Major focus will be on provision and strengthening of support facilities so that the disadvantaged groups can make necessary arrangements for self-help. In this regard, the main thrust will be directed towards motivational and organisational activities where family will be the unit of development;
- b. linkages will be established with other Ministries/Departments/Agencies for promotion of skill development, employment generation and marketing of products made by the participants of different programmes;
- c. community-based rehabilitation programmes will be given greater emphasis in relation to the physically disabled, the orphans, the beggars and other disadvantaged groups. The services will be made available to these groups in their own community environment which will work as a substitute for institutional programme of service. Local bodies like Union Parishads, Upazila Parishads and Pourashavas will be encouraged to support these programmes;
- d. facilities will be created for development of children in specially difficult circumstances including the orphans, the destitutes and the socially handicapped to make them self-reliant and productive citizens;

- e. curative measures will be taken for rehabilitation of the victims of drug abuses both in urban and rural areas through the continuing community-based programmes;
- f. provisions will be made for prevention of juvenile delinquency problems through the continuing community based and institutional programmes;
- g. special programmes will be implemented for better standard of living for the poor people living in hill districts;
- h. follow-up measures for the Vagrants' Homes and other institutional programmes will be taken up for proper rehabilitation of the target beneficiaries;
- i. more emphasis will be given on community-based programmes through the establishment of village-based institutions (VBIs) as an instrument for poverty alleviation in Rural Social Services (RSS) setting; in order to sustain the programmes, the VBIs will have organisational frame works of their own;
- j. private sector participation in implementing social welfare programmes will be encouraged;
- k. social security programmes will be undertaken with community participation; and
- l. religious trusts will be encouraged to participate increasingly in social welfare programmes.

23.8 Programmes to be Undertaken During Fifth Plan

23.8.1 Keeping in view the above objectives, the following programmes during the Fifth Plan will be undertaken:

- a. urban and rural community development programmes;
- b. development of services for the physically and mentally disabled children;
- c. development of programmes for orphans and distressed children;
- d. welfare services for juvenile delinquents and youth offenders;
- e. integrated approach (package programme) for poverty alleviation in community setting through micro-credit;
- f. development of rural and urban poor women including female headed families (widow, divorced and deserted women);
- g. Community-based rehabilitation programme for the elderly and disabled people;
- h. management, planning and development of department of social services;
- i. development of appropriate income generating programmes to discourage gambling and prostitution;
- j. development programme for the vagrants, the destitutes and the socially handicapped;
- k. socio-economic development for ethnic and tribal people of the hill districts;
- l. welfare services for the aged and the infirm;
- m. establishment of village-based institutions for the rural poor and disadvantaged people;
- n. providing opportunities for income generation, health service and housing for the urban poor;
- o. development of social welfare through NGOs/voluntary organisations for poverty alleviation; and
- p. social security programmes for persons who are under extremely difficult circumstances;

23.9 Poverty Alleviation and Micro Credit Programme for Social Welfare

23.9.1 Special attention for the alleviation of poverty among the disadvantaged or people bypassed in the development process will continue to be the rationale for an additional and independently targeted effort under the programme for increasing social welfare. The target covers population who are the hard-core poor. These poor include the rural and urban poor, chronically unemployed men and women, vagrants, destitutes, disabled people, youth offenders, poor patients, older people and other disadvantaged and underprivileged segments of the population.

23.9.2 In February, 1997 a micro-credit summit was held in Washington, DC. In the summit the Prime Minister of Bangladesh stated "we need more effective tools to fight destitution and more appropriate policies to enable the poor to work their way out of poverty" and added that one of the tools for combating poverty which has been tested around the world is micro-credit. She further suggested that government could play a crucial role in fostering an enabling environment for the development of micro-credit institutions. This provides guidelines for developing micro-credit programme for social welfare in the Fifth Plan. During this Plan period micro-credit programmes, in addition to usual institutional conduits will be implemented through Rural Social Service Project and Urban Community Development Programme.

23.10 Participation of Local Bodies/NGOs

23.10.1 In order to achieve the objectives of the social welfare sector, suitable policies will be adopted with primary emphasis on providing social and economic security to the target groups. To this end, it will be essential to ensure their participation in development activities. This will need close co-ordination among thana/district/division and national levels through local bodies. Field level officers will be given training on project planning, management, monitoring and leadership development.

23.10.2 In implementing different projects local government bodies like Thana Parishad and Union Parishad will be involved for forming Thana Social Welfare Councils in rural areas and Project Councils under the Urban Community Development (UCD) projects in urban areas. The co-operation and involvement of the local bodies will be encouraged in implementing projects under the Fifth Plan.

23.10.3 A guideline has been prepared to enhance government participation in social services with NGOs/private sector. This will increase and sustain co-ordination amongst all welfare organisations and institutions.

23.11 Estimated Financial Outlay of Fifth Five Year Plan

23.11.1 The estimated financial outlay for this sub-sector during the Fifth Plan is to the tune of Tk. 5,253.70 million. For the spill-over projects Tk.3,200.00 million will be needed, while the rest will be utilised for the new projects. The contribution of the private sector will be at least one third of the aforesaid public sector outlay. Programme-wise outlay during the Fifth Plan is given in Table 23.1.

Table 23.1
Estimated Financial Outlay for Social Welfare During Fifth Plan
(at 1996/97 prices)

(in million Taka)

Sl.No.	Programmes	Estimated Outlay
1	2	3
A	Spill -over Projects (25 Nos.)	3,200.00
B	New Programmes/Projects	
	Urban and Rural Community Programme (Package Programme)	840.00
	Welfare Services for the Physically and Mentally Handicapped, Disabled and Retarded	158.70
	Development Services for Orphan and Disabled Children	645.00
	Welfare Services for Juvenile Delinquents and Youth Offenders	100.00
	Welfare Services for the Aged and Infirm	40.00
	Rehabilitation Programme for the Drug Addicts	40.00
	Social Welfare Services for the Beggars, Vagrants and Destitutes	80.00
	Support to NGOs for social welfare services	130.00
	Social Security Programme	20.00
	Sub-Total	5,253.70
	Private Sector Programme	1,710.00
	Total	6,963.70

23.11.2 In the Fifth Plan, concrete steps will be undertaken to manage and operate social welfare institutions by local government bodies/management committees. The support to such institutions will be provided by the national government in terms of required funds and logistics.

B. WOMEN AND CHILDREN AFFAIRS

I. Women's Development

23.12 Introduction

23.12.1 Women constitute about half of the country's population. They enjoy a much lower status than men. Tradition and socio-cultural norms limit their access to education, skill training, health, and employment. Life expectancy of women continues to be less than men. The maternal mortality rate is high. Literacy rate of women is much lower than that of men. Nutritional status of women and girls is marked by sharp differentials with that of men and boys. Health care for women is restricted to their reproductive health and the general health of women is neglected. Women bear a disproportionate burden of poverty and their opportunities to lessen that burden continue to be highly restricted both spatially and functionally. Participation rate of females in the labour-force has increased but continues to be lower than that of men. Wage differentials between women and men are very high both in agriculture and non-agricultural work. Violence against women and the incidence of divorce, desertion and widowhood have been growing.

23.12.2 The continuing disparity between women and men demonstrates that development does not benefit women and men equitably. Inequitable development entails high costs for women and calls for a re-structuring of the development priorities and development approach. A holistic and integrated approach to development should be promoted to ensure equal participation of women.

23.12.3 Constitutionally, women in Bangladesh have equal rights with men in all spheres of the state and of public life. These have been clearly reflected in Articles 9,10,18,19, 28,29 of the Constitution. Besides, Article 65(3) reserved thirty seats of the parliament exclusively for women members. Similar reservations for women have been made in case of the local government bodies.

23.13 Review of Past Plans

23.13.1 In the First Plan (1973-78) under the Social Welfare Sector, a programme entitled "Rehabilitation of War Affected Destitute Women and Children" was undertaken. Some specific programmes/projects were taken up during the later part of the First Five Year Plan to improve the lot of the women. None of the projects undertaken could be completed during the Plan period and all the projects spilled over to the Two Year Plan. During the Two Year Plan (1978-80), programmes were undertaken for increasing employment and skill of women and an allocation of Tk.105.60 million was made for women's development. For similar programmes during the Second and Third Plans Tk.310 million and Tk.500 million respectively were allocated. The Fourth Plan advocated a multi-sectoral thrust for development of women.

23.13.2 An amount of Tk.880 million was originally allocated for women's development in the Fourth Plan, which was revised down to Tk.450 million subsequently. In addition, an allocation of Tk.100 million was made for the Bangladesh Shishu Academy for undertaking development activities for children. A total of 20 development projects were undertaken under the women's affairs sub-sector. About 63,000 women were trained in different vocational skills under various projects. As many as 86,000 women were given non-formal education and other services, and over 34,000 distressed women were brought under credit programmes for self-employment. Altogether Tk.545 million was spent during the Fourth Plan period for advancement of women and children.

23.14 Two Years Between Fourth and Fifth Five Year Plans (1995-97)

23.14.1 In the two years between the Fourth and the Fifth Plans (1995-97) a National Policy for Women's Advancement (NPWA) with the goal of eliminating all forms of discrimination against women and empowering them to become equal partners of development was declared. NPWA aims to promote and protect women's human rights, ensures equal rights to have access to politics, administration, sports, culture and socio-economic activities, commits equal access to health and nutrition, eradicates persistent burden of poverty on women, prioritises education and skill training for women, reflects positive image of women in the media, emphasises protection from environmental hazards, supports measures including elimination of trafficking and violence against women and rehabilitation of women affected during natural calamities.

23.14.2 An institutional review of the government's WID capability was completed during 1995-1997. The findings reaffirmed that women's development was not adequately addressed in the process of formulating, implementing and evaluating development programmes of the

different sectors. Initiatives for women's development were ad hoc and uncoordinated and attention to women's development issues was largely compartmentalised. There was limited understanding of the requirements of a mainstreaming approach. The review identified many gaps in institutional mechanisms, professional skills and information resources in various agencies of the government and made recommendations on the institutional mechanisms required to achieve changes in policy and programmes and to equip public personnel and agencies to address issues of women's equality and development in a systematic and consistent manner. Implementation of the recommendations made by the review will be of critical importance to the future of women in development in Bangladesh.

23.14.3 As a follow-up measure of the Beijing Conference, a sectoral needs assessment of 12 key ministries based on the critical areas of concern outlined in the platform for action (PFA) was conducted to examine mandate and programme of activities and identify what could be incorporated from the Beijing Platform for Action. On the basis of the findings of the Sectoral Needs Assessment Studies and the Institutional Review of the government's WID capability, a National Action Plan (NAP) for Implementation of the Beijing Platform for Action was formulated. The NAP focused on translating the policy statements made in the NPWA into concrete programme packages and project components to be implemented within a specific time frame and made specific recommendations for adoption of institutional measures and programmatic actions that would contribute to the reduction of gender disparity and the advancement of women. The NAP emphasised on the incorporation of gender dimension and concerns such as gender equality, gender disaggregated information and gender resource allocation for gender responsive programmes towards achieving parity in terms of key social and economic indicators.

23.14.4 In line with the recommendations of the institutional review, the NAP underscored that all sectoral ministries and agencies of the government have responsibilities for women's development. All agencies have responsibilities for ensuring that their policies and programmes respond to the needs and interests of women as well as men and distribute benefits equitably between men and women.

23.14.5 A total of 20 projects were undertaken during the period 1995-97 for development of women in these 2 years. An amount of Tk.659.20 million was allocated for the period out of which Tk.651.12 million was actually spent upto June 1997. Two projects were completed and remaining 18 projects spilled over to the Fifth Plan.

23.15 Issues and Constraints

23.15.1 Major constraints identified during the implementation of these projects are as follows:

- a. the Ministry and the Department of Women's Affairs were not equipped with adequate and trained manpower to deal with development projects/programmes;
- b. frequent policy changes on the part of the development partners necessitated revision of project objectives which delayed implementation;
- c. administrative procrastination caused delay in the appointment of project personnel;
- d. lack of co-ordination and linkages among cross-sectoral activities for women's development hindered effective implementation;
- e. lack of proper monitoring of WID activities of focal Ministries/Agencies and NGOs caused delay and ineffectiveness; and

- f. personnel related to WID activities both in the government and NGOs were not adequately gender-sensitised.

23.16 Fifth Plan

23.16.1 The emphasis of the Fifth Plan is on the reduction of gender disparity through integration of women in the main-stream of development. The thrust of the Plan is on protection of women's rights and empowerment of women, reduction of persistent burden of poverty on women through generation of productive self-employment opportunities, prioritisation of education and skill training and access to micro-credit and basic services. The Fifth Plan emphasises on support measures for the security of abandoned, deserted women in need of special protection measures as well as measures towards the elimination of trafficking of and violence against women. Thus the Fifth Plan focuses on a strategy of ensuring equal access to and control over resources and benefits, expansion of education and training and making provision of basic services.

23.17 Objectives of Fifth Plan

23.17.1 Public sector involvement in encouraging, supporting, protecting and empowering women and women's rights will be a major objective of the Fifth Plan. In order to implement the National Women Development Policy and the National Children Policy, the Fifth Plan envisages to:

- a. initiate necessary steps to implement the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW);
- b. ensure women's legal rights in property inheritance and other related laws;
- c. promote gender equality and improve the status of women;
- d. promote and protect women's human rights and raise awareness of men and women about these rights;
- e. promote equal rights of women and men in all spheres of development, including access to information, skills, resources and opportunities;
- f. promote equal rights of women in access to education, health and nutrition, water and sanitation, and social services;
- g. reduce poverty and improve food security and nutritional status of women and girls living below poverty line;
- h. increase women's participation in decision-making both at the national and local levels;
- i. increase women's representation at all levels in the public service including all tiers of local government;
- j. promote greater participation of women in the formal and informal sectors of employment;
- k. promote support services for working women such as child care, accommodation and transport facilities;
- l. protect women and children from insecurity at work place, economic exploitation and hazardous occupations;
- m. promote economic self-reliance of women through expansion of vocational skill training, especially in non-traditional areas, managerial training and credit facilities;
- n. adopt appropriate measures towards the reduction of insecurity faced by women and girls and towards the elimination of all sorts of violence against women

- o. undertaking treatment and rehabilitation of violence victims;
- o. adopt appropriate measures towards the elimination of trafficking of women and girl children;
- p. promote the positive portrayal of women and girl children in media;
- q. promote increased participation of women in national and international peace negotiations;
- r. promote women's role, interest and needs in environmental and natural resources and conservation management;
- s. strengthen institutional structures and mechanisms within the government to promote main-streaming women's development;
- t. institutionalise a national monitoring mechanism to monitor progress in achievement of Plan targets on WID;
- u. ensure reflection of gender equality in text books and curricula;
- v. ensure increased participation of women in sports and culture and establish separate sports and cultural complexes for women;
- w. develop women entrepreneurship and create employment for women through skill training in various trades and extensive micro-credit; and
- x. reduce maternal mortality rates.

23.18 Strategies of Fifth Plan

23.18.1 The Fifth Plan advocates main-streaming women's development and emphasises a multi-sectoral approach and shared responsibilities of all development sectors for integration of women's development into policy planning, project formulation, implementation and monitoring. To achieve this multi-sectoral thrust for women development, the following general strategies will be adopted during the Fifth Plan:

- a. **Inter-sectoral approach:** Strategies for mainstreaming will have a multi-sectoral approach involving sectors related to economic and social development, governance and participation in public life. The sectoral ministries will be responsible for implementation of programmes with definite time-bound targets relating to business allocated to them. As the lead agency, MWCA will provide overall policy guidelines, build-up information base and co-ordinate with relevant ministries to facilitate system-wise integration of women's development and equality perspective in all programme areas as it will review and monitor progress in these areas.
- b. **Advocacy:** Advocacy will form a part of all programme activities at all levels to make people aware about the rights and needs of women and girl children, violence against women, international commitments made by the government to promote gender equality and women's development. Effective advocacy to promote social mobilisation for creating gender awareness and foster positive attitudinal and behavioural change is necessary for the development of an appropriate structural and social environment for bringing gender equity and sustaining it. International and regional instruments will be used to monitor implementation of the government's commitment to ensure gender equity. Necessary steps will be taken for implementation of the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW), the National Action Plan (NAP) for implementation of the Platform for Action and recommendations of the Institutional Review of the government's WID capability;
- c. **Co-ordination and monitoring:** The National Council for Women's Development (NCWD), with 44 members has been set up with the Prime Minister as its

Chairperson for formulation of policies for the development of women and to oversee the WID related activities of the country. The NCWD will act as a guide, policy maker, sponsor and watchdog of WID. It will have two organs, namely, the Lead Focal Point which will be located in the Ministry of Women and Children Affairs and the GOB - FDP (Foreign Development Partner) Taskforce which will be located in the Planning Commission. The main task of the Lead Focal Point will be to monitor and evaluate women's development projects to identify the implementation constraints and to take necessary steps for providing services to women in the special concern areas which do not fall under the purview of any specific ministry. The major task of the GOB- FDP Taskforce will include formulation of macro policies on the basis of information provided by the Ministry of Women and Children Affairs for intersectoral co-ordination and structural adjustment. Co-ordination among the sectoral ministries will be strengthened. MWCA will provide support facilities for NCWD to enable it to effectively oversee inter-ministerial co-ordination and promotion of WID and monitor WID activities across the relevant sectors. Attention will be given to strengthening the WID Focal Points in the ministries. An Inter-Ministerial WID Programme Implementation and Evaluation Committee will be formed under the chairmanship of the Minister, MWCA to review, evaluate and co-ordinate women's development activities. Field-level co-ordination will be enhanced by strengthening professional capacity of the field-level functionaries of DWA, local government institutions, NGOs and delegating responsibility to the field-level functionaries. As the lead agency, MWCA will monitor progress on women and children development programmes implemented by the relevant sectoral ministries and agencies.

- d. **International regional and sub-regional co-operation:** The implementation of some of the programmes and projects of the Fifth Plan will depend on effective international, regional and sub-regional co-operation in sharing experiences. Therefore, such co-operation will be encouraged for the advancement of women and children and for protecting them against violence and trafficking.
- e. **Capacity building:** Capacity building for women's development programmes at national, sub-national and community levels will be emphasised through all the programme sectors. Conscious efforts will be made to facilitate women's participation in planning, formulation and implementation of sectoral programmes/projects at all levels. Necessary attention will be given to the enhancement of skill and effectiveness of the representatives of local government bodies, especially women, in promoting women's development through facilitating training on WID and providing guidelines on how to carry out WID responsibilities.
- f. **Research and data base development:** Institutional arrangements and mechanisms for ensuring availability of necessary inputs such as adequate sex-disaggregated data and research on women's situation to support policy and programme formulation and implementation will be strengthened.
- g. **Public expenditure:** Reallocation of existing resources, provision of additional resources and institutionalisation of effective mechanism for monitoring resources earmarked for women will be emphasised to ensure equitable share of development benefits for women. Greater transparency in budget allocations including separate budget allocations for women personnel and programmes will be emphasised.

23.18.2 In conformity with the aforesaid strategy the following specific steps will be taken during the Fifth Plan period:

- a. Enforcement of laws and legal protection:** Efforts will be made to liaise with other actors in drawing attention to promotion and protection of women's rights and in identifying relevant options for addressing them such as through more effective enforcement of laws, constitutional guarantees, reforms in laws, regulations as well as in judicial procedures to effectively deal with violation of women's rights and to improve women's access to the criminal justice system. MWCA will play an advocacy role in promotion of gender equity and encourage setting up of advocacy groups for women's rights.
- b. Eliminating violence against women and discrimination against girl child:** A number of legislative actions will be made to protect the interests of women and children and eliminate discrimination against them. The legislative measures will include reform of family laws, laws on equal pay and empowerment and protection and expansion of political rights. Bangladesh has endorsed the Platform for Action (PFA) of the Fourth World Conference of Women held in Beijing in 1995 and is committed to ensure its implementations. On the basis of the sectoral reviews, a National Action Plan (NAP) was framed in February 1997 for the advancement of women. The NAP envisaged a specific national policy on violence against women adopting the definitions of Beijing Platform For Action. Following the NAP, the government has declared a National Policy on Women in March 1997. The National Policy has identified actions against violence as a priority area for government intervention. It suggested the following specific actions for the eradication of all kinds of oppression against women:
- i. eradication of physical, mental and sexual harassment at the family and social levels, and rape, prostitution of women, dowry and violence against women;
 - ii. amendment of the existing laws which are repressive to women and the formulation of new laws giving special assistance to the oppressed women;
 - iii. eradication of oppression of women, ensuring participation of women in the judicial system and at all levels of the police force in order to implement the laws properly;
 - iv. making of judicial procedures easy so that all legal procedures for torturing women and the girl child and trafficking are complete within six months;
 - v. reduction of insecurity faced by women and girls;
 - vi. elimination of all sorts of violence against women and providing treatment and rehabilitation of victims of violence; and
 - vii. elimination of trafficking of women and girl children.
- c. Trafficking dowry and polygamy:** The following laws provide for punishment for trafficking, receiving and giving dowry and for polygamy:
- i. **The Penal Code of 1860** prescribes punishment for kidnapping, rape and murder and for trafficking of women.
 - ii. **The Suppression of Immoral Trafficking Act, 1993** provides for punishment for forcing a girl into prostitution.
 - iii. **Dowry Prohibition Act of 1980** provides for punishment for giving and receiving dowry.
 - iv. **Muslim Family Law Ordinance of 1985** provides for punishment for polygamy and unregistered marriage.
 - v. **Women and Child Repression (Special Provisions) Act 1995** provides for capital punishment for repression of women and children. It debars granting of

bail to persons accused of heinous offences against women and children. The penalty imposed in section 8 of this act for trafficking and associated offences is life imprisonment and fine. Section 9 stipulates a penalty of 10 years with a minimum of 7 years imprisonment for abduction to commit immoral act on women and children. This Act provides for the setting up of separate courts one in each district to try cases coming under it. So far ten such courts have been established. Review of their performance and effectiveness will be in order before setting up more such courts in other districts.

All these laws need strict enforcement by the administrative-legal system of the country.

- d. **Awareness/public education:** Specially designed legal literacy and education programmes will be undertaken to create public awareness about women's legal rights and to provide legal support where needed to women in distress as well as the survivors and the victims of violence. Programmes for political education and creation of political awareness among women will be undertaken widely and more effectively.
- e. **Public employment:** Efforts will be made to promote increased participation of women in public service and in decision making position through advocacy for expediting quota (women) fulfilment, exemption of district quotas and adoption of affirmative action measures. As the lead agency, MWCA will review and monitor progress on fulfilment of quota and representation of women in public service on a regular basis.
- f. **Support services for women's employment:** Appropriate measures will be adopted to facilitate improvement of service conditions and working environment in the public sector. These will include workplace security, provision of child-care facilities, accommodation, transport, etc. MWCA will review existing facilities, identify cases of discriminatory practices and economic exploitation, follow-up and monitor progress on the provision of improved facilities and facilitate awareness creation on labour rights and violations of such rights.
- g. **Consideration of women in need of special measures:** The government will carefully undertake appropriate measures to reach socially and economically disadvantaged women and children such as destitutes, abandoned, women with disabilities, women and girls engaged in commercial sex work and women and girls who are victims of violence and trafficking.
- h. **Institutional:** Systematic schemes will be taken up for strengthening MWCA to enable it to take account of gender issues and provide effective leadership on women's development issues, motivate and support other agencies in fulfilling their responsibilities in integrating women's development issues into ongoing planning and programmes, and review and evaluate WID activities of the different sectoral agencies. Necessary amendments will be made to the Allocation of Business of MWCA to make explicit MWCA's role as a catalyst and motivator for women's development within the government and reflect its responsibilities for implementation of the specific commitments made in the PFA. MWCA will provide supporting facilities for NCWD to enable it to effectively oversee inter-ministerial co-ordination and promotion of WID and monitor WID activities across the sectors. Attention will be given to strengthening the WID Focal Points in the ministries and agencies. The Inter-Ministerial Advisory Committee for the Prevention of Violence Against Women will continue to review reports on violence against women and

monitor the functioning of the district, thana and union level committees set up under the Central *Nari Nirjatan Protirodh* Cell in MWCA.

- i. **Capacity development:** Measures will be taken to strengthen the human resource base of MWCA and its agencies in line with their revised mandate and responsibilities in furthering the advancement and development of women. Sensitisation and capacity development of government planners, managers and development workers to contribute to main-streaming women's development will be facilitated through training on gender conducted through existing training institutes.
- j. **Skill development training:** Women's access to all skill development training opportunities will be prioritised and special programmes for women and girls on the development of traditional and non-traditional skills will be supported.
- k. **Provision of basic services:** Women's access to basic services such as education, health care, water and sanitation will be promoted. Time bound quantifiable targets for reaching women, particularly disadvantaged women, will be set in each sector and its implementation will be monitored.
- l. **Financial service/resource:** Women's access to and control over economic/productive resources and financial services, in particular to micro-credit for investment in small-scale production and entrepreneurial activities, will be actively encouraged in both government and private sector financial institutions. Allocation of government lands, ponds and other water bodies to assist the poor, assetless women and homeless families in securing a sustainable livelihood will be facilitated through revision of rules, regulations and affirmative measures.
- m. **Allocation of public expenditure:** Steps to restructure and target the allocation of public expenditure to address the basic needs of women by expanding social services to the poor and in ensuring access to and control over different resources, particularly credit and technology will be actively considered.
- n. **Data base:** Development of a gender-sensitive statistical data base and dissemination of sex disaggregated data necessary for development planning will be actively considered. Particular emphasis will be given to staff training on design and analysis of data from a gender perspective. Liaison and co-ordination with relevant agencies will be maintained. Research agencies will be promoted to carry out gender oriented research in order to identify gender concerns and disseminate gender specific information.
- o. **GO-NGO and private sector co-operation:** NGO's women organisations and private sector organisations will be encouraged to complement the government efforts to improve the situation of women and children and in reaching the disadvantaged women and children. A large number of women are working in industries like ready-made garments, fish processing, leather processing, computer software and data entry industry, etc. But most of these women are unskilled workers and support services for them have not yet been developed properly. Training centres with support services will be developed through GO-NGO and private sector co-operation and programmes will be launched to train potential women workers so that they can be absorbed in those industries. Facilities like day-care centres, maternity leave, accommodation and transportation will be provided by the respective employers. These efforts will facilitate supply of skilled women personnel to various industries at home and outside.

23.19 Programmes During Fifth Plan

23.19.1 The following women's development programmes will be undertaken for women's development during the Fifth Plan:

- a. **Skill development training programme:** Skill development training facilities will be expanded to give wider coverage to the unemployed women. Under this programme 1,00,000 women will be trained in different trades.
- b. **Integrated staff development programme:** Staff development programmes will be undertaken to strengthen capacity of MWCA, DWA and BJMS personnel.
- c. **Policy and advocacy unit in MWCA:** A policy and advocacy unit will be set up in MWCA to strengthen its policy and advocacy role for the advancement of women and children.
- d. **Women's credit programme:** Under this programme 1,00,000 women will be provided credit facilities.
- e. **VGD programme for women:** Provision of food for work under VGD will be limited to poverty stricken areas and 1,50,000 poor women are envisaged to be provided training and credit facilities under this programme.
- f. **Accommodation facilities for working women:** Programme to expand accommodation facilities for working women from low and middle classes will continue in the Fifth Plan.
- g. **Day-care services for children of working mothers:** Existing programme of day-care services for children of working mothers from low and middle classes will be expanded in the Fifth Plan.
- h. **Multi-sectoral programme on reduction of violence against women:** An umbrella action programme to mobilise different agencies of the government to deal more effectively to prevent and redress violence against women will be undertaken during the Plan period.
- i. **Training resource centre:** A training resource centre for other training institutes will be established through reorganising the National Women's Training and Development Academy of the Department of Women's Affairs. A documentation and resource centre will also be set up in this resource centre during the Plan period.
- j. **Centres of excellence for HRD research and training:** A network of Centres of Excellence for Human Resource Development will be established to promote capacity building of public, non-government and private sector organisations through exchange of information, research, advisory service and technical co-operation within the country and in the region.
- k. **Strengthening of linkages/co-ordination among various agencies:** Special programmes to strengthen co-ordination and establish linkage and networking among government agencies and NGOs at the national, regional and global level will be undertaken.
- l. **Development of gender sensitive data base:** Programme to establish linkage with the BBS for developing gender-sensitive statistical data base and information system, and training of personnel on design and analysis of data will be undertaken. Identification of research needs will be promoted.
- m. **Programme on special concerns and interests of women:** Programme on special concerns and interests of women such as prevention of trafficking of women will be initiated.

23.20 Poverty Alleviation and Micro Credit Programme

23.20.1 To alleviate the persistent and increasing burden of poverty of women, the government will pursue sound macro-economic policies that are gender-sensitive, designed with the full participation of women and based on development strategies centred on people; restructure and target the allocation of public expenditures to address the basic needs of women; expand social services to the poor; establish mechanisms to ensure that resource allocation at the macro, sectoral and project levels reflects the social costs and benefits of women's work and provide women with access to credit and savings.

23.20.2 Under these programmes destitute and poor women will be organised and trained and credit facilities will be provided for collective or individual income generating activities. Provision of food for work will be incorporated in specially poverty stricken areas under VGD programme.

23.20.3 To address the basic needs of women in extreme poverty, the Ministry of Disaster Management and Relief instituted food distribution through Vulnerable Group Feeding (VGF) programme as a relief mechanism. The programme was subsequently oriented towards development and renamed as Vulnerable Group Development (VGD) since mid-1980s. There has been a progressive shift in the VGD programme to make it development oriented. The Food for Work (FFW) programme provides food in exchange for rural development and other extension services. For 'Strengthening Institutions for Food Assisted Development (SIFAD)' the government transferred administration of the VGD programme from the Ministry of Disaster Management and Relief to the Ministry of Women and Children Affairs with effect from July 1996. The VGD programme is expected to be implemented at a cost of Tk.598.00 million and 6,23,370 m. ton. wheat for a period of four years from 1996 to 2000. Under this programme about 11 million women are expected to be given food security through development package of training on education, health care and self-employment. The VGD programmes will be co-ordinated by the Planing Commission.

23.20.4 The Prime Minister at the Micro-credit Summit in Washington in February 1997, stated- "while our macro-economic policies are designed to increase investment and stimulate the economic growth, we are equally mindful of the need to undertake urgent measures to address the problems of the poor, the women and the children". This provided the guideline for developing macro framework for WID under the Fifth Plan. The development programmes in the Fifth Plan will be people-centred, equitably distributed and environmentally and socially sustainable. Attainment of accelerated growth rate and alleviation of poverty through generation of productive self-employment opportunities, especially in the non-formal sector, energised with micro-credit input and increased self-reliance, will be inextricably linked up with the increasing participation of women in the development activities during the Fifth Plan period. The emphasis of the Plan is to integrate women's development into the macro-framework and to reduce gender disparity from all spheres of life through the integration of women into the mainstream of development in all sectors including education, health and family welfare, agriculture, industry and environment. This may be achieved attaching a multi-sectoral thrust involving women's increased participation in decision-making process at social, familial and state levels.

II. Child Development

23.21 Introduction

23.21.1 The priority concerns relating to children in Bangladesh have so far centred around

(a) survival issues and basic needs and (b) protection of children in specially difficult circumstances. In the context of the high incidence of poverty and the poor indicators of children's health and slow school enrolment, the government emphasised on making considerable investments in primary health care and education. But utilisation of these services was low, especially by the poor who needed them most. Children, being the most needy and vulnerable were most affected by the material conditions of their families. The poor health and education status of the population is reflected in still high mortality and illiteracy rates of children.

23.21.2 Bangladesh has been experiencing the effects of certain socio-economic trends which unfavourably influence conditions of childhood and adolescence for many of the under-18 age group. Foremost among these has been the process of rapid economic transition from an agrarian economy to one with growing industrial and service sectors. This has been accompanied by a population shift from countryside to town, in which migrants from the poorer sections of society predominate. The urban population now represents 20 per cent of the country's population and the slum population represents 25 per cent of the urban inhabitants. Landlessness, increased marginalisation of certain groups and the commercialisation of all aspects of life have come to react negatively on livelihood, on family cohesion and, particularly, on childhood roles and requirements. The erosion of traditional values and support systems has led to frequent family breakdown and early school drop-out, children's entry into the workplace and to child negligence and abandonment.

23.21.3 A relatively high number of children have been living in specially difficult circumstances. They are not only poorly served by basic health and educational services, but they also face additional forms of deprivation. Those include family stress or breakdown associated with poverty, low status, especially among girls and non-conducive neighbourhood and disabilities derived from nutritional stunting.

23.21.4 Poverty, landlessness, assetlessness and natural disasters have taken their toll on society in many other ways and led to the break-up of social stability, to migration, destitution and the rise of anti-social elements. This has contributed to large numbers of children being orphaned, abandoned, neglected, exploited, abused, over worked, bonded in labour and left to fend for themselves on streets. As an effort to protect these children in difficult circumstances, social welfare policies have provided legal and institutional remedies to these vulnerable and neglected groups of children. Constraints, particularly inadequate resources have badly affected the quality and extent of coverage of these services.

23.21.5 The policy and programme pursued so far have centred around welfare, particularly physical well-being of the children and their acquisition of basic literacy skill only.

23.22 Major Shift from Past Plans to Fifth Plan

23.22.1 Despite constraints and inadequate measures, there has been some improvement in the areas of child survival and accessibility to safe drinking water and sanitation. The infant mortality rate has declined from 112 in the middle of the last decade to about 78 per 1000 live births in 1995. The main reasons for this success has been the innovative outreach mechanisms that have been put in place with the collaboration of the community. Water-borne diseases still continue to be a major cause of child deaths and morbidity which makes it essential to focus more on attitudes and behaviour during the next decade with respect to use of safe water and sanitary latrines. The stunting of the population over the last few decades is an outcome of the persistent deficiency of nutritional standards. Low calorie intake by the

children, particularly the girl children, has been a critical issue. As long as mothers and children do not have access to better food and are not able to escape recurring episodes of illness, their physical health cannot improve even if their survival rates show encouraging progress. This life-long nutritional gap represents a colossal national waste of potential human resources. Such a challenge calls for a re-ordering not only of child or social welfare policies and strategies, but the entire range of development priorities, including food production, public distribution and household food security. The new approach to child development requires the country to move from survival and protection to achieving better health status and higher quality of life for children. Thus the Fifth Plan will focus on a combined strategy to make provisions for basic needs and survival with the adoption of higher standards of health and education for children.

23.22.2 Basic right of children to primary education has been accepted and free and compulsory primary education has been launched. The Fifth Plan will bring all villages and mahollas of the country under the cover of primary education, enlarge the scope of access of all children to secondary, higher and vocational education. In these programmes adequate attention will be given so that admission to educational institutions is based on educational requirement of children irrespective of parental ability to bear costs of such education.

23.22.3 The Fifth Plan will also emphasise on providing services to the children in need of special protective measures, particularly who do not have the family support or whose families are dysfunctional. These include street children, working children, disabled children, children who are victims of abuse, neglect and prostitution, victims of arms conflict and natural disaster and orphans and abandoned children. The Fifth Plan will create an enabling environment for them so that necessary support and services are made available to them and they are treated humanly. The Plan will focus on (a) establishment of laws and procedures for children who are in difficult circumstances; (b) creation of mechanisms for dealing with children infringing with law; and (c) identify alternatives to existing institutional care and improve upon it.

23.23 Guiding Principles

23.23.1 The National Children Policy (NCP) of 1994, National Plan of Action (1990-1995) for child development and Decade Action Plan for Girl Child 1991-2000 are the national guiding instruments within the overall framework of the UN Convention on the Rights of the Child (CRC) to achieve the child development objectives.

23.23.2 New approaches to child development have been introduced by the government which place the issue in the context of human rights and human development. This approach does not perceive the child in isolation, it sees the children as a part of the institution of the family and focuses on the rights, duties and responsibilities of the family vis-a-vis the child. The "best interest of the child" will be the guiding criterion for adopting programmes and strategies during the Fifth Plan period. The Plan will focus on the new "rights" approach according to which children have inalienable rights to survive, live, grow up and develop their strengths and potentials.

23.24 Objectives of Fifth Plan

23.24.1 The objectives of the child development in the Fifth Plan are to:

- a. reduce infant and under-5 child mortality rates by half the 1990 level;
- b. expand early childhood development activities;

- c. reduce malnutrition among under-5 children by half of the 1990 level;
- d. provide universal access to basic education and completion of primary education by at least 75 per cent of primary school-age children;
- e. provide universal access to safe drinking water and sanitary means of excreta disposal;
- f. take necessary steps for the children in need of special protective measures such as reducing child labour, eliminating trafficking of children, eliminating violence against children and making arrangements to rehabilitate destitute, shelterless, disabled and displaced children;
- g. provide equal opportunities to all children for development of their personality, talent and mental and physical abilities; and
- h. make conscious efforts for ensuring children's rights to survive, live, grow up and develop their strengths and potential.

23.25 Strategies of Fifth Plan

23.25.1 Strategies for effective implementation of the child development programmes will have a multi-sectoral and multi-dimensional approach involving the key social development sectors such as education, health and nutrition, water and environmental sanitation, labour and law and justice and social services. The dimension and magnitude of child development will call for collaborative efforts of the government, NGOs and private sector.

23.25.2 Public sector support in children's development will continue to get high priority throughout the Plan period. In addition, public support will also cover institutional support to ensure the participation of social welfare agencies to meet the basic needs of children. Facilities in the state-run institutions for maintenance, training, rehabilitation of the shelterless, neglected, abandoned and handicapped children will be extended and improved. At the same time the NGOs and voluntary agencies and the local government bodies will be encouraged and supported to supplement government efforts in the area of welfare of the children at the community level.

23.25.3 A two-fold approach in the public sector will be adopted to create an enabling environment for children. The first one will be an inter-sectoral one and will cover monitoring and co-ordinating development projects with a view to improving its impact on children. This will include monitoring plan targets, support and maintenance of the data-base specifically providing information on children, undertaking demonstration and pilot projects and facilitate the relevant ministries to take cognisance of the impact of its activities on children. MWCA will act as the lead agency in this regard.

23.25.4 The second one will be the adoption of direct measures to assist children in achieving the various development goals of the government. The sectoral ministries/divisions such as Health and Family Welfare, Primary and Mass Education, Local Government, Labour and Manpower, Law and Justice, Social Welfare, Home, Information, and Statistics will be directly responsible to implement their respective child development and welfare related programmes. This will also involve development of sectoral indicators to measure the impact of development on children. The National Children's Council (NCC) will be responsible for providing overall policy guidance to and monitoring of the child development goals and programmes within the general framework of National Children Policy (NCP) and Convention on the Rights of the Child (CRC). Advocacy on behalf of children will be a strategic approach for the National Children's Council to push it higher on all the key sectoral as well as national agenda. The elements in these strategies will include the following:

- a. setting the measurable and time-bound targets for child development programmes and monitor them regularly by the sectoral ministries;
- b. improving the child development related statistics, particularly by enforcing birth and death registration;
- c. strengthening the Multiple Indicator Cluster Survey (MICS) methodology within the Bangladesh Bureau of Statistics towards monitoring progress in achieving World Summit Goals on each major child development indicator;
- d. undertaking a co-ordinated information campaign to appraise people about child survival, protection, participation and development issues;
- e. reviewing, amending and enforcing of existing laws relating to the protection of children in difficult circumstances including elimination of child labour, child trafficking, etc; and
- f. supporting and strengthening local government bodies, NGOs/private sector to work for the children, particularly for hard-to-reach ones.

23.26 Child Trafficking

23.26.1 Child trafficking has been recognised as one of the most violent forms of crime against children. Bangladesh has passed laws to end women trafficking and children repression. Enforcement of laws on grounds of ignorance and inadequate consciousness, has neither been extensive nor strict. Bangladesh has ratified the CRC of which articles 11, 19, 32, 34, 35 and 39 commit protection of children from trafficking. To address the problem of child trafficking in accordance with these commitments the government has decided to take-up “Integrated Project for Elimination of Child Trafficking in Bangladesh” covering the entire country. For the purpose of this project, all persons under 18 years will be considered as children as defined in the CRC. Situation analysis, awareness raising for prevention of child trafficking, capacity building of enforcement agencies and rescue, repatriation, rehabilitation and reintegration of victims of trafficking will be the main action elements of this project.

23.26.2 Monitoring and co-ordination: National Children's Council will review and assess the impact of sectoral programmes on children at regular intervals and will provide guidance towards effective implementation of child development activities in the sectoral programmes. MWCA will act as the secretariat of the NCC. During the Fifth Plan period the national monitoring mechanism will be strengthened. As the lead agency, MWCA will be responsible to co-ordinate, monitor and facilitate the child development programmes implemented through various ministries. *Shishu Adhikar* Forum will co-ordinate and monitor activities as the apex body of NGOs.

23.26.3 Child labour: Bangladesh has taken up the International Programme for Elimination of Child (IPEC) Labour sponsored and supported by ILO. During the Fifth Plan, Bangladesh will have close co-operation with ILO in developing human resources to this end. It has committed to end hazardous child labour by the year 2000 and child labour by the year 2005. In ending hazardous child labour, direct actions are being taken either for removal of the child from such work or humanising the work conditions and protecting the child labour. Bangladesh has also committed to eliminate child labour from RMG industries. Support for schooling of children employed hitherto in RMG industries has been provided in collaboration with NGOs. In agriculture child labour will be reduced through pursuit of compulsory universal primary education.

23.27 Estimated Financial Outlay of Fifth Plan

23.27.1 During the Fifth Plan Tk. 2,780.00 million is projected for utilisation on different projects and programmes for the development of women and children. Of this, Tk.1,370.00 million will be needed for completing the spill-over projects, while the rest will be utilised for the new projects. Programme-wise outlay for the women and children affairs sub-sector is shown in Table 23.2 .

Table 23.2
Projected Public Sector Outlay for Women and Children Affairs During Fifth Plan
(at 1996/97 prices)

(in million Taka)

Sl.No.	Programmes	Projected Outlay
A.	Spill-over projects (18 projects)	1,370.00
B.	New Programmes on Women and Children Affairs	
	Skill development/staff training programmes	130.00
	Women's credit programme/empowerment and poverty alleviation programmes for women	630.00
	Policy leadership and advocacy for gender equality	30.00
	Reduction of violence against women and children	170.00
	Working women's hostel	30.00
	Day-care service programme	50.00
	Special women's concern/support services programme	140.00
	Innovative programme on women's development	20.00
	Research and development of data base	10.00
	Integrated and innovative programme for child development	130.00
	Programme for prevention of child trafficking	50.00
	TOTAL	2,780.00
	Vulnerable Group Development Programme (VGD)	**598.00

Note: **Amount for this programme will come out of block allocation to be kept in the ADP. In addition 6,23,370 mt of wheat will be utilised for this programme.

23.27.2 The objectives and coverage of these programmes will be subject to such change and modifications as may be required by the changing situation. It is expected that, in addition to the aforesaid outlay in the public sector, private organisations and local government bodies will come up with programmes for development of women and children. Such an outlay outside the public sector is expected to be about 10 per cent of the projected public sector outlay.

C. YOUTH DEVELOPMENT

23.28 Introduction

23.28.1 Youth of the age group between 15-30 years comprise about 30 per cent of the total population of Bangladesh. Of this group those who are underemployed and unemployed but at the same time are trainable for gainful employment come under the purview of youth development. The total number of the youth now is estimated to be about 40 million among whom more than a third are estimated to be unemployed or underemployed. The unemployed youth are handicapped with poverty, lack of adequate skill and training; thus, most of them remain outside the mainstream of development paradigm. Transformation of this youthforce into a dynamic and sustainable human resource for proper utilisation in the development process is an essential and enormous task. The Department of Youth Development under the Ministry of Youth and Sports is engaged in creating an enabling environment to ensure the pro-active involvement of the youth in development by implementing a number of pragmatic programmes which, inter-alia, include organising the youth, motivating them, improving their state of education and skill, providing micro-credit and other facilities to solve unemployment and other related problems.

23.29 Review of Past Plans

23.29.1 The First Plan (1973-78) followed an integrated approach for the development of the youth. The Plan pursued some specific programmes for social welfare services for the youth like youth hostels and youth welfare centres. However, a departure from this integrated approach was made later, primarily to use the unemployed youth in the partisan interests. The physical target fixed for the Two Year Plan (1978-80) was to train 42,255 unemployed youths of whom 36,200 were actually trained. During this Plan an amount of Tk.95.00 million was provided for youth development programme; of this Tk.70.10 million was utilised. In the Second Plan (1980-85) a sum of Tk.255.00 million was allocated for youth development of which Tk.196.00 million was utilised. A total number of 1,63,070 youth, out of a target of 2,20,124, received training in different vocational trades including livestock and poultry farming, telemechanics, secretarial science, agriculture, fisheries, driving of auto-rickshaws, etc. Of the trained youths about 3,000 undertook self-employment projects in agriculture, pisciculture and transportation.

23.29.2 During the Third Plan (1985-90) Tk.170.00 million was allocated for youth development activities. The development programmes undertaken during this Plan period were basically a continuation of past training activities. However, an additional amount of Tk.760.00 million was allocated for implementation of a new project "Thana Resource Development and Employment Project (TRDEP)" which was taken up in only two thanas for poverty alleviation at the grass root level.

23.29.3 The Fourth Plan (1990-95) envisaged programmes for the youth for self-employment promotion, poverty alleviation, skill development training and community development through voluntary youth organisations. The physical target fixed for the Plan period (1990-95) and for 1995-96 was to train 3,58,701 youth in different trades out of which 3,04,388 were trained up.

23.29.4 Expansion of micro-credit facility among the trained youth was an important feature of youth development during this period. The credit fund for the Plan period (1990-95) was Tk.870.00 million out of which Tk.306.90 million was disbursed. Under poverty alleviation programme of Thana Resource Development and Employment Project (TRDEP) which was

extended to 32 thanas with the assistance of Asian Development Bank, the total target of beneficiaries was 192,000 and all of them were brought under micro-credit programme.

23.29.5 Encouraged by the success of poverty alleviation programme of TRDEP project, "Family Based Employment Programme" was undertaken in 50 selected thanas with Tk.1,250.00 million as credit fund during the same Plan period. Youth Training Centres on residential basis were expanded from 6 to 10 districts to train the rural youth in livestock, poultry, fishery and tree plantation and also to motivate them to get involved in different socio-economic activities including literacy, primary health care, family welfare, environmental improvement, resource conservation, etc. Besides these, 3 Zonal Resource Training Centres were established at 3 divisional headquarters to train landless rural beneficiaries in different socio-economic activities. During the Plan period, youth activities were extended from 50 thanas in 31 districts to 230 thanas in 64 districts.

23.30 Resource Allocation and Utilisation During Fourth Plan

23.30.1 A total of Tk.800.00 million was allocated for youth development programmes during the Fourth Five Year Plan (1990-95). Against this, an amount of Tk.722.55 million (at 1989-90 prices) was spent.

23.30.2 During Fourth Plan a total of 10 projects were undertaken, out of which 5 projects were completed. Almost all the projects that were completed during the Plan experienced both time and cost over-run.

23.31 Two Years Between Fourth and Fifth Plans (1995-97)

23.31.1 During 1995-97 a total of 10 projects were undertaken of which 5 had spilled over from the Fourth Plan. An amount of Tk.439.50 million was allocated for 1995/96 out of which Tk.325.14 million (at current prices) was spent upto June '96. The allocation for 1996/97 was Tk.897.60 million (at current prices) out of which Tk.582.65 million was spent. One project was completed and the rest 9 projects spilled over to the Fifth Plan with a financial implication of Tk.4,000.00 million (at current prices).

23.32 Issues and Constraints Related to Previous Plan Implementation

23.32.1 Youth Development suffered from a number of constraints during the past plan periods. In this respect the following important issues and constraints need to be mentioned:

- a. inadequate community support and participation and non-involvement of local bodies limited the after-effects of the projects;
- b. the youth were not properly motivated and organised for pro-active participation;
- c. there was a serious constraint of non-availability of proper data and information regarding the depth and dimension of different youth-related issues and problems;
- d. there was little co-ordination among different government and non-government organisations involved in youth development;
- e. lack of information and awareness regarding training, credit and other facilities offered by the Department of Youth Development also worked as an impediment;
- f. no marketing network could be developed for the goods produced by the self-employed youth which was a major constraint against rapid expansion of self-employment projects;
- g. in some cases, delay in processing of land acquisition cases resulted in the failure to complete projects in time; and

- h. private sector involvement in the youth development sector was not very encouraging.

23.33 Objectives of Fifth Five Year Plan

23.33.1 The overall objective of the youth development programme will be to organise and mobilise the youth properly to ensure their spontaneous and pro-active involvement in the development process. The objectives of the youth development programme during the period are to:

- a. encourage the youth for self-development and gainful employment through motivation, training, micro-credit and other necessary input support;
- b. ensure increased participation of women in youth development programmes;
- c. expand facilities for improving working skill and suitable training in technical, vocational and professional fields;
- d. organise youth groups and motivate them to assist community development through voluntary youth organisations;
- e. ensure youth participation in development process at every level;
- f. involve the youth in nation building activities like literacy programmes, disaster management, primary health care, immunisation drive and family welfare, tree plantation, environmental improvement, resource conservation and awareness raising against anti-social activities, drug abuse, HIV/AIDS/STDs, etc.;
- g. increase youth participation in different healthy recreational activities like games and sports, debates, literary competition and other cultural activities to improve their physical and mental faculties; and
- h. inculcate the spirit of self-help, co-operation and cohesion and qualities of good citizenship.

23.34 Strategies of Fifth Plan

23.34.1 In order to achieve the objectives, the following strategies will be followed:

- a. expanding training, credit and necessary input supply programmes to facilitate self-employment projects by the youth both in rural and urban areas;
- b. emphasising on modern training and use of existing training facilities and creation of new facilities for enhancing training standards;
- c. encouraging the educated youth to change the present trend of job dependence and get involved in self-employment projects;
- d. ensuring community participation and involving different local government organisations in all youth related activities;
- e. promoting formation of youth organisations at the grass root levels and ensuring their involvement in participatory development;
- f. motivating the youth to participate in different socio-economic development programmes, including literacy, disaster management, nutrition awareness, primary health care, immunisation, family welfare, prevention of HIV/ AIDS/ STDs, environmental improvement, resource conservation and awareness raising against anti-social activities like drug-abuse, crimes against women, terrorism, etc.;
- g. establishing close co-ordination among all relevant government and non-government agencies engaged in youth development;
- h. ensuring at least 50 per cent participation of women in all skill development training, credit and self-employment programmes;

- i. emphasising overall mental and physical development of the youth through promotion of healthy recreational facilities like games and sports, debates, literary competitions and various cultural activities;
- j. helping transfer of modern technology through participation of foreign youth volunteers from organisations like United Nations Volunteers (UNV), Peace Corps, Japan International Co-operation Agency (JICA), Korea International Co-operation Agency (KOICA), etc;
- k. encouraging NGO and private sector participation not only to supplement but also to undertake pragmatic and innovative programmes in youth development; and
- l. inculcating character, discipline, confidence, punctuality and tolerance in the youth through seminars and other means of advocacy.

23.35 Programmes to be Undertaken During Fifth Plan Period

23.35.1 The following will constitute the salient elements of the Fifth Plan period:

- a. **Skill development training:** Under this programme the following major steps are envisaged:
 - i. The number of residential training centres for livestock, poultry and pisciculture will be gradually increased from the existing 21 centres to 64 centres to cover all districts. By the end of the Plan period the total annual capacity of these training centres is expected to reach 40,200 from the present capacity of 13,300.
 - ii. Block and Batik Printing Centres will be gradually established in all districts; this will significantly increase the number of trained female youth.
 - iii. Mobile training camps will be regularly organised at union/thana/district levels for short durations.
 - iv. Entrepreneurship training will be imparted to 50,000 young men and women during the Plan period.
 - v. During the Plan period, a total number of 1 million young men and women are expected to be trained in different fields.
- b. **Self-employment programme:** Self-employment programmes will be facilitated through motivation, training, group formation, credit and input support and close supervision and development of a marketing network for the goods produced by the successful self-employed youth. Under this programme 8,00,000 young men and women are expected to be self-employed.
- c. **Community development programme:** Under this programme, large scale participation of youth will be ensured in various community development activities.
- d. **Development of youth leadership:** This programme will help develop leadership qualities among the youth through promotion of youth organisations at the grass-root level and involving the youth in participatory planning and development. Steps will be taken to bring at least two voluntary youth organisations in each union within the network of youth development programmes and other programmes for socio-economic development.
- e. **Participation of youth in population and health care:** Programme for participation of the youth in population activities will be undertaken in 64 districts and 470 thanas; altogether 9,75,000 young persons will be brought under this programme.
- f. **Community development and self-employment programmes for ansars and VDPs:** Joint programmes will be implemented with Ansars and VDPs for

community development and self-employment at the union and other appropriate levels.

- g. Involvement of college and university students in national social service:** Steps will be taken to establish Youth Counselling Centres in different colleges and universities to motivate the youth to engage in community development programmes and income generating activities for themselves during their leisure time.
- h. Supply of input to trained youth:** Under this programme different necessary inputs like improved breed of cows and goats, layer chicken, etc. will be supplied to the trained youth to facilitate taking up self-employment projects.
- i. National youth centre:** This will be a centre of excellence for youth development in the country. It will contain facilities for research, collection of data and information on youth development and arranging seminars/workshops on youth development issues. Facilities will also include youth hostels to help national and international youth exchange.
- j. Technology transfer programme:** Transfer of modern technology will be effected mainly with the help of volunteers from United Nations, Japan International Co-operation Agency (JICA), Korea International Co-operation Agency (KOICA) and Peace Corps.

23.36 Poverty Alleviation and Micro Credit Programme for Youth Development

23.36.1 Since its inception the Department of Youth Development (DYD) is pursuing a number of policy goals and implementation of programmes for poverty alleviation. It has already expanded its programmes to 470 thanas which will be intensified during the Fifth Plan. The DYD, in this respect, will give priority to motivation, literacy, skill development training, self-employment, micro-credit delivery, family-based group formation, necessary input supply and very close supervision to ensure success. It has developed training facilities, both institutional and mobile, for skill development in different trades and fields. The poverty alleviation programmes, especially the Thana Resource Development and Employment Project (TRDEP) model, shows that government organisations can undertake such activities with success and on a competitive cost basis. Since its inception the Department of Youth Development has trained a number of 4,34,802 unemployed young persons in various trades upto June 1996. About 60 per cent of them have been able to get involved in self-employment. Others have been able to get employment opportunities at home and abroad. Monthly income of self-employed youth ranges from Tk.5,000.00 to Tk.50,000.00. During the Fifth Plan period “Thana Resource Development & Employment Project (Phase iv)” alone expects to provide credit facilities for self-employment to around 5,50,000 rural youth.

23.36.2 At the end of the Plan period 8,00,000 young persons are estimated to be covered by micro-credit programmes. Presently, the total credit fund at the disposal of the Department of Youth Development is Tk. 2,470.50 million. This is expected to be increased during the Fifth Plan by taking loans from organisations like Palli Karma Shahayak Foundation (PKSF).

23.37 Involvement of NGOs/Local Bodies in Youth Development

23.37.1 The following steps will be taken to encourage involvement of NGOs/local bodies in youth development:

- a. Co-ordination will be established with NGOs like BRAC, ASA, MIDAS, etc., and with Grameen Bank to reorient their programmes for poverty alleviation and income generation for catering to the needs of the youth community both in the urban and rural areas.
- b. The NGOs will be pursued to identify the unemployed youth as a specific beneficiary group.

- c. Expertise of the NGOs will be utilised for mobile training and group formation at the grass root level.
- d. Support and patronage of local bodies at village, thana, union and district levels will be enlisted to improve the coverage and success of motivation, training, beneficiary selection, group formation, micro-credit delivery and self-employment programmes.
- e. Involvement of NGOs/local bodies will be encouraged with the formation of Youth Development Committee at all levels of local government. These will be headed by elected people's representatives and will comprise of people's representatives at village, union, thana and district levels, representatives of different nation building agencies and NGOs and youth representatives.
- f. A National Co-ordinating Committee for Youth Development will be formed to give a sense of direction and adequate support to the related policies and programmes. The committee will be at the ministerial level with representatives from the relevant ministries/ departments and NGOs.

23.38 Estimated Financial Outlay of Fifth Plan

23.38.1 During the Fifth Plan a sum of Tk.6,280.00 million is estimated to be made available for different projects for youth development. For the spill-over projects Tk.4,000.00 million will be needed while the rest will be utilised for the new projects. Programme-wise estimated outlay is shown in Table 23.3.

Table 23.3
Estimated Financial Outlay for Youth Development During Fifth Plan
(at 1996/97 prices)

		(in million Taka)
Sl. No.	Programmes	Estimated Outlay
A	Spill Over Projects (9 Nos.)	4,000.00
B	New programmes:	
1.	Poverty alleviation programme (Thana Resource Development and Employment Project)	1,500.00
2.	Skill Development Training Programme	250.00
3.	Self- employment Promotion for the trained youth	200.00
4.	Community Development Programme through Voluntary Youth Organisations	150.00
5.	Population and Family Welfare Programmes through youth clubs	30.00
6.	Involvement of college/university students/educated youth in self-employment/national social service	150.00
	Total	6,280.00

23.38.2 In addition to the public sector outlay, private contribution to youth development objectives will be encouraged. It is expected that private contribution to and NGO's investment in the youth development programme in the Fifth Plan period will be at least a third of the public sector outlay. Together, the public and the private programmes in this field will enable the youth to contribute their best to the betterment of the society.

CHAPTER XXIV

MASS MEDIA

24.1 Introduction

24.1.1 The contribution of mass media to socio-economic development is now widely acknowledged. It plays an effective role to inform, educate and motivate people towards achieving national development goals and objectives. Specially, objectives like poverty alleviation, family planning, eradication of illiteracy, employment generation, primary health care and nutrition, for their sustained success, are contingent on people's awareness, support and participation. Mass media mobilises support for development programmes aimed at self-reliance and it makes people conscious about their duties and responsibilities to achieve these.

24.2 Review of Past Performance

24.2.1 During the First Plan period, a programme was undertaken for the creation of necessary facilities at Dhaka TV station and establishment of four relay stations at Chittagong, Khulna, Natore and Sylhet to bring about 80 per cent of the population under TV coverage. Dhaka TV station was shifted to Rampura and three relay stations, one each at Rangpur, Noakhali and Mymensingh were commissioned during the Two Year Plan period (1978-80). A TV relay station was established at Natore and Colour TV was introduced during the Second Plan period (1980-85). During the Third Plan period (1985-90), establishment of three low power transmitters, one each at Comilla, Rangpur and Thakurgaon and installation of 100 k.w. radio transmitters at Bogra and Chittagong were planned and completed. The history of Bangladesh War of Independence (in 16 volumes) was compiled. National Institute of Mass Communication (NIMC) was established. Performance of different agencies during the Fourth Plan (1990-95) was as follows:

- a. **Bangladesh Betar:** As of now, Bangladesh Betar has 7 broadcasting stations, 16 transmitters and 2 relay stations. Betar broadcast covers about 90 per cent of the total geographical area of Bangladesh. A total amount of Tk.856.20 million was allocated out of which Tk.569.60 million i.e. 67.32 per cent was spent in the Fourth Plan period. During the Fourth Plan period, Bangladesh Betar undertook 8 projects out of which 2 were completed and 1 abandoned. While coverage increased, qualitative improvement as a medium of information and healthy recreation left much room to be improved upon.
- b. **Bangladesh Television:** With a view to bringing the whole country under TV coverage, BTV thus far has established 15 relay stations and 2 rebroadcasting centres at various places of the country. The extended television service covers 92 per cent of the population and 85 per cent of the total geographical area. Bangladesh Television took up 5 projects for implementation during the Fourth Plan. None of these projects was fully completed. Rehabilitation of Chittagong TV relay station, damaged by the cyclone of 1991, could not be completed in time. Introduction of BTV 2nd channel and BMR of Dhaka TV stations could not be implemented as per schedule due to non-availability of required fund.
- c. **National Institute of Mass Communication (NIMC) :** NIMC was set up in the early 1980s and developed over years. NIMC organises training programme for the electronic and media personnel to acquire hands on skills to improve knowledge and capabilities. This institute has conducted 266 training courses and seminars and trained 3552 participants including 96 foreign participants during the Fourth Plan

period. It also conducted 12 research programmes on model broadcasting during the same period.

- d. Press Institute of Bangladesh (PIB):** PIB was set up in the early 1970s. It provided training to 500 journalists during the Fourth Plan. Earlier, during the Second Five Year Plan, a technical assistance project was implemented to develop the research and training base for the journalists.

24.3 Resource Allocation and Utilisation During Fourth Plan

24.3.1 During the Fourth Plan period, an allocation of Tk.1,230.00 million was made and Tk.1,360.00 million (at current prices) was spent.

24.4 Two Years between Fourth and Fifth Plans (1995-97)

24.4.1 During 1995-97, a total of 29 projects were undertaken including 13 spill over projects from the Fourth Plan. An amount of Tk.646.80 million (at current prices) was allocated for the period out of which Tk.506.00 million was actually spent upto June'97. By June, 1997, five projects were completed and the remaining 24 projects spilled over to the Fifth Plan with a financial implication of Tk.3,003.10 million. TV relay stations in Brahmanbaria, Thakurgaon and Jhenaidah were completed in this period. TV relay station at Patuakhali came to completion at the beginning of the Fifth Plan.

24.5 Issues and Constraints to Plan Implementation

24.5.1 The most important barriers to implementing development projects of mass media have been: (a) lack of timely acquisition of land; (b) delay in completion of construction work by the Public Works Department (PWD); (c) lack of co-ordination among various ministries; (d) uncertainty in inflow of foreign assistance; and (e) lack of commitment of the past governments in favour of the free media. Moreover, due to non-availability of foreign aid in time, a good number of projects could not be implemented within the stipulated time.

24.6 Fifth Five Year Plan

24.6.1 Objectives: The objectives of the mass media sector in the Fifth Five Year Plan (1997-2002) are to:

- a. increase the coverage of Betar and television throughout the country;
- b. provide signals to the people of the remote off-shore areas about natural disasters;
- c. cater to the recreational needs of the people, help growth of regional culture and exchange of experiences;
- d. improve, up-grade and modernise the existing training facilities for media personnel;
- e. improve the press as the fourth estate – the conscience keeper of the people – to play a positive role in national development;
- f. provide upto-date facilities to the film industry;
- g. provide printing and publication wings of the government with modern and cost effective equipment;
- h. equip media agencies with proper logistic support to ensure quick flow of information;
- i. educate and motivate people through effective use of media about primary health care, immunisation, nutrition and environment protection;
- j. make media communication network available to all the people by 2000 AD to keep pace with the rapidly changing world;
- k. attain functional autonomy in Bangladesh Betar and Bangladesh Television;

- l. encourage the private sector for more package TV programmes in various fields;
- m. encourage TV channels in the private sector ;
- n. review and amend the Press and Publication Act for ensuring freedom of press; and
- o. provide and sustain freedom of media in general in pursuance of the constitutional guarantee for freedom of speech and communication.

24.6.2 Strategies: In order to achieve the objectives of the Fifth Plan, the following strategies will be adopted:

- a. Betar and TV will be made easily accessible to the people by establishing more powerful Betar and TV relay/broadcasting stations and renovating existing facilities;
- b. TV channels will be opened in the private sector;
- c. facilities will be developed in BTV to provide services to the Open University;
- d. more emphasis will be laid on rural life-oriented programmes;
- e. two-way communication between the listeners/viewers and the broadcasters for both Betar and TV will be improved;
- f. programmes on our national, social and cultural value-raising consciousness of the people will be encouraged;
- g. projection of Bangladesh within and outside the country will be improved through application of video cassettes and satellite;
- h. essential office and residential accommodation for the personnel who have to work in abnormal situation like flood, cyclone, strike, etc., will be provided;
- i. entire country will be covered by establishing more TV relay/regional stations;
- j. a separate establishment with equipment and facilities for electronic news gathering (ENG) will be developed;
- k. improved training with developed laboratories and modern equipment of the latest technology for development of the radio, TV and film will be procured and installed through NIMC;
- l. training institutes, in particular PIB, will be equipped with other logistic supports to impart training to the media personnel;
- m. awareness among the people about sanitation and primary health care will be created through TV, radio and the press;
- n. programmes to motivate women in national development activities will be undertaken;
- o. Press and Publication Act will be reviewed and amended for ensuring freedom of press;
- p. autonomy will be provided to Bangladesh Betar and Bangladesh Television for dispassionate dissemination of information and raising the qualities of their production;
- q. laboratory and other facilities of the Film Development Corporation (FDC) will be modernised to produce good quality films;
- r. a film institute will be established to impart training to the new performers; and
- s. a film city will be established in the private sector to provide package facilities to the local and foreign film producers.

24.6.3 Programmes

- a. **Television:** New facilities will be created to bring 95 per cent of the population of the country under TV coverage by providing more powerful TV relay broadcasting stations. Expansion of television service throughout the country through installation of

relay transmitters at Ukhia and Rangamati will be completed. Hours for telecasting will be increased. The first channel facilities will be balanced, modernised and expanded. A second channel, primarily for educational programmes, will be opened up.

- b. **Bangladesh Betar:** Appropriate facilities will be set up to bring 100 per cent population and the area of the country under Betar coverage. Bangladesh Betar will implement 20 development projects during the Fifth Plan period. The most important programmes include establishment of broadcasting stations at Comilla, Thakurgaon and Rangamati. Other important programmes include establishment of high power medium wave radio transmitter at Dhaka and establishment of self-contained radio stations at Bandorban and Mymensingh. The existing transmitting stations at Rangpur and Sylhet will be upgraded and other radio stations including Kabirpur and Rajshahi will be replaced and modernised. Programmes will be taken up to establish technical monitoring receiving centres and microwave link systems and to introduce nationwide FM broadcasting system, initially at Dhaka, Chittagong, Sylhet, Rajshahi and Khulna. In addition, a project for repair and maintenance of broadcasting equipment of Bangladesh Betar will be centrally set up. Private sector will be encouraged to set up FM broadcasting centres. Adequate attention will be given to educational programmes and programmes on rural development.
- c. **NIMC:** Adequate training and research facilities for the Betar and TV personnel and other electronic media personnel will be provided through National Institute of Mass Communication (NIMC). Modern/advanced laboratory facilities will be developed. Its facilities will be opened up for participation of the private sector.
- d. **PIB:** The existing Press Institute of Bangladesh will be further strengthened to develop it as a centre of excellence with equipment, accommodation, course development and other logistic support to impart training to the media personnel. Attempts will be made to set up effective links with similar institutions of the region.
- e. **FDC:** A programme for balancing, modernisation and expansions of FDC will be undertaken to facilitate development of quality films. A scheme will be undertaken to fund production of films of educational and cultural values. A film on the life of Bangabandhu depicting the liberation struggle will be produced to sustain and cherish the ideals of sacrifice for the national causes.
- f. **Other programmes:** Bangladesh Film Archives will be expanded and modernised for research, collection, preservation and maintenance of the classic films and allied materials. Bangladesh Shangbad Shangstha (BSS) will be computerised. Department of Mass Communication will continue to create awareness through documentary films and video projectors. Development activities at thana levels will be projected through filming of documentaries. Laboratory and other facilities of the Department of Films and Publications will be modernised to produce good quality and cost-effective documentary and video films to motivate the masses on development activities of the government. The local government bodies will be associated in a national drive to sensitise the people about their rights, duties and obligations as good citizens. Press Information Department (PID) will be modernised and strengthened through a programme by enhancing its logistics and technical capability. A new office complex will be built to accommodate Bangladesh Film Archives, Censor Board, Department of Mass Communication and the headquarters of Bangladesh Television.

24.7 Estimated Financial Outlay During Fifth Plan

24.7.1 For the Fifth Plan a sum of Tk.4,845.70 million has been estimated as investment for the mass media sector. For the spill-over projects Tk.3,003.10 million will be needed while the rest will be utilised for the new projects. Programme wise projected financial outlay is given in Table 24.1.

Table 24.1
Estimated Financial Outlay for Development of Mass Media During Fifth Plan
(at 1996/97 prices)

(in million Taka)

Sl. No.	Programme	Estimated Financial Outlay
A.	Spill-over projects	3,003.10
B.	New programmes	
	Programme for Betar	600.00
	Programme for Television	900.00
	Programme for NIMC	100.00
	Programme for PIB	50.00
	Programme for FDC	50.00
	Other programmes	142.60
	Total	4,845.70

24.7.2 Investment of the private sector in the mass media will be in TV, Betar, newspapers, journals and periodicals. The government will follow and ensure freedom of speech and conscience as guaranteed in the Constitution of the country. It is expected that the private sectors investment to these ends will amount to about a half of the projected public sector outlay in the Fifth Plan period.

CHAPTER XXV

SCIENCE AND TECHNOLOGY

25.1 Introduction

25.1.1 For attaining socio-economic prosperity of a country science and technology is a crucial area where development is essential. The need for a faster technology development is being increasingly felt in Bangladesh. Hence high emphasis will be placed on the advancement of science and technological research and innovations by adopting imported improved technology as well as through development of indigenous technology in the Fifth Plan period. Acceleration of economic development will require re-orientation of Research and Development (R&D) activities towards specific goals of national importance for achieving self-reliance within the shortest possible time.

25.2 Review of Past Plans

25.2.1 Development of science and technology is a long run process within which short term strategies are adopted for catering to the immediate needs of the economy. In order to strengthen the science and technological research, earlier plans emphasised/stressed upon the formulation of policies and strategies for this sector. But due to uncoordinated research and development work, absence of private sector's initiative for R&D and organisational weaknesses, substantial development could not be achieved in the past.

25.3 First Five Year Plan (1973-78)

25.3.1 The First Plan (1973-1978) was, in the words of the then Prime Minister Bangabandhu Sheikh Mujibur Rahman, "a plan for reconstruction and development of the economy taking into account the inescapable political, social and economic realities of Bangladesh." Recognising the weaknesses of the Bangladesh economy as a litany of undiversified poor inheritance, characterised by an underdeveloped infra-structure, stagnant agriculture, a rapidly growing population, years of colonial exploitation and missed opportunities with debilitating effects on initiative and enterprise, the Plan spoke of its "vast manpower" as "the basic resource in Bangladesh" and, therefore prescribed that "projects and programmes must be so formulated as to make its maximum use within the constraints of technology and socio-political institutions". The planners also took cognisance of the fact that progress in technological frontier like socio-political transformation, is a *sine qua non* if we are to overcome the limits placed by our material resource constraints.

25.3.2 The strategy adopted in the First Plan was to concentrate energy and efforts on those fields of research whose results could lead to produce quick returns in products and services.

25.3.3 The First Plan allocation in the science and technology sector was Tk.232.60 million which was 0.58 per cent of the total plan outlay of Tk.39,840.00 million.

25.3.4 The programmes of Bangladesh Atomic Energy Commission (BAEC) during the First Plan included nuclear science and technology; electronics and applied space research; nuclear bio-sciences; and exploration and exploitation of radioactive and heavy minerals. Feasibility study of the Rooppur Nuclear Power Project was completed during this Plan period. The programmes of Bangladesh Council of Scientific and Industrial Research (BCSIR) included: development of industrial technology (process/product) for utilisation of natural resources and raw materials; food science and technology; fuel and energy; glass and

ceramics; leather and animal by-products; natural drugs and pilot plant and process development centre. During this period BCSIR patented 103 processes/products based on the results achieved through research. A total of 26 industrial processes were ready for being leased out and 29 research processes were awaiting pilot plant experimentation, having proved successful in bench-scale research.

25.3.5 As the First Plan came to a close, it transpired that "some of the issues needed close and painstaking analysis" and the Planning Commission of the day went for a Two Year Plan.

25.4 Two Year Plan (1978-80)

25.4.1 During the Two Year Plan period, attempts were made to complete the incomplete projects of the First Plan. The 'Jutton' project of BCSIR was taken up. The BAEC made significant contribution by starting nuclear medicine centres at Sylhet and Dinajpur and considerable progress was made in respect of Beach Sand Exploitation Centre, Cox's Bazar. TRIGA MARK Research Reactor was procured during this plan period. Tk.391.60 million was allocated for STR during this period, representing 1.20 per cent of the total allocation of Tk.32,610.00 million.

25.5 Second Five Year Plan (1980-85)

25.5.1 The total allocation of the Second Plan was Tk. 1,11,000 million while allocation for STR was Tk.1,290 million which was 1.16 per cent of the total.

25.5.2 The BAEC's programme during this period included : research on nuclear technology; application of nuclear science in agriculture; health services and exploration of nuclear minerals and development of materials from beach sand at Cox's Bazar.

25.5.3 The BCSIR's programme during the period included : development of "jutton" for the diversified use of jute by blending with other fibres including synthetics; development of formulated food of high nutritive value; technology for the preservation and processing of fruits; fish meal etc.; development of technology for the utilisation of alternative sources of energy such as bio-gas, solar energy, etc; research on indigenous herbs and medicinal plants for the manufacture of common medicines and development of processes for the improvement of leather, ceramics, glasswares and refractory products. The agencies like Space Research and Remote Sensing Organisation, National Museum of Science and Technology, Environmental Pollution Control, House Building Research Institute, Bangladesh Standard Institute, Central Testing Laboratory, Bangladesh Medical Research Council and S&T Division had undertaken development works as well as R&D projects in the STR sector during the Second Plan period.

25.6 Third Five Year Plan (1985-90)

25.6.1 The allocation for the STR Sector in the Third Plan was Tk. 600 million (at 1984/85 prices) which was 0.24 per cent of the total allocation of Tk.2,50,000 million.

25.6.2 BAEC's programmes during this Plan envisaged research on nuclear technology in its research establishment named Atomic Energy Research Establishment (AERE), Savar. The Plan made an allocation of Tk.101.16 million for this project and it was completed in 1987. In addition to this, the Plan provided necessary allocations against some important projects, namely, (a) Exploration of Useful Minerals in Bangladesh, (b) Establishment of Four New Nuclear Medicine Centres (NMC) at Barisal, Khulna, Rangpur and Mymensingh, (c) Modernisation of existing NMCs at Dhaka, Chittagong and Rajshahi, (d) Replacement of

Equipment in Atomic Energy Centre, Dhaka and (e) Construction of BAEC Housing Colony at Savar.

25.6.3 BCSIR's programmes included research establishments at Rajshahi, Chittagong and Institute of Food Science at Dhaka. The Plan emphasised continuation of R&D activities in the research establishments. BCSIR undertook several research projects on energy, food, medicine, chemicals and oils, industrial wastes, etc.

25.6.4 Science and Technology Division's programmes during the Third Plan period, included spill-over projects of National Museum of Science and Technology (NMST); procurement of books and equipment for BANSDOC and National Science Library; feasibility study for oceanographic research; feasibility study for biotechnology, etc.. The Third Plan also included projects of Bangladesh Space Research and Remote Sensing Organisation (SPARRSO) and Bangladesh Standards and Testing Institution (BSTI).

25.7 Fourth Five Year Plan (1990-95)

25.7.1 The major thrust of the Fourth Plan was to increase productivity, income and employment and alleviate poverty. One of the basic strategies of the Plan was to increase productive and operational efficiency in all sectors.

25.7.2 The objectives of science and technology sector as set forth in the Fourth Plan were to develop scientific and technological research, planning and institutions for different sectors. To attain these objectives due emphasis was laid on proper science and technology planning, and institutional and human resources development. Science and technology development was conceived in a long term perspective with expected short-run spin-offs to meet the immediate needs of the economy. The objective was to meet practical technological requirement. It was mentioned that along with development of relatively capital-intensive technologies, specially required for the capital goods sector and large industrial enterprises, improvement of appropriate traditional and indigenous technologies for small enterprises in both rural and urban areas would need special consideration. It was viewed that over time the technological transformation should bring, in its wake, desirable changes in the economic structure.

25.7.3 The problem which was identified during the Fourth Plan as the major constraint in this sector was that the research organisations had no linkages with the industry. As a result, most of the research findings or the developed technologies could not see the light of the day beyond the premises of the research organizations. Another problem which was identified was the absence of any satisfactory linkage between the industries and the universities. Local industries remained satisfied with the know-how of imported technology and had not taken any serious initiative to gear up R&D activity in their organisations.

25.7.4 The total public sector allocation during the Fourth Plan was Tk.3,47,000 million. Out of which only Tk.540 million was allocated for science and technology representing only 0.16 percent of the total.

25.7.5 BAEC engaged in R&D activities in science and technology in health and medicine, non-destructive testing (NDT) and quality control, materials analysis, development of electronics, radiation protection services including control of imported food stuff, environment pollution studies and monitoring geological prospecting for nuclear minerals, application of radioisotopes in hydrology including studies on deposition and movement of silt in Chittagong harbour, preservation of foodstuff, extension of shelf-life of fish and

vegetables, disinfection and sterilisation of medical products, separation of useful heavy minerals from the beach sand and fresh feasibility study of the Rooppur Nuclear Power Plant.

25.7.6 BAEC also formed a joint venture with a commercial irradiation facility for preservation of food stuff and fish and sterilisation of medical and pharmaceutical products. BAEC developed analytical equipment like digital PH meter and other electronic systems but these were yet to be commercialised. NDT developed by BAEC was put in service in different industrial units in Bangladesh. In the field of nuclear technology and radiation protection services, the development of radiation shielding materials such as polyboron for neutron and high density concrete using local illuminant and magnetite for gamma radiation made significant contributions. Atomic Energy Centre, Savar produced radioisotopes which were used in NMCs, chemical purposes and related nuclear experiments.

25.7.7 During this period, BCSIR undertook 10 projects for implementation out of which 6 projects were completed by June, 1995. During this period, 84 industrial processes were developed by BCSIR, 23 processes were patented and 37 processes were leased out. Production of spirulina under local climatic conditions, innovation of improved "chula", bio-gas plants, etc., were some of the major achievements of this period.

25.7.8 Bangladesh National Scientific and Technical Documentation Centre (BANSDOC) undertook two projects for implementation during this period. These were: (a) Development and Modernisation of BANSDOC and (b) Automation and Networking of Science and Technology Libraries in Bangladesh. The second project will be spilled over to the next plan. An amount of Tk.1462.00 million was allocated. National Museum of Science and Technology implemented two development schemes during this Plan period. These were (a) Development of Project Innovated by the Young Scientists and (b) National Museum of Science and Technology (second phase).

25.7.9 Bangladesh Computer Council (BCC) implemented three projects during this period. An amount of Tk.59.08 million was allocated against these projects. The projects were : (a) Study on Strategy Formulation for Software Industry of Bangladesh (b) Strengthening of Bangladesh Computer Council and (c) Assistance to Secondary Schools for Introducing Computer Science Course. The activities of BCC included : organising workshops on software industry, advising government and autonomous organisations in their computerisation plans, developing human resources in the areas of computer and information technology and creating infrastructural facilities for IT application in various fields.

25.7.10 The project "Establishment and Strengthening of Bangladesh Standards and Testing Institute" with a cost of Tk. 45.70 million was already completed. Two projects for establishment of branch offices of BSTI at Khulna and Chittagong were undertaken. These two projects will be continued in the Fifth Plan period.

25.7.11 SPARRSO continued its research programme on remote sensing technology and natural hazards and its main contribution was in the field of weather forecasting.

25.7.12 Ministry of Science and Technology undertook five investment projects and two T.A projects during this Plan period. Works on the investment projects will continue in the Fifth Plan. Ministry of Science and Technology is also responsible for providing support and services to the apex national body for Science and Technology, namely, National Council for Science and Technology (NCST) and its executive body ECNCST. The NCST is headed by the Prime Minister and ECNCST is headed by the Minister-in-charge of Science and

Technology Ministry. These bodies consider policy formulation in respect of science and technology at the highest level. Further, co-ordination of R&D activities among different institutions is achieved through these bodies.

25.8 Two Years Between Fourth and Fifth Plans

25.8.1 During 1995/96 an amount of Tk.275.00 million was allocated for this sector of which Tk.159.50 million was spent. A number of 33 projects including 25 spill over projects from the Fourth Plan were taken up of which 4 projects were completed. During 1996/97, a number of 34 projects (29 on-going and 5 new) were included in the ADP. An amount of Tk.380.20 million was allocated during the period. Only 4 projects were completed and the remaining 30 projects will continue in the Fifth Plan period.

25.9 Fifth Five Year Plan (1997-2002)

25.9.1 One of the main goals of the Fifth Plan is to achieve self-reliance within the shortest possible time. Self-reliance cannot be achieved without proper contribution of science and technology. But due priority on the advancement of science and technology could not be given due to various reasons and as a result required technological advancement did not take place. In Bangladesh the level of science and technology is low and its spread is narrow. The reasons are traceable, amongst others, to:

- a. absence of adequate support for removing institutional weakness of the R&D institutions;
- b. low allocation due to lack of project preparation/ designing appropriate projects;
- c. low literacy coupled with narrow spread of education in science and technology ;
- d. inadequate training facilities for scientists and technologists at post-diploma and post-graduate levels;
- e. non-development of centres of excellence in scientific and technological research;
- f. inadequate planning for innovation, development and expansion of products and processes;
- g. absence of R&D efforts in the private sector;
- h. lack of direction in avoiding duplication of R&D activities of different organisations;
- i. absence of mechanism for co-ordination of R&D activities of different organisations;
- j. lack of direction for commercialisation of research results and processes/products/technologies;
- k. inadequate and in some cases, complete absence of legal provisions affecting R&D, particularly in the science and technology sector;
- l. inadequate provision for accountability and transparency, in matters, both administrative and financial, covering R&D sector;
- m. non-integration of policies for science and development with policies in other fields;
- n. lack of direction for fixing up priorities of R&D activities; and
- o. lack of attractive/enabling environment for the scientists/technologists.

25.10 Objectives of Fifth Plan (1997-2002)

25.10.1 The major objectives of the Fifth Plan in the field of science and technology are as follows:

- a. Development of technologies specially required for the capital goods sector and large industrial enterprises, and improvement of appropriate traditional and indigenous technologies for small enterprises in both rural and urban areas will be undertaken.

- b. Research organisations involved in the field of science and technology will be upgraded. Through the use of indigenous technology and innovations, attempts will be made to make Bangladesh a modern state. Attention will be given to bring the fruits of scientific and technological innovation to the door step of common people.
- c. Co-ordination of efforts will be strengthened for scientific and technological development among the different ministries/agencies of the government .
- d. Strengthening of the institutional and human development activities in the country through the development of improved science and technological knowledge will be undertaken.
- e. Strengthening R&D programmes of existing organisations of the Ministry of Science and Technology through dissemination of modern scientific and technological know-how will be aimed at.
- f. Strengthening of science-based educational institutions and establishment of 12 science- based new universities will be undertaken.
- g. Associating private enterprises in scientific and technological development will be encouraged.
- h. Building up Centres of Excellence in required fields of science and technology will be aimed at.

25.11 Strategies for Fifth Plan

25.11.1 In view of the past experiences and the problems/reasons identified for the low level of science and technology development in the country, attempts will be made in the Fifth Plan to evolve some mechanism and adopt new strategies for overcoming those problems and limitations. In order to establish linkages between research organisations and industries and also to strengthen inter-agency co-ordination, development of appropriate mechanism will be ensured during the Fifth Plan period. Bangladesh may follow the experiences of the newly industrialised countries (NICs) in this context. Thus the following will be the elements for development of science and technology:

- a. canalising, over years, 2 per cent of GNP to the development of science and technology including increase in public sector allocation at an average annual rate of 25 per cent; given the present low level, in the first 3 years the increase will be at an annual rate of 40 per cent;
- b. expanding education in science and technology to cover at least 60 per cent of enrolment at secondary and higher secondary and 40 per cent at graduate levels in the Plan period;
- c. training of scientists and technologists in selected fields at post-diploma and post graduate levels in centres of excellence at home and abroad on a massive scale; on average 500 scientists and technologists will be trained at these levels and centres every year;
- d. drawing up of time-bound programmes for development, improvement and expansion of products and processes in the thrust sectors of industrial development; research and development in various laboratories and centres of excellence will be pressed forward to this end;
- e. encouraging private sector R&D activities and in-plant training of the unskilled into skilled manpower through fiscal incentives; expenditures on R&D and inplant training will be made tax exempt to this end;
- f. integrating policies for development of science and technology with macro-economic, industrial, agricultural, commercial and educational policies;

- g. effectively linking the entrepreneurs within the country with the supply of technology originating both at home and abroad through a national network;
- h. exposing the country as a whole to the process of change and progress at the frontiers of production, development, knowledge, market and changes through the information technology;
- i. remodelling the legal frame for protection of intellectual properties, providing incentives for local entrepreneurs and development and transfer and absorption of technology;
- j. linking the remuneration package for the scientists and technologists to their individual productivity and potentiality;
- k. encouraging and enabling expatriate Bangladeshi experts to generally forge linkups with scientific and technological development of the country inclusive of wooing back home recognised experts in selected fields;
- l. providing institutional support and financing for commercialising technology; setting up a venture capital fund to this end will be a step in the desired direction;
- m. entering the nuclear age through setting up of a nuclear power plant at Rooppur for productive and peaceful use of nuclear technology;
- n. strengthening organisational support to NCST and ECNCST for increased and meaningful cooperation among all sectors of science and technology;
- o. modernising science syllabi at all levels of education as per present and future national needs;
- p. providing strong support for theoretical R&D in basic sciences like physics, chemistry, mathematics, medical science, etc.; appropriate balance is to be evolved between theoretical and applied research;
- q. establishment of 'Technopolis' or science cities in response to the global revolution in information technology (IT) and biotechnology. Such establishments will have 3 main elements: telecommunication backbone, preferably of high capacity fibre-optic for the multimedia super-corridor; soft infrastructure assisting electronic trade and commerce; and protection of intellectual property rights and a common platform for scientists and technologists from different institutions at home and abroad for collaborative work on specific problems. Global Information Infrastructure (GII) for education, health care, work and business and leisure for disparate population, once separated by distance and time, initiated by 'Internet' should be taken as a king-pin of our strategy for the next century;
- r. establishing unique educational/recreational facilities such as tilted dome "Novotheatre"/Planetarium for making people science and technology conscious;
- s. compiling of all laws, rules, statutes relating to science and technology, identification of their necessary modifications for help in adaptation to the requirements of the day and also for harmonisation with the international conventions, particularly relating to intellectual properties, patent of products and processes as an incentive to the scientists and technologists and the local entrepreneurs;
- t. assessing the need for focusing research on perceived national problems; research in fields of biotechnology and genetic engineering; its application in agriculture, aquaculture, animal husbandry, food processing and computer software development with infrastructural facilities in the public/private sectors, promotion of technologies for enhanced use of renewable energy (e.g. bio-mass, wind, solar) and new materials.

25.12 Role of Local Bodies in Development of Science and Technology

25.12.1 For the balanced development of science and technology, steps will be taken to involve the rural people, particularly the local bodies like the Thana Parishad/Union Parishad/Gram Parishad. In the past Thana parishad/Union Parishad and other local agencies of the government located at the thana and union levels extended proper co-operation and co-ordination in implementing and disseminating technical know-how relating to the establishment of improved oven and bio-gas plants. Similarly in future, local bodies will also be involved in promoting and disseminating technical knowledge for setting up of projects relating to solar energy, biofertilizer and the like.

25.13 Programmes During Fifth Plan

25.13.1 In accordance with the strategy adopted, the Ministry of Science and Technology and other line ministries have identified the work components of the Fifth Plan for its various implementing agencies. The indicative work-plan in terms of physical components has been prepared considering the situational context and the specific objectives of the Ministry of Science and Technology, Bangladesh Atomic Energy Commission, BCSIR, Bangladesh Computer Council, National Museum of Science and Technology, BANSDOC and SPARRSO.

25.13.2 During the Plan period the thrust areas of the Ministry of Science and Technology, in accordance with the strategy for development of science and technology will include :

- a. establishment of Bangabandhu Sheikh Mujibur Rahman Novotheatre;
- b. offering overseas fellowship/scholarship programmes for young scientists and technologists at the rate of 300 per year for training at M.Sc/Ph.D. level under which the most promising scientists and technologists of the country will be given opportunities to develop their potentials at the frontiers of knowledge in their respective fields;
- c. establishment of a biotechnology institute;
- d. setting up of a national institute of oceanography;
- e. creation of a technology dissemination centre;
- f. setting up a Technology Cell within the Ministry to serve as a clearing outfit for acquisition, dissemination and adaption of technology;
- g. establishment of an Information Technology Village to provide High Speed Data communication link, different software development platforms and other infrastructure to the export oriented software industries with a view to capturing the annual US\$ 270 billion (appx.) market of software;
- h. establishment of "Bangladesh National Information Network (BaNINet)" to bring all government offices under this network;
- i. establishment of "Bangladesh Institute of Information Technology" to develop expertise in information technology offering MS/Ph.D. programmes for government officials, fresh graduates and other IT professionals;
- j. construction of a science and technology building;
- k. setting up of an international centre for science, technology and environment;
- l. establishment of a Mining Institute at a suitable place;
- m. assistance for enhancement of seismic facilities at Chittagong and Rangpur;
- n. establishment of technopolis in areas of industrial concentration and communication hub;
- o. updating laws and statutes relating to science and technology as per global requirements; and

- p. strengthening organisational support for the NCST and Executive Committee for National Council for Science and Technology (ECNCST).

25.13.3 The main thrust of BCSIR during the Fifth Plan period will centre around:

- a. training of manpower;
- b. modernisation of laboratories and institutes;
- c. promoting research on tissue culture and biotechnology, glass and ceramics;
- d. R&D activities on renewable energy;
- e. development of technology for preservation of fruits, vegetables and spices for local market as well as for export; and
- f. pilot plant study on liquid fuels.

25.13.4 The Bangladesh Atomic Energy Commission (BAEC) is engaged in research and development activities in various fields for peaceful application of atomic energy. It has already been possible to successfully utilise results of selected R&D programmes in different sectors of national economy. The main areas of activities will include (a) medical diagnostic and therapeutic services using nuclear and other state-of-the art techniques; (b) non-destructive techniques as a part of quality control; (c) elemental and analytical techniques; (d) food preservation and sterilisation and tissue banking using radiation techniques; (e) environmental monitoring; (f) radiation processing; (g) acquisition of capability in electronic instrumentation and maintenance; and (h) acquisition of nuclear minerals. Laboratories are being upgraded and new facilities are planned in order to improve performance and to provide benefits and services to a wider cross-section of the population. BAEC is also playing the important role of ensuring radiation control and nuclear safety through enforcement of the Nuclear Safety and Radiation Control Act, 1993. Considering the paucity of indigenous primary energy resources, especially in the west zone of the country, environmental dimension of fossil fuels, energy security and the need for maintaining a long-term energy-mix the government has decided to expedite implementation of the Rooppur nuclear power project.

25.13.5 Bangladesh Computer Council will concentrate on training of manpower needed for Bangladesh's entry and participation in the information super highway. In the process, concerted efforts will be made to develop and expand exportable software, introduce computer aided designing (CAD) in garments and related industries and computer aided manufacturing (CAM) in light engineering sector within the country. To this end specific projects will be formulated in due course. In order to increase information technology (IT) related research and development facilities "IT Research and Development Centre" will be established. Besides regular R&D activities, this centre will initiate incorporation of Bangla into different softwares. Another centre entitled "National IT Resource Centre" will be established to provide books, CD-ROMs, computers in different platforms, journals and other IT related resources to teachers/students and researchers.

25.13.6 During this Plan period BANSDOC will concentrate on 3 projects at an estimated cost of Tk. 84.15 million, including one on "Automation and Networking of Science and Technology Libraries in Bangladesh".

25.13.7 The infrastructural facilities of National Museum of science and technology will be expanded during this period. To this end second phase construction work of the museum will be undertaken. Special attention will be given to publish magazines and journals on science and technology. The proposed Bangabandhu Novotheatre/Space theatre under the direct

supervision of the Ministry will provide an unique opportunity for science education through recreation.

25.13.8 Institutional and physical infrastructure for SPARRSO was developed during the Second and Third Plans. Equipment procured for SPARRSO during the past plan periods have become obsolete and as such replacement of those equipment is very essential now. For replacement of old and procurement of new equipment a project "Environment, Disaster and Resource Monitoring System" (EDREMOS) has been included in the Fifth Plan. Under this project a satellite ground station will be set up which will help to receive directly in time remote sensing data from Marine Observation Satellite (MOS), Japanese Earth Resource Satellite (JERS) and Advanced Earth Observation Satellite (ADEOS). Programme for development of required human resources through training will also be undertaken through this project.

25.13.9 During the Fifth Plan period BSTI will be strengthened and its regional offices at Chittagong, Khulna and Rajshahi will be set up for ensuring the quality testing of all products and accuracy in measurement. Project for setting up regional offices at Chittagong and Khulna has already been approved.

25.14 Estimated Financial Outlay

25.14.1 The total estimated public sector allocation for science and technology sector in the Fifth Plan stands at Tk.5,051.10 million. Agencywise outlay for the sector is given below:

Table 25.1
Estimated Financial Outlay for Science and Technology Sector During Fifth Plan
(at 1996/97 prices)

Agency	Estimated Outlay
a. Bangladesh Atomic Energy Commission	1,640.00
b. Bangladesh Council for Scientific and Industrial Research	1,030.00
c. Bangladesh Computer Council	200.00
d. National Museum of Science & Technology	1,100.00
e. Bangladesh National Scientific & Technical Documentation Centre	90.90
f. Ministry of Science & Technology	560.00
g. Bangladesh Space Research and Remote Sensing Organisation	330.20
h. Bangladesh Standards & Testing Institute	100.00
Total	5,051.10

25.14.2 The private entrepreneurs are expected to invest Tk.3,000.00 million in scientific and technological research in the Plan period. Such investment will be encouraged by giving tax incentives. In addition, provision of institutional venture capital will be made to commercialise research and innovated products and process. Laws relating to intellectual properties will be reformed to encourage investment in R&D and to transfer technologies into the country from outside by the private entrepreneurs.

CHAPTER XXVI

LABOUR AND MANPOWER

26.1 Introduction

26.1.1 Bangladesh is densely populated with limited resources. Nevertheless, its vast manpower constitutes a potential resource for development; so human resource development is one of the main objectives of the Fifth Plan alongside generating productive employment opportunities. This is necessary not only to accelerate the process of poverty alleviation but also to survive in a competitive market economy. To meet these challenges in the Fifth Plan period the labour and manpower sector will concentrate on three-fold objectives: generation of productive employment; human resource development (HRD); and poverty alleviation.

26.2 Review of Past Development

26.2.1 The formulation of planning for development of manpower and improving welfare of the labour was laid in the First Plan. Besides completing rehabilitation and reconstruction work following the War of Liberation, 7 new technical training centres and 12 vocational training institutes were set-up during the First Plan and the Two Year Plan. No marked progress was made in the Second and Third Plan.

26.2.2 During the Fourth Plan, government took some steps to raise domestic employment opportunities and sought employment opportunities in other countries to absorb surplus manpower. As a result, Bangladesh earned a major portion of its foreign exchange from remittances by Bangladeshis working abroad. Vocational training institutes in the country produced skilled manpower, not only for use and employment within but also for export.

26.2.3 A sum of Tk. 850.00 million was earmarked for the labour and manpower sector during the Fourth Plan for the implementation of twenty-four projects under various organisations/ agencies. Out of Tk. 850.00 million, a total of Tk. 180.00 million was spent. A total of ten projects were completed out of twenty-four projects during the Plan period.

26.2.4 Skill development programmes were carried out through 11 Technical Training Centres and Bangladesh Institute of Marine Technology. Non-institutional programmes in the forms of apprenticeship, in-plant and up-gradation training for the workers and supervisory personnel of the industry were introduced. The Technical Training Centres also offered special self-employment oriented training courses for other agencies such as the Ministry of Youth and Sports, Water Development Board, Technical Education Directorate, some leading hotels, private industries and non-government organisations. The training performance of the Technical Training Centres and Bangladesh Institute of Marine Technology under the Bureau of Manpower Employment and Training (BMET) is shown in Table 26.1.

26.2.5 The Employment Services Wing of BMET engaged in implementing a programme of self-employment and micro enterprise development side by side carried out its usual functions such as collection and analysis of labour market information, registration, referral and vocational guidance for enhancing self-employment. The output of BMET in the area of self-employment programmes and foreign employment is shown in Table 26.2.

Table 26.1
Training Performance of BMET During Fourth Plan

(in numbers)

Year	Institutional Training	Apprenticeship Training	Language Training for Nurses
1990/91	1,128	429	-
1991/92	2,862	275	-
1992/93	2,518	309	-
1993/94	3,605	354	238
1994/95	4,283	364	241
Total	14,396	1,731	479

Source : Ministry of Labour and Manpower.

Table 26.2
Employment Programmes of BMET During Fourth Plan

(in numbers)

Year	Self-Employment	Foreign Employment
1990/91	2,300	96,691
1991/92	2,200	1,85,257
1992/93	2,450	2,37,779
1993/94	1,500	1,92,184
1994/95	1,000	1,99,925
Total	9,450	9,11,836

Source : Ministry of Labour and Manpower

26.2.6 Placement of migrant workers was almost entirely carried out by the private recruiting agents. A small portion was handled by the Bangladesh Overseas Employment Services Ltd. (BOESL) and Bureau of Manpower Employment and Training. The Bureau of Manpower Employment and Training took up significant measures to promote overseas employment. Overseas employment initially increased and then declined somewhat in the post-Gulf War period. Remittances increased during Fourth Plan as shown in Table 26.3.

26.2.7 A stipend programme was undertaken to encourage and assist the trainees in skill development. During the Fourth Plan a total of 13,989 stipends were given .

26.2.8 Some programmes were undertaken to promote sound labour/industrial relations, maintenance of industrial peace and labour welfare to attract foreign and domestic investment. The activities of the Department of Labour in this respect are depicted in Table 26.4.

Table 26.3
Trend in Overseas Employment and Remittances (1990-95)

Year	Overseas Employment (Nos.)	Remittances (in million Taka)
1990/91	96,691	27,256.10
1991/92	1,85,257	32,415.00
1992/93	2,37,779	36,984.30
1993/94	1,92,184	43,549.00
1994/95	1,99,925	48,144.00
Total	9,11,836	1,88,348.40

Source : Ministry of Labour and Manpower.

Table 26.4
Activities of Department of Labour (1990-95)

Year	No. of Disputes	No. of Disputes Disposed	No. of Trade Unions Registered	No. of Members of Unions	No. of Courses Conducted through Industrial Relations Institute	No. of Participants
1990/91	576	570	244	-	-	3,345
1991/92	1,632	1,627	282	46,294	58	965
1992/93	729	720	289	44,483	50	1,578
1993/94	332	324	268	32,547	55	1,814
1994/95	790	780	315	-	-	3,210
Total	4,059	4,021	1,398	1,23,324	163	10,912

Source: Ministry of Labour and Manpower.

26.3 Two Years Between Fourth and Fifth Plans

26.3.1 During 1995/96, an amount of Tk.74.6 million was allocated for implementation of sixteen projects out of which Tk.50.31 million was spent and two projects were completed. In the Annual Development Programme 1996/97, a total of Tk.90.00 million was allocated for implementation of fifteen projects. Ten ongoing projects are expected to spill over to Fifth Plan.

26.4 Objectives of Fifth Plan

26.4.1 Within the broad framework of overall national development perspective of poverty alleviation and human resource development (HRD), and keeping in view the changing requirements, the major objectives of this sector during the Fifth Plan will be to:

- a. generate employment opportunities within and outside the country;
- b. raise productivity of labour through skill development and upgradation of technology under the overall human resource development strategy of the government;
- c. ensure fair wages, welfare and social protection of workers under the structural adjustment programmes adopted by the government;

- d. accord higher priority on self-employment and set up a specialised employment bank to this end;
- e. ensure access of women in vocational training and employment;
- f. maintain industrial peace and a congenial atmosphere for domestic investment and also for attracting foreign investment;
- g. develop informal sector as a residual source of employment for the growing unemployed work-force;
- h. encourage private institutions/organisations to participate in imparting training for human development;
- i. strengthen institutional capabilities by introducing indigenous and modern technologies;
- j. initiate steps to protect children from economic exploitation;
- k. make legal reforms more effective for regulating private manpower recruiting agencies; and
- l. strengthen the wage earners welfare fund at important overseas destinations of Bangladeshi workers.

26.5 Strategies for Fifth Plan

26.5.1 To achieve the above mentioned objectives, the following strategies will be pursued during the Fifth Plan period:

- a. existing labour related laws, rules, regulations and directives will be reviewed and necessary modifications will be done in pursuing the sectoral activities;
- b. special stress will be laid on elimination of child labour gradually and to protect children from economic exploitation and hazardous work;
- c. emphasis will be given on determination of wages by bargaining between management and workers instead of through implementing award of the wage commission;
- d. attempt will be made to utilise the non-government organisations as active development partners in generation of self-employment and welfare activities with thrust on women in development;
- e. in order to ensure participation of different segments of population in skill development training and self-employment activities, local government institutions at district, upazila and union level will be involved very effectively;
- f. immigration will be encouraged, and in consultation with the Ministries of Foreign Affairs and Home, efforts will be made to simplify the present immigration procedures;
- g. existing licensing system of manpower recruiting agencies will be evaluated and reviewed in the light of experiences of the neighbouring labour exporting countries to open up manpower export trade for better competition and for eliminating the multi-tier middlemen operators;
- h. steps will be taken to introduce exemplary punishment system for fraudulent activities and for extortionist practices in manpower export trade;
- i. the internal system of cautioning the Bangladeshi foreign job seekers about the unfriendly and adverse conditions in some countries will be strengthened and intensified;
- j. steps will be taken through the Ministry of Foreign Affairs to set up and operate worker's information and welfare centres/services in embassies at major overseas destinations of Bangladeshi workers;

- k. a study will be undertaken to ascertain the applicability and potential to collect wage earners remittances by the private sector at competitive exchange rates and float attractive bonds for investment of remittances in different fields of economic development such as agriculture, small scale industries and infrastructure building activities, etc.; and
- l. an employment bank will be set up for funding self-employment.

26.6 Programmes During Fifth Plan

26.6.1 The labour policy of the government is primarily based on the objective of creating an environment conducive to improved labour-management relation in order to ensure higher wages through higher productivity. Therefore programmes for this sector have to be designed with a view to emphasising the importance of tripartism, productivity and incentives, labour welfare, employment and training. Programmes to be taken up during the Fifth Plan in the Labour and Manpower sector will include the following:

- a. employment promotion;
 - i. local employment/self-employment; and
 - ii. overseas employment;
- b. skill development;
- c. welfare and social protection of workers;
- d. maintenance of industrial peace and promotion of sound labour-management relation;
- e. strengthening of institutional capability of the Ministry and the attached departments for policy formulation, project implementation, monitoring, evaluation and other research activities;
- f. programmes for wage earners;
- g. wage earner's welfare fund; and
- h. involving non-government organisations in income generating activities.

26.6.2 Employment promotion

a. Local employment/self-employment: In developing countries salaried/wage employment in the formal sectors can not be big enough to take care of the huge number of unemployed. So the spirit of self-employment must be inculcated. Employment promotion, mainly self-employment, will continue to be one of the important functions of the Bureau of Manpower Employment and Training. During the Fifth Plan, additional employment of 6.35 million (persons) will be created. Of this, it is expected that a total of 1,60,000 persons will be self-employed. Emphasis will be given to train and give credit support to women micro entrepreneurs. Presently a study is underway in the Planning Commission for formulation of a national action plan for non-formal employment generation with the assistance from UNDP.

b. Overseas employment

- i. Our country is a labour-surplus country. So it can tap the potential of foreign exchange earning through manpower export. Attempt will be made to explore the possibility for finding new job opportunities in oil rich Middle Eastern countries, South African countries, USA, Canada, Japan, Korea, South Asian countries, Latin America, Brunei, etc. During the Plan period, it is expected that about 12,85,000 persons will get foreign employment.
- ii. The Ministry of Shipping deals with the mercantile navigation and employment in seaports, but the Ministry of Labour & Manpower deals with employment in

dockyards, manufacturing, etc. Present output of manpower in marine technology is about 500 annually and they are being fully employed in different dockyards. At present a good number of workers trained in Bangladesh Institute of Marine Technology are working in different dockyards of Singapore. In co-operation with the Ministry of Shipping, it will be possible to engage 15,000 workers annually.

- iii. Under the umbrella of the United Nations, the peace keeping contingents from the Bangladesh Armed Forces are sent to different troubled areas of the world. In Bangladesh a peace keeping centre at the behest of UN is going to be established soon. It is expected that substantial foreign exchange through activities of the peace keeping force during the Plan period will be earned.

Prospect of future employment is shown in Tables 26.5 and 26.6.

Table 26.5
Employment Projection During 1997-2002

(in thousand numbers)

Year	Wage Employment	Self-Employment within the Country	Foreign Employment
1997/98	1,170	30	265
1998/99	1,194	35	270
1999/2000	1,228	30	275
2000/2001	1,259	30	250
2001/2002	1,334	35	225
Total	6,185	160	1,285

Source : Ministry of Labour and Manpower.

Table 26.6
Manpower Export Projections During Fifth Plan

Year	Overseas Employment* (in thousand numbers)	Remittances to be Earned Through Wage Earner's Scheme (in million Taka)
1997/98	265	67,252.50
1998/99	270	70,668.50
1999/2000	275	74,084.50
2000/2001	250	77,927.50
2001/2002	225	81,770.50
Total	1,285	3,71,703.50

*Note : Ministry of Labour and Manpower.

26.6.3 Employment of women: Increased participation of women in labour force, specially in manufacturing, is a recent phenomenon in Bangladesh. Recruitment of women in manufacturing sector started in early eighties with the emergence of ready-made garments as the fastest growing export industry. At present, more than a million women constitute about 80 per cent of garment workers. This has important socio-economic implications in terms of positive impact on age of marriage, rate of literacy and child birth. Female labour also dominate export-oriented industries like frozen food, footwear, electronics, computer software and handicrafts. In EPZs women worker's participation has been increasing from year to year. During Fifth Plan, greater female participation in labour force will be further encouraged by providing requisite training and necessary incentives to women workers. In collaboration with the private sector and NGOs, facilities like day-care centre and creche for

working mothers will be provided. These measures, together with greater emphasis on female education, are expected to contribute significantly towards closing the gap between male and female participation in civilian labour force by the end of Fifth Plan.

26.6.4 Employment of children : Bangladesh has signed an agreement with ILO, thereby, becoming a member of the International Programme for Elimination of Child (IPEC) labour. In the formal sector, as of now, employment of children is prohibited. In the informal sector total elimination of child labour could not be achieved yet. Recently the government has signed a Memorandum of Understanding (MOU) with the Bangladesh Garment Manufacturers and Exporters Association (BGMEA) and the related UN agencies with an aim to remove under-aged children from the garment factories and to arrange for their placement in appropriate education programme. Following the signing the RMG sector has turned out to be free of child labour. Attempts will be made to eliminate child labour from shops and establishments in the urban and peri-urban areas. In the rural areas exposure to education and other facilities will gradually eliminate child employment. Following income generations of the poor families as envisaged in the Plan children will be sent to schools instead of employing them informally in households. In this context and to this end concerned families will be encouraged to take a long term view and to pursue education for children for garnering larger income later instead of employing them now for earning marginal income.

26.6.5 Skill development

a. Apprenticeship and in-plant training programme

- i. No country can meet its need for craftsmen from the formal institutions of educational training alone, nor do the industries and other public utility installations require training of the level of TTC graduates for all the craftsmen positions. Apprenticeship is therefore recognised throughout the world as a supplementary and economic means of producing craftsmen. This also gives the unskilled/semi-skilled worker an opportunity to rise to the successive and higher ranks of supervisor and foreman . In view of the domestic needs arising from the expansion of manufacturing and other modern sectors and also to meet overseas demand for skilled hands, it is necessary to introduce large scale apprenticeship training programme.
- ii. The in-plant and apprenticeship training programmes in the Fifth Plan period will be undertaken for the following purposes:
 - to increase the output of skilled workers;
 - to upgrade skills of semi skilled workers;
 - to increase production and improve quality;
 - to build quality training infrastructure;
 - to increase the number of trainers for technical trades; and
 - to introduce regular apprenticeship training programme by adopting a suitable Apprenticeship Act to create proper linkage with institutional training programmes.

b. Advanced training institutes : Many of the skill training programmes are suffering from shortage of trained instructors resulting in unsatisfactory standard of training. Although Instructor Training Programme can be carried out in any existing training centre, the standard of training naturally may not be up to the mark. Moreover, training of foremen and industrial instructors is required to be organised so that

industrial productivity and training programme can be improved. It is, therefore, essential that a few advanced training institutes will be established not only for training of instructors and apprenticeship trainees but also to be utilised for preparing training aids for the different training programmes.

- c. Formal and non-formal rural training programmes :** In order to generate employment of rural people, it will be necessary to provide training in both cottage industries and other traditional and non-traditional sectors including skill development for service industries and also other non-farm activities in the rural areas. This training will be provided through formal and non-formal training programmes by creating necessary infrastructure and also by utilising the facilities already created. Future projection for training is shown in Table 26.7.

Table 26.7
Projected Training Facilities During Fifth Plan

(in numbers)

Year	Institutional Training	Apprenticeship Training	Language Training to Nurses
1997/98	7,000	500	305
1998/99	10,000	1,000	350
1999/2000	15,000	1,500	399
2000/2001	18,000	2,000	441
2001/2002	20,000	3,000	450
Total	70,000	8,000	1,945

Source : Ministry of Labour and Manpower .

26.6.6 Welfare and social protection of workers : The Chief Inspector of Factories and Establishment is responsible for enforcement of various labour laws/rules concerning working hours, working condition, safety and maternity benefits in different mills, shops and factories, etc. This office needs to be strengthened in terms of both manpower and other resources to enable it to play its role more effectively. Capacity for data collection, analysis and report writing should be modernised and upgraded. Registration system needs to be computerised to expedite disposal of cases. The number of inspections estimated to be carried out by the Chief Inspector of Factories and Establishment during 1997-2002 is shown in Table 26.8. While increasing the frequency of inspection to the desired level, care will be taken to avoid, control down and eliminate possible harassment of the micro entrepreneurs in the process.

Table 26.8
Inspections Projected to be Carried out During Fifth Plan

Year	No of Inspections Projected to be Carried Out
1997/98	43,569
1998/99	45,013
1999/2000	50,457
2000/2001	50,790
2001/2002	52,480
Total	2,42,309

Source: Ministry of Labour and Manpower

26.6.7 Maintenance of industrial peace and promotion of sound labour-management relations.

- a. Cordial relation between management, workers and the government is conducive to a production-oriented atmosphere in manufacturing and all other sectors of the economy. To ensure that all the three parties play their due roles, there must be institutionalised arrangements to carry out training and research programmes. Such motivational education is a continuous process. The Department of Labour and Manpower also needs to be strengthened to:
 - i. enhance capacity for data collection, analysis and report writing;
 - ii. computerise the system of registration to enable the department to be more effective;
 - iii. strengthen all Industrial Relation Institutes and their activities;
 - iv. reform the Labour Welfare Centres and improve their services;
 - v. adopt programmes for health and family welfare of labours; and
 - iv. strengthen the Labour Courts including establishment of new office buildings to enable them to dispose cases promptly and reduce the present backlog of cases.
- b. An estimate of output of the Department of Labour in major subfields of industrial relations during 1997-2002 is given in Table 26.9. This estimate is based on the assumption that militancy in trade unionism or predatory labour leadership will not be dominant in coming years. The use of labour for political purpose, sporadic manifestation of unscrupulous labour leadership and unhealthy exploitative application of muscle power by the ownership will be reduced through consensus among the major political parties and role players.

Table 26.9
Estimated Output of Department of Labour During 1997-2002

Year	No. of Disputes	No. of Disputes Disposed	No. of Trade Union Registered	No. of Participants to be given Training through Industrial Relation Institute
1997/98	935	925	750	3,990
1998/99	1,090	1,081	830	4,250
1999/2000	1,208	1,198	1,011	4,830
2000/2001	1,280	1,275	1,052	4,930
2001/2002	1,310	1,301	1,079	5,350
Total	5,823	5,780	4,722	23,350

Source: Ministry of Labour and Manpower

26.6.8 Strengthening of institutional capacity: It has strongly been felt that planning cells of the Ministry and the attached departments are, at present, very weak in rendering services. They need training and logistic support to improve their data collection capability, project monitoring and evaluation and regular updating of necessary statistical information. These functions, which are known together as Labour Market Information, are very important tools for policy formulation and programme implementation.

26.6.9 Programme for wage earners: Presently, the Wage Earner's remittances are spent mostly on consumption items rather than on investment operations. However, productive use of the remittances should be of national importance for Bangladesh. The issue should be studied in detail. A special fund will be created with wage earner's remittances. The following are some of the possible fields of investment:

- a. expanding and improving the transport facilities throughout the country, to be organised on commercial lines without any subsidy whatsoever;
- b. setting up of export oriented industries particularly in the rural areas such as electronics, garments factory, etc.;
- c. other projects capable of generating multiplier effects in respect of employment and income; and
- d. setting up special wage earners bonds and open-ended investment funds and trust funds to support self-employment as micro-entrepreneurs of wage earners on their return home.

26.6.10 Collective bargaining and minimum wage fixation : As of now wages are fixed through collective bargaining in the private sector industries. This process is subject to the minimum wage law as in force. In the agricultural sector similarly wage fixation through the usual informal process in the backdrop of seasonality is subject to minimum wage law applicable to agricultural labour. In case of SOEs, wages are determined largely by the government fiat, influenced more often than not by organised labour working therein. At times the government decision on this is based on findings and recommendations of periodically appointed wage commissions.

26.6.11 In the Plan period institutional care will be taken and emphasis given to base determination of wages in both public and private sector industries on productivity. The laws relating to minimum wages will be adhered to in both industry and agriculture. In case of industry, units not in a position to pay the relevant minimum wages will not be supported to limp along. In case of agriculture, enforcement of minimum wages will have to be monitored and supervised by the local government bodies as well. Along with imposition of financial discipline, sustaining accountability of management and protection of rights of the minority shareholders, ultra trade unionism forcing wage payment not supportable by productivity will be brought under control mainly through conscientisation.

26.6.12 Wage earner's welfare fund : The government created "Wage Earner's Welfare Fund" for the welfare of immigrant workers and their families. The activities undertaken for them include setting up of hostel-cum-briefing centre, orientation and briefing to the workers selected for employment abroad, setting up of welfare desk at airports, arranging repatriation of the dead and crippled and distressed migrant workers, and protecting their rights abroad. The Bureau of Manpower Employment and Training has been doing these in a limited way. To provide wider scope and to make an optimum utilisation of the collected fund, provision for rehabilitation and providing loans for buying tickets, medical treatment, etc., will be made during the Fifth Plan.

26.6.13 Co-operation with ILO and IOM : ILO is the international organisation of which Bangladesh became a member in 1972. For elimination of child labour, which is primarily a manifestation of poverty, Bangladesh has signed an agreement with ILO, thereby becoming a member of International Programme for Elimination of Child (IPEC) labour. The programme is being successfully implemented in the ready made garments sector. During the Fifth Plan, Bangladesh will endeavour to have close co-operation with ILO in developing human resources. International Organisation for Migration (IOM), of which Bangladesh is a member, is exclusively devoted to looking after the interest of migrant population. It is with the help of IOM that the English language courses for nurses are conducted by the Ministry of Labour and Manpower. During the Fifth Plan, closer collaboration with IOM will be

sought in order to improve the marketability of our migrant workers and improve their welfare. Bangladesh will welcome location of IOM's regional office at Dhaka.

26.6.14 Involvement of private sector/non-government organisations: Skill development training should not be the sole responsibility of the government. The private sector can also play a vital role to this end. During the Fifth Plan, private organisations/ institutions will be encouraged/involved in providing skill development and income generating training, formulation and administration of labour and manpower policies and extension of credit and motivation of workers for attaining and sustaining increased productivity.

26.7 Estimated Financial Outlay

26.7.1 The financial outlay for the labour and manpower sector during the Fifth Plan has been estimated at Tk.1,390.20 million. The programme-wise outlay is shown below:

Table 26.10
Estimated Financial Outlay for Labour and Manpower Sector During Fifth Plan
(at 1996/97 prices)

(in million Taka)

Sl. No.	Programmes	Estimated Outlay
1.	Spill-over projects	920.00
2.	Employment promotion	150.00
3.	Skill development	150.00
4.	Welfare and social protection of workers	40.20
5.	Maintenance of industrial peace and sound labour management	50.00
6.	Human Development through private sector/ NGO	30.00
7.	Strengthening of institutional capacity	30.00
8.	Programme for wage earners	20.00
	Total	1,390.20

CHAPTER XXVII

PUBLIC ADMINISTRATION

27.1 Introduction

27.1.1 The Fifth Plan period is planned to be a period of reforms and development. To spearhead the process public administration will be reengineered, redesigned and reoriented. To the end of deregulation, liberalisation and privatisation and effective delivery of administrative, legal, social and economic services, public administration will be the main conduit. Merit based recruitment, rigorous training and targets for high level of performance will be the cornerstones of public administration.

27.2 Review of Past Performances

27.2.1 Creation of an efficient public administrative system was one of the major objectives pursued in the past plans. Enhancement of job knowledge and skills of the public personnel through systematic training, establishment of training institutes for such purpose, organisational development, improvement of personnel administration in the government, semi-government and autonomous bodies, streamlining of administration through simplification of accounts, budgeting and financial and administrative procedures and restructuring of government offices and agencies were some of the major efforts towards bringing in efficiency in administration.

27.2.2 As a first step towards increasing the efficiency of a newly emerged administration, the First Plan, on the recommendations of a Services Reorganisation Committee, envisaged immediate training of personnel involved in administration and management. Projects were undertaken mostly to provide institutional framework for such training. The Civil Officers' Training Academy (COTA), the National Institute of Public Administration (NIPA) and the Staff Training Institutes (STIs) were developed and the Bangladesh Administrative Staff College (BASC) was set up for training of senior officers at the policy level. The Plan emphasised formulation of unified administration and management training policies and programmes and constitution of a National Training Council (NTC) for providing overall direction to training for human development. The NTC was constituted in 1981 during the Second Plan period. It provided guidelines to the Ministry of Establishment for formulation of a training policy. In the Third Plan period, policy dimension of creating new institutions for training was changed; consolidation of training institutions rather than proliferation was given emphasis. The Public Administration Training Centre (PATC) at Savar was established amalgamating the former COTA, NIPA and the BASC. The Foreign Affairs Training Institute (FATI) was merged with the BCS (Admin) Academy, earlier established to cater to the professional training in law, administration and development. Former divisional STIs were developed as Regional Public Administration Training Centres (RPATCs) and placed under the administration and management control of the PATC. Subsequently, though the consolidation of training institutions on management development was done, several professional training institutes were established because of given emphasis on professional development. Institute of Chartered Accountants, Bangladesh (ICAB), Institute of Cost and Management Accountants, Bangladesh (ICMAB), Academy for Planning and Development (APD), Audit and Accounts Training Academy, Institute of Bank Management and Bangladesh Institute of Administration and Management (BIAM) were established. At the end of the Fourth Plan, an Electoral Training Institute (ETI) was established and it started functioning under the aegis of the Election Commission to cater to the training needs of personnel involved in the election process.

27.2.3 During the previous planned development period (1973-95), the highest priority in public administration was accorded to personnel training which absorbed as much as 55 per cent of sectoral allocation in the First Plan, 51 per cent in the Second Plan, 67 per cent in the Third Plan and about 60 per cent in the Fourth Plan.

27.3 Organisational Development Personnel Management and System Improvement

27.3.1 With the objective of development of modern personnel and financial management system and systematic creation of facilities for extension of training support, a number of programmes were conceived during the last 25 years. Their implementations were focused on ministries of Establishment, Finance, Disaster Management and Relief, Commerce and Economic Relations Division (ERD), Internal Resources Division (IRD), Implementation Monitoring and Evaluation Division (IMED) and Planning Division. Bangladesh Bureau of Statistics and Bangladesh Institute of Development Studies have benefited by participating in some of these programmes. Some of the important ones among these programmes are listed below :

- a. extension of computer facilities to government organisations;
- b. introduction of a System for Autonomous Bodies Reporting and Evaluation (SABRE) in the Finance Division;
- c. modernisation of the O & M Wing of the Ministry of Establishment;
- d. setting up libraries/documentation centres in the Planning Commission, ERD and Social Science Research Council;
- e. strengthening of VAT administration system;
- f. improving foreign aid accounting and management system in the ERD;
- g. enhancing the implementation monitoring and evaluation capacity of the IMED;
- h. simplification of project processing methodologies;
- i. introduction of new methodology for household survey and collection of local level data system for poverty monitoring ; and
- j. modifications of the examination system of the Public Service Commission.

27.4 Administrative Reforms

27.4.1 In pursuance of the recommendations of the Committee on Administrative Reorganisation and Reforms set up in 1982, several important administrative reforms and improvements have been carried out. The government has carried out some programmes of decentralisation of administration. The Upazilas (now thanas) were created as the focal points of development. Substantial responsibilities for planning and implementation of development activities were transferred to upazilas at that time. Following a number of studies, a high powered Administrative Reform Committee was constituted which worked on organisational structure of the government and autonomous bodies to rationalise their structures and functions. In 1996, an Administrative Reform Commission was constituted to reform the administration along the desired lines. In the financial sector, Finance Division initiated several reforms on fiscal and monetary management. This Division has been implementing two important projects: one on the reforms in its budgetary and expenditure control system and the other on the reforms in the financial institutions.

27.5 Allocation of Funds and Utilisation Position

27.5.1 During the past plan periods, an allocation of Tk.3,282.40 million was made. As against this allocation a total number of 143 projects were taken up for implementation at a cost of Tk.3,463.30 million. However, Tk.1,797.90 million was spent and a total number of 83 projects were completed during the past plan periods.

27.6 Two Years between Fourth and Fifth Plans

27.6.1 During 1995/96 and 1996/97, Tk.1,761.70 million (including TA projects) and Tk.956.20 million (including TA projects) respectively were allocated for the public administration sector. A total of 50 on-going projects were carried over from the Fourth Plan to the ADP 1995/96. In addition, 11 new projects were included. An amount of Tk.1,550.20 million was spent and 14 projects were completed. A total of 50 projects, 47 on-going and 3 new, were included in the ADP, 1996/97. An amount of Tk.698.30 million was spent.

27.6.2 The following table shows the financial performance of the public administration sector during the past plan periods and the last two years thereafter:

Table 27.1
Public Administration Projects (1973-1997)

(in million Taka)

Plan Period	Allocation		Number of Projects Taken		Number of Projects Completed	Amount Utilised (at current prices)	Percentage Utilisation Over ADP Allocation
	Plan (at base year prices)	ADP (at current prices)	Spill-over	New			
1973-78	131.20	105.00	0	21	4	40.60	38.66
1978-80	111.20	113.80	17	10	7	89.80	78.91
1980-85	380.00	641.00	20	34	37	483.00	75.35
1985-90	650.00	1,113.80	17	35	24	474.50	42.60
1990-95	2,010.00	3,446.90	28	43	21	710.00	20.59
1995/96	--	*1,761.70	50	11	14	*1,550.20	87.99
1996/97		956.20	47	3	--	698.30	73.20
Total	3,282.40	8,138.40	--	157	107	4,046.40	--

* accelerated allocation and utilisation due to ID card projects

27.7 Fifth Five Year Plan (1997-2002)

27.7.1 Emerging concerns of public administration: In the previous plans, public administration was conceived too narrowly taking it to be synonymous with public personnel management. The programmes and allocation of fund were necessarily constricted by such an approach. Decades back, the fiction of a politically neutral administration had led to an emphasis on technologies for administrative improvement as opposed to political morality. Moreover, a large number of less developed countries were saddled with inefficient and corrupt bureaucracies that needed to be modernised. A focus on personnel management, in those circumstances, was perhaps not misplaced. However, the recent dramatic changes, globally and in the region, have brought about fundamental changes in the breadth of vision and scope of activities of public administration that can no longer be ignored. Revamping the traditional administrative strategies without coming to terms with those challenges may not be very fruitful.

27.8 New Challenges

27.8.1 In the wake of the collapse of the command economies in Europe and the former Soviet Union in the late eighties, market economy has emerged as the only mode of international economic management. The global integration of the economies accompanied by rapid technological changes have put tremendous pressure on developing economies to change their known ways of doing business. Whatever may be the disposition of a country to this new exposure, change is inevitable. The phenomenon of globalisation and marketisation have also come upon Bangladesh.

27.8.2 Secondly, collapse of the command economy witnessed a flurry of political activities leading to the establishment of democratic governments, in many instances in countries hitherto ruled by authoritarian military rulers. Their regimes were marked by arbitrary and capricious decisions leading to marginalisation and income disparity. Endemic corruption and a total absence of rule of law also adversely affected the well-meaning and enterprising citizens. Disgusted by this lack of governance, there is a growing demand for establishment of civil society and good governance by ushering in transparency, accountability and compassion in public business.

27.8.3 Thirdly, globalised market economy requires the national states to follow the rules of the game. Taxes, investment rules and economic policies of individual countries must be congruent with the global needs. In order to help develop the markets, a regime of stiff competition will have to be accepted, even when it will involve liquidation of some less efficient national enterprises. Government will have to bring about suitable changes in the rules and regulations to check arbitrary action and combat rampant corruption. It has to arrive at an appropriate mix of government and market activities to secure economy and efficiency.

27.8.4 Fourthly, the demand for good governance and civil society is also partly internally generated. Developments in the communication technology have truly turned the world into a big global village. At no other point of time in human history did people have such unhindered access to the whole areas of information. In these conditions, it is difficult for a country to remain isolated and not to be impacted by the happenings all around.

27.9 Objectives of Fifth Plan

27.9.1 Development of an efficient public administration commensurate with the socio-economic policy of the present democratic government will be the basic goal for the public administration sector. In this context, the objectives of the Plan will be to:

- a. foster and sustain good governance by maintaining a sound judicial system; impartial, transparent and accountable administration and a justifiable rule of law;
- b. put in place sound commercial and regulatory laws and highly competitive financial and banking system that will develop market economy as a compliment to governmental activities;
- c. encourage and actively promote transfer of such functions hitherto performed by the public sector to the private sector who can do these better and more economically;
- d. make the government capable of serving the people better by establishing appropriate elected local government bodies and by providing fora for people's participation at all levels of policy planning and execution;
- e. bring in economy and efficiency in government operations by streamlining and restructuring all public organisations through a process of eliminating redundancies, inefficiency and inertia;

- f. help create a professional cadre of mid-level and top managers by constituting a Secretariat Services Pool where induction will be on the basis of proven merit only;
- g. introduce large-scale technological changes in all public organisations with computerisation that will foster modern record-keeping, filing and other office procedures;
- h. enhance the knowledge and skill of the public personnel for delivering goods and services and implementation of development programmes;
- i. make the public administration free of inefficiency, corruption and red-tapism; and
- j. make the system capable of attracting the meritorious, promoting the capable and sustaining fast tracks for the best and the brightest;

27.10 Strategies of Fifth Plan

27.10.1 Designating public administration as a sector is a matter of convenience only; in fact it impacts and is impacted upon by the entire web of government and its environment. For this reason, programmes of public administration can be multi-sectoral and may have universal importance. Most of the issues relevant to public administration involve tough decisions affecting the lives of innumerable people and tend to be politically sensitive. Trends towards politicisation and unionisation, particularly in the lower ranks of the public service, in recent years made reform of administration extremely difficult.

27.10.2 In order to achieve the objectives set out for public administration in this Plan document, the first strategic consideration for development of programme is its political acceptability and degree of probability of implementation. While nobody perceives any personal harm in the emergence of good governance or in reviving the local government institutions, a good number will be adversely affected by transfer of activities to private sector or by right-sizing the public organisations or even by the creation of a professional and competent Secretariat Services Pool. In the past, many reform programmes were stalled due to opposition from the vested quarters. In order that the intended reforms may be carried out without directly hurting large number of public employees, the following principles may be followed as operational guidelines:

- a. There shall not be in general any retrenchment of any employee in the process of right-sizing public organisations. Should there be need to terminate the services of any one, it will be done after paying him adequate compensation and, in suitable cases, allowing full pension and other benefits.
- b. Introduction of new technologies like computerisation shall not necessarily render the incumbent staff redundant. Such an effort will either be preceded or accompanied by a retraining programme to make them suitable for new jobs.
- c. A staffing plan with reduced manpower and suitably changed categories of positions needed for introducing new office and management technologies will be prepared for each public organisation. For example, positions of typists, stenotypists, record keepers and assistants should be replaced by data entry operators, programmers and system analysts and recruitment rules for all entry level gazetted posts may be amended listing suitable skills in computer programming as a requirement .
- d. On the basis of the staffing plan, surplus staff will be identified. These people will be encouraged out through a process of attrition and compensation. Such surplus staff can be retained on the basis of posts created and retained on year-to-year basis. Vacancies caused in this list during the year will not be filled up and these will be

abolished at the beginning of the following year. One condition that will help operation of this policy smoothly will be to retain the retirement age at 57 till such time the entire surplus personnel are weeded out.

- e. Alongwith these tough measures, the government may pass the necessary laws creating a Secretariat Service Pool. There is enough previous experience on this issue, and despite anticipated opposition from some quarters, the government may take this decision in the greater national interest. For obvious reasons, there are very few advocates in favour of merit. But if we have to take our proper place in the globalised and competitive economy, there is no other choice.
- f. Training and orientation will be continuously imparted so that public personnel serve public interest as servants of the republic, protect people's rights as embodied in the constitution and support development and operation of local government bodies.

27.10.3 The government will continue to support various reform programmes ongoing in different sectors. The physical infrastructure for imparting in-service training has already been created. The imminent reduction in the size of public bureaucracies will significantly improve the situation created by back-log and overcrowding. The urgent task will be to nurture and develop a professional group of trainers and training materials. The standard of training in all training institutes will be improved.

27.10.4 Due emphasis will be given on increasing the role of women in public administration. Measures will be undertaken to integrate women into the overall national development process and the public administration system. Efforts will be made to increase the participation of women at all levels of the government through recruitment of females and affirmative promotion. Attention will be given to associate women in larger numbers at all stages of development planning and implementation, monitoring and evaluation . In view of the widespread unemployment among women, particular emphasis will have to be given to the issue of increasing the ratio of female employment. In certain fields like nursing, family and social welfare and primary and secondary education reservation for females will be enhanced.

27.10.5 At present, staff welfare activities and health care of various public offices are inadequate and lopsided. These activities will be reviewed with a view to creating and sustaining organisational allegiance, increasing efficiency and supplementing social security net. Programmes will be drawn up for creation of separate super-annuation funds for parastatals and funding pension and provident fund schemes operated by the government now as mere accounting mechanism.

27.10.6 Different areas of the country's public administration system as well as the system of financial management and accounting require substantial simplification and modernisation for which systematic studies and research for identifying the existing drawbacks and suggesting measures for improvement are extremely important. The Finance Division will undertake an objective evaluation of its existing auditing system and rationalise the same. A number of studies such as the review of the existing judiciary, law reforms, etc. and review of the direct tax policy, VAT system, review of the function of Securities and Exchange Commission and other development related areas will be completed during the Fifth Plan period. Substantive research in the various emerging concerns of public administration will be carried out for getting the insights into and direction for a continuing public administration development programme.

27.11 Major Programmes for Fifth Plan

27.11.1 Major programmes of public administration sector during the Fifth Plan period will be mostly through the training in manpower development, bringing in efficiency in administration and creation of fast track in civil service, improving planning and development, reform of organisations, modernisation of personnel management system and reform of financial and judicial systems.

Training

27.11.2 Considering the importance of job skill of personnel as an important pre-requisite for overall improvement of administration, planning and development, programmes relating to both job-specific and personnel management training will be given the highest priority. Emphasis will be given on consolidation and development of the existing training network. Emphasis will also be given on the assessment of facilities of the institutions in terms of their present capacity, utilisation and future needs.

27.11.3 To make investments in training effective, importance will be given to the development of locally suited practical training materials, innovation and application of appropriate training techniques and development of curricula and objective evaluation of training impacts. At the operational level, the programme envisages identification of the tasks and responsibilities of the trainees, assignment of relative priority to various client groups, provision of requisite administrative support to training in terms of resource commitment, career incentives to both trainees and trainers, inter-agency co-ordination and setting up of a control mechanism within the personnel management system of the government capable of monitoring all training inputs in public administration and their impacts.

27.11.4 Training of public servants must be consistent with personnel policies and practices in a wider context, and therefore, it will be more appropriate to plan investments in training within the framework of a National Training Policy (NTP). It is expected that Ministry of Establishment will finalise the NTP in the initial years of the Plan and carry out a survey on the existing training institutions, training needs of different ministries/divisions and make recommendations for public sector manpower development.

27.11.5 The PATC, RPATCs, APD and BCS (Admin.) Academy will be further developed during the Plan period. The PATC at present can cater to the training needs of 1,200 officers annually at foundation level. With this target, the PATC is supposed to train at least 7,000 entry level officers in the Fifth Plan period. Besides, it will continue its programme for training of senior officers. More emphasis will be given to development economics and administration, business management and societal changes. To this end, faculty development will be intensified. Staff training will be assigned higher priority in the Fifth Plan. Training courses in greater number will be offered for the enhancement of required skills to create a positive impact on efficiency. Under the network of 4 RPATCs, staff training programmes will be continued. Four RPATCs have an estimated annual training capacity of 3030 personnel. Utilising the existing facilities 22,000 personnel can be trained in the Fifth Plan. In the PATC, RPATCs and APD, special arrangements will be made for the “training of trainers” who will in turn provide training within the major departments and agencies. Besides, Bangladesh Institute of Administrative Management (BIAM) will be strengthened during the Fifth Five Year Plan.

27.11.6 The Academy for Planning and Development (APD) will continue to impart training to officers of various ministries, departments and other organisations concerned with

development planning, project formulation, management and implementation. The Academy will also go for diversification of its training activities during the Fifth Plan. The APD envisages a six month pre-entry modular training programme in planning and development for university graduates as well as public servants. The training activities of the APD during the Plan period will be, to a large extent, addressed to sector-specific development programmes and problems connected therewith. Faculty development efforts of the Academy including other institutions will be further geared up during the Plan in order to increasingly reduce its dependence on external resource persons. With an annual training capacity of 600, it is estimated that 3,000 officers will be given training in the APD during the Fifth Plan.

27.11.7 It is estimated that BCS (admin.) academy will be able to train about 2500 officers during the Fifth Plan. Besides, the Statistical Institute will continue its training programmes, especially on questionnaire designing, techniques of data collection, compilation and analysis, etc. The recently set-up Foreign Service Training Academy will carry out its scheduled training programmes. The National Institute of Local Government will be made more effective for training and orientation of personnel of the local government bodies.

27.11.8 An efficient and well-trained police force is indispensable for any civilised society. Faced with increasing demand from a fast changing society, the need for both responsive and pro-active policing have become ever more important. This will require re-equipping and transforming the existing police force into service and community oriented roles.

27.11.9 At present, about 10,000 persons of different ranks of the police are being trained in the following existing training institutions : Police Academy at Sardah, four Police Training Schools, Detective Training School and Traffic Training School at Dhaka, Police Motor Driving School at Jamalpur and Police Special Training at Betunia, Rangamati.

27.11.10 For modernising training facilities for the police, the training wing of the Police Directorate will be strengthened during Fifth Plan. This will enable evaluation and monitoring, and career planning of the police officers and effective supervision and co-ordination of the programmes of various training institutes.

27.11.11 The police personnel at the level of constables comprises about 75 per cent of total manpower in the police department. Constables, in their domain of responsibilities, come in direct contact with the people more often than any other ranks. Therefore, upgrading of training for the police should place the constables at the centre. The 4 police training centres established immediately after liberation did not get proper attention from the subsequent regimes. All these four police training schools will be modernised during the Fifth Plan. In-service training facilities for all ranks of the police, specially staff-training for mid and senior level officers, which is almost absent now, will be introduced.

27.12 Organisational Development

27.12.1 Programmes to be undertaken will relate to functional development of organisations of the Finance Division, the Economic Relations Division, the Bangladesh Bureau of Statistics, the Public Service Commission and the Election Commission. The construction of the building of BBS at Agargaon, Dhaka is expected to be completed by June, 1998. This will create facilities for locating different offices of the Statistics Division/BBS in one place. Another important project recently taken up by BBS is National Data Bank. Its implementation is progressing well. Other programmes to be carried out by BBS during the Fifth Plan include development of a system of local level statistics, enhancement of

household survey capabilities, collection of national income and poverty level statistics of the country. Besides, the present publication unit of BBS will be strengthened and a database on the environmental statistics will be created under new projects. Election Commission is being strengthened with modern logistics. Organisational development programmes of ERD will relate to improvement of the programmes, processing and monitoring capabilities in respect of various types of technical assistance programmes, aid accounting and procedures, debt-servicing and overall aid co-ordination and administration through a modern computerised system. Such organisational and procedural development is expected to ensure speedier and effective utilisation of foreign aid including technical assistance. IMED will carry out the work for future improvement of its monitoring and evaluation capability.

27.13 Personnel Management

27.13.1 There is considerable scope for improvement in administration which is presently characterised by shortage of properly trained manpower in many key-fields with surpluses in other fields. Anomalies and inadequacies also exist in personnel policies and career administration and planning. With a view to improving the personnel management and administration in the country, the personnel management information system will be further strengthened under the Ministry of Establishment. Computerised record keeping and data processing system will be developed for storage and retrieval of personnel job training and other records. Further long-term benefit of the management information system will be to improve morale and productivity of civil servants as the usual unplanned placement and seniority-based promotion system is gradually replaced. A rationalised and codified personnel manual will reduce the time and manpower now utilised to oversee procedural compliance.

27.14 Correction of Weaknesses

27.14.1 The major weaknesses of public administration that have been identified in various studies are lack of efficiency and weaknesses in policy analysis and formulation, inefficient delivery of services, insensitivity to the public demand, absence of accountability and transparency, lack of prudence in public expenditure, prevalence of corruption and a large size of the government. These identified weaknesses of public administration will be addressed by way of taking appropriate programmes/projects in the Fifth Plan. Besides, steps taken under the Law Reform Commission for separation of the judiciary and several law reform measures will be geared up during the Plan period. Steps will be taken to provide for the establishment of the office of an Ombudsman.

27.15 Communication Computerisation and Filing System

27.15.1 Throughout the world, the pace of changes in computerisation and electronic communications are occurring so fast that any nation unable to adjust with these swift changes will miserably lag behind and fail to compete with others. Public administration must, therefore, adjust itself to these changes and help the country to move forward. If it fails, it will be a drag on the national progress.

27.15.2 The age-old filing system in public offices needs to be replaced by computerised filing system. The system of records and accounts keeping and reference making needs to be changed. Even the size of the papers and files used in the offices needs to be changed. FAX and E-Mail will be introduced in government offices as fast as possible. All officers should be able to operate computers. To achieve this target, a programme for computer training and procurement of computer hard wares and soft wares will be undertaken for which necessary resource allocation will be made in the Fifth Plan.

27.16 Development of National Statistical Activities

27.16.1 A sound and comprehensive statistical system with adequate organisational structure and network is a functionally essential ingredient of the country's public administration planning and development process. Currently the institutional structure of the national statistical system of Bangladesh comprises the National Statistical Council, as the apex body providing policy guidance, the Statistics Division of the Ministry of Planning overseeing the activities of the Bangladesh Bureau of Statistics (BBS) and the Bangladesh Bureau of Statistics in charge of the collection, collation and dissemination of official statistics.

27.16.2 Over the years, BBS has acquired considerable expertise by conducting several rounds of the three nation-wide census programmes, namely, the population, the agricultural and the economic censuses, which are in the core of the national statistical system. These three censuses define the nation's statistical universe. BBS utilises the census operations to develop survey frames and for periodic updating of bench mark data.

27.16.3 Using the census based survey frames, BBS has set up an elaborate system of sample surveys that are conducted annually or on a periodic basis to generate current economic, demographic and social statistics of various kinds. Through its outreach system, BBS also regularly collects current administrative and financial data from its outreach partners.

27.16.4 The current economic statistics generated by its own survey system and the fiscal, monetary and financial data obtained from its outreach partners are directly collated into annual estimation of GDP and other national accounts aggregates. The demographic and social statistics consolidated into socio-economic indicators of various kinds are used in poverty and other social monitoring.

27.16.5 Paradigm shifts are taking place in the demand and supply of statistical data generated by the national statistical system. On the demand side, data needs of major users – government, multilateral institutions, donors, NGOs and private organisations are shifting towards current and timely macro data for the development of macro-economic policies for macro-economic management, designing and monitoring safety net and human resource development programmes and reduction of rural and urban poverty. Private entrepreneurs and foreign investors operating in liberalised market environment are in need of timely and quality macro data and indicators for market assessment and investment decisions. The NGOs and non-profit institutions (NPI) operating at the grass roots, on the other hand, are in need of local level statistics for developing and monitoring target-oriented programmes. Research and academic bodies need social and economic data/information of all kinds.

27.16.6 On the supply side shifts are triggered by the need for replacing obsolescent technology and methods by newer technology and procedure for data generation and revolutionary changes in IT for data dissemination and exchange.

27.16.7 Objectives of national statistics system: Internalisation of paradigms within BBS calls for redefining the objectives of the national statistical data generation and dissemination system for the medium term. The following objectives are implicit in the Fifth Plan's programmes:

- a. generation of timely and reliable data with built-in quality assurance system;
- b. user orientation in data generation with user needs setting the data collection priorities;
- c. system approach in national accounting and other data generation with integration and harmonisation of sample design and data generation instruments;
- d. full use of IT for speedier data generation, dissemination and exchange;

- e. division of labour between public and private sector agencies in data generation and greater use of out-reach system in the production of national statistics;
- f. adequate infrastructure and legal support in the form of a general statistics law for the redefined activities of BBS; and
- g. a close interaction between users and BBS in order to establish priorities and timeliness in statistical publications.

27.16.8 Strategy: In keeping with the shifts in user needs, BBS needs to orient its data generation towards timely production of priority economic and socio-demographic macro data aggregates and indicators. The priority macro data will relate to real sector comprising national accounts aggregate, production, price and wage indices and labour market indicators and socio-demographic data comprising population, poverty, health, education and selected environmental indicators.

27.16.9 In fact, redefined data generation priorities will require national accounting to be the central and core activity of BBS. National accounting needs to assert its role by co-ordinating and leading the data generation system of BBS, providing consistency and statistical standards and ensuring that the survey questionnaires and other data generation instruments are fully aligned to the requirements of national accounts.

27.16.10. A system approach needs to be adopted by BBS in all its census and sampling operations. Concepts, definitions and systems used in censuses and sample surveys need to be harmonised and integrated with national accounts requirements as far as feasible. Sample surveys should be based on the frames or registers developed by the censuses and integrated on the basis of commonality of objectives and design. Division of labour in data generation can take many forms depending on the objectives and modalities of data collection. Use of local level enumerators in censuses and surveys is now a regular practice in BBS. Use of private sector or academic vendors can be tried progressively to enlarge the scale of statistical operations or data entry. Network of outreach partners needs to be expanded with more reliance on outreach partners in collection of administrative file data. NGOs and NPIs can be assisted in their local level target-oriented data collection effort by providing sample frame, survey procedure such as standardised rapid assessment survey, etc.

27.16.11 Timely data dissemination will be an essential part of data generation process of BBS. Innovative and newly evolving methods of data dissemination such as development of internet web-site for dissemination and exchange participation in GDDS (General Data Dissemination System) of IMF, holding regular dissemination seminars and workshops in addition to standard data dissemination through hard copies and publications and data in diskette and other machine readable forms (such as CD-ROM) will be progressively adopted.

27.16.12 Infrastructure support is an essential element in raising system efficiency. Currently under-construction statistics building will be ready for occupancy during the first year of the Fifth Plan. Completion of the statistics building will mitigate a long-felt need of housing the various wings of BBS currently scattered all over Dhaka city in one structure thus making BBS visible to the general public and developing synergy in day-to-day activities of BBS.

27.16.13 Restructuring of the organisational set up of BBS, including setting up a full fledged wing for National Accounts and enactment of an umbrella type general statistical law that will provide the much needed legal coverage to data collection activities of BBS, will be part of the infrastructure support for the Fifth Plan programme activities.

27.16.14 Statistical work programme to be undertaken by BBS during the Fifth Five Year Plan period will consist of a 5 year cycle of activities comprising annual compilation of national account aggregates, supported by base line and annual surveys for collecting economic, demographic, health, education, poverty and environmental statistics and three censuses, namely, the decennial census of population in March 2001, agriculture census in 2002 and economic census (census of non-agricultural economic enterprises) by the middle of the Fifth Plan.

27.16.15 Performance during Fourth Plan (1990-95): During the Fourth Plan period, BBS took up 21 projects; 10 of these were in public administration, 7 in social-welfare, 2 in agriculture, 1 in health and 1 in industry sector.

27.16.16 The total allocation in the Fourth Plan was Tk.750.58 million of which project assistance component was Tk.483.88 million. The actual expenditure incurred was only Tk.494.17 million including project aid component of Tk.392.26 million. This unsatisfactory performance was mainly due to:

- a. frequent changes in the top management of BBS;
- b. organisational weakness in BBS; and
- c. delay in negotiating project assistance.

27.16.17 Of the 21 projects mentioned earlier, 9 were completed and the rest were carried over for implementation during the period '95-97. During these two years, only 1 project was completed and 2 new projects were undertaken. Now BBS has 13 projects under implementation. Of these, 11 projects will be carried over to the Fifth Plan period.

27.16.18 The allocation for these projects during the period 1995-97 stood at Tk.838.50 million with a project assistance component of Tk.784.30 million. Against this allocation during the period, only Tk.545.70 million could be spent of which Tk.487.10 million was project assistance.

27.16.19 Fifth Plan outlay for BBS: A total of Tk. 1,500.00 million is estimated to be earmarked in the public sector for BBS during the Fifth Plan at 1996/97 prices. The allocation will be spent to implement the ongoing projects (13 in numbers) and to embark upon 20 new projects. The programmes will be targeted to attain the objectives of strengthening the BBS so that reliable data could be timely generated with user orientation, fully using IT for speedier and quality assured performances. Priority will be given to poverty monitoring projects, strengthening the national accounts and censuses.

27.16.20 Emphasis will be given on building the capacity of the private sector for data collection and data entry. An amount of Tk. 1,000.00 million is expected to be invested by the private sector, particularly in the field of data entry. Early liberalisation of telecommunication regime of the country will be necessary to achieve this investment target.

27.17 Financial Outlay for Public Administration

27.17.1 About 50 projects from the Fourth Plan will be carried over to the Fifth Plan with needed modifications. These projects will require about Tk.6,000.00 million. New programmes, including the programmes of BBS will need an estimated Tk.3,000.00 million. In addition, a block allocation of Tk.674.30 million for technical assistance projects will be made. Thus the total projected financial outlay for the Fifth Plan earmarked for the public administration sector is Tk.9,674.30 million.