



BTTB

Bangladesh Telegraph & Telephone Board



ANNUAL REPORT 2002-03

Annual Report 2002-2003



BANGLADESH TELEGRAPH & TELEPHONE BOARD

CHAIRMAN'S MESSAGE

Advances in information and communication technology (ICT) have done more than anything else to drive the last decade's economic boom and the integration of markets around the planet. Since telecommunications play an important role in the development of ICT as well as socio-economic condition of a country, development of telecommunication is essential.

Bangladesh T & T board (BTTB), the only public sector telephone service provider, is doing the best with its limited resources to provide most advanced and new telecommunication services to its valuable subscribers. To this end, all the district headquarters have been equipped with digital exchanges. BTTB has a firm policy to digitalize the complete network as soon as possible. Digitalization of BTTB networks started back in the year 1983 and over the past few years the installation of digital equipment has increased considerably.

In the age of information technology (IT), a robust and efficient national transmission system is required to support telecommunication and data communications as well as the IT activities of a country. With that in view BTTB is gradually supplementing/ replacing microwave links by high speed and broadband Optical Fibre network to meet the further demands of telecommunications.


BTTB has started providing Internet services in all the district headquarters & 172 Upazillas using access services in six major cities. Plans are under way to extent the facilities to rest of the upazilla headquarters very soon.

Recently, BTTB has joined a consortium to install submarine optical fibre cable which will provide broadband connectivity to the global information super highway enabling better overseas gate-way facilities for data communications as well as voice communications for public and private operators. To achieve this goal a contract was signed on 27 March, 2004 among the sixteen parties of fourteen countries under the Consortium. It is expected that Bangladesh will get connectivity with the international Super Highway through Submarine Cable by July, 2005.

BTTB has already signed a purchase contract with the respective contractors to provide Mobile Phone Service from Public Sector to meet the long expected demand of mass population. It is expected that BTTB's Mobile Phone system will come into service by December, 2004.

BTTB is committed to expand the telecommunication network of the country by introducing latest technology and also to continue contributing a sizable amount of revenue to Govt. exchequer from its earning.

I hope that this Annual Report will be helpful for better understanding of the activities of the BTTB. Due to some unavoidable circumstances the Annual Report could not be published in time, although we put our best efforts to minimize delay. However there might be some shortcomings and oversight in the report. I would earnestly request the readers to view it leniently and advise us for its better presentation in the years to come.



(Md. Nurul Islam)
CHAIRMAN

COMPOSITION OF BANGLADESH TELEGRAPH AND TELEPHONE BOARD

A. CHAIRMAN

Mr. S. A. T. M. Badrul Hoque

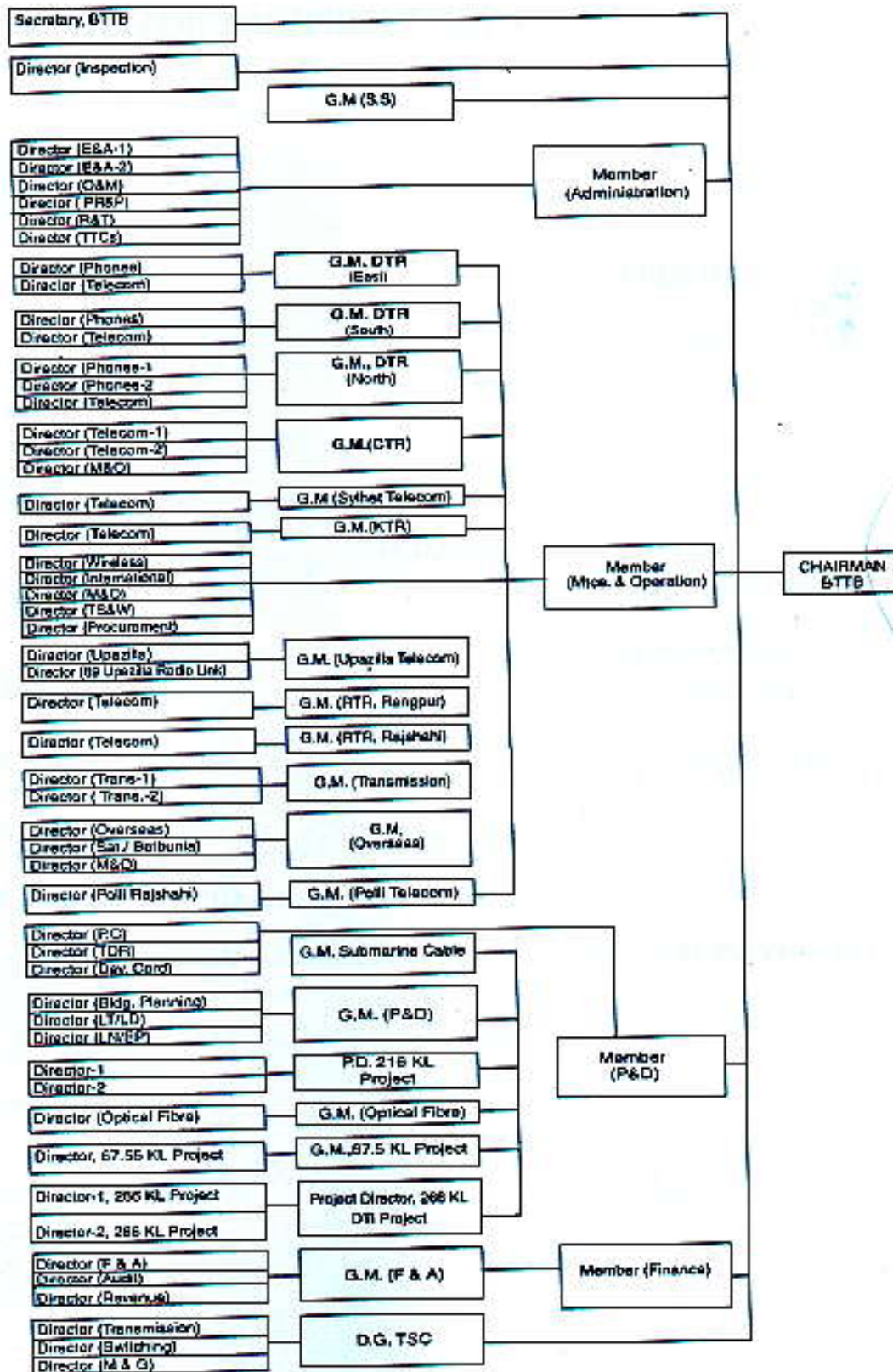
B. FULL TIME MEMBERS :

1. MEMBER (PLANNING & DEVELOPMENT),
Mr. Md. Nurul Islam
2. MEMBER (ADMINISTRATION)
Mr. Md. Abdul Maleque Akhond
3. MEMBER (MAINTENANCE & OPERATION),
Mr. Md. Fazlul Huq
4. MEMBER (FINANCE)
Mr. Md. Anisur Rahman

C. PART TIME MEMBERS :

1. Mr. Md. Abdul Majid, DG-I, PM's office.
2. Mr. Ali Akbar Hossain Akond, Member-1, Land Appeal Board (Ex. JS, ERD, M/O. Finance).
3. Lt. Col. Golam Mowla Bhuiyan, psc, Signals Directorate, General Staff Officer-1, AHQ

**Organogram of Bangladesh Telegraph and Telephone Board as on 30 June 2003
Up-to- Director Level**



PERFORMANCE AT A GLANCE

SERVICE CATEGORY	2001-2002	2002-2003
TELEPHONE SERVICES		
No. Telephone Exchanges	668	652
Exchange Capacity	746,078	920,993
Telephone Connections	605,931	716,721
Public Call Office	695	695
Card Phones	1,513	1,515
TELEGRAPH AND TELEX SERVICES		
Inland Telegraph Office	848	848
International Telegraph Office	01	01
Inland Telegram (Messages)	641,378	282,042
International Telegram (Messages)	55,934	36,516
Telex Exchange Capacity	2,000	2,000
Connections (Telex)	1,390	1,230
GENTEX Services (Office)	135	135
INTERNET SERVICES		
Internet Capacity (Backbone)	2.5 MBPS	(6+4)=10 MBPS
Internet Connection	8,000	10,500
OVERSEAS CIRCUITS		
Telephone	3,327	3,700
VFT	09	09
Data	52	52
Leased Circuit	05	05
NATIONAL AUTO TRUNK		
NWD Circuits Capacity	51,073	54,943
NWD Circuits Working	29,016	33,781

1. TELECOMMUNICATION ADMINISTRATION IN BANGLADESH

1.1 Historical Background of Bangladesh Telegraph and Telephone Board :

The Telegraph branch under the Posts and Telegraph Department was created in 1853 in the then British India and was regulated afterward under the Telegraph act of 1885. This was reconstructed in 1962 in the then Pakistan as Pakistan Telegraph and Telephone Department. After the independence of the People's Republic of Bangladesh in 1971, Bangladesh Telegraph and Telephone Department was set up under the ministry of Posts and Telecommunications to run the Telecommunications Services in Bangladesh. This was converted into a corporate body named 'Telegraph and Telephone Board' by promulgation of Telegraph and Telephone Board Ordinance, 1975. In Pursuance of Ordinance No. XII of 1979 promulgated on 24th February, 1979; Telegraph and Telephone Board was converted to "Bangladesh Telegraph and Telephone Board" as a Government Board.

1.2 Organizational Structure of Bangladesh Telegraph and Telephone Board :

Bangladesh T&T Board is run as a government establishment under the Ministry of Posts and Telecommunications (MOPT). The Board Comprises of 1 (one) Chairman, 4 (four) full time members and 3 (three) part time members, all are appointed by the government of the People's Republic of Bangladesh.

1.3 Privatization & Regulatory structure of Telecommunication Services:

The Telecom. sector of the country has been liberalized for private investment. Bangladesh T&T Board provides all types of telecommunication services in urban and rural areas while the mobile, paging and radio trunking services are offered by private operators. Private operators were also given license to install and operate digital exchanges in rural areas and they would install telephone exchanges in phases. Table-1 shows the list of the private operators in 2002-2003.

Table-1
Private Telecom. Operators in Bangladesh

SL	Name of the Operators	Function
1	Pacific Bangladesh Telecom. Limited (PBTL)	Cellular Radio Telephone services.
2	Bangladesh Telecom. (Pvt) Limited (BTL)	Paging, Radio Trunking & Riverine Telecom. services.
3	Bangladesh Rural Telecom. Authority (BRTA)	Establishment, operation & maintenance of Digital Telephone Exchanges in 200 Upazilla's.
4	Seba Telecom. (Pvt.) Ltd.	Rural Telecom. Services in 199 Upazilla's and Cellular Mobile Radio telephone systems.
5	Telecom. Malaysia International (BD) Ltd. (TMIB)	Cellular Mobile Radio telephone systems.
6	Grameen Phone Consortium	Consortium Cellular Mobile Radio T telephone systems.

2.0 TELECOMMUNICATION SERVICES PROVIDED BY BTTB

2.1 Telephone Exchange Status of The Bangladesh T&T Board

At the end of 2002-2003 fiscal year Bangladesh T&T Board had 652 telephone exchanges with total capacity of 920,993 lines. BTTB started operating digital local exchanges after installation of six NEC- NEAX 61E exchanges in the Dhaka Telecom. Region Network in 1990-91 fiscal year with initial total capacity of 26,000 lines. Upto 2002-2003 financial year seventy six, twenty seven, seventy three, twenty five, twenty five and fifteen local digital exchanges were installed in Dhaka (S/N/E), Chittagong, Khulna, Rajshahi, Rangpur & Sylhet Telecom. Regions respectively. These were supplied and installed by NEC (Japan), Alcatel (France), Italtel (Italy), Ericsson (Sweden & Mexico), GDT (China) and ZTE (China). Exchange status of BTTB as on June, 2002 and June, 2003 are given in the following Table-2 and Table -3 respectively.

Table-2
BTTB Telephone Exchange Status as on 30 June, 2002.

Region	Type	Number of exchange	Capacity	Connection	Pending demand
Dhaka	Magneto	62	4,518	3,773	2,219
	C.B	12	1,817	1,692	1,702
	Auto(Analog)	16	22,478	20,480	2,632
	Auto(Digital)	58	3,82,300	3,43,380	1,36,504
	SUB-TOTAL	148	4,11,113	3,69,325	1,43,057
Chittagong	Magneto	100	6,031	4,665	4,676
	C.B	38	6,718	5,775	4,383
	Auto(Analog)	25	11,720	7,512	2,687
	Auto(Digital)	31	1,19,343	99,041	21,258
	SUB-TOTAL	194	1,43,812	1,16,993	33,004
Khulna	Magneto	63	3,905	3,115	1,114
	C.B	36	6,971	5,764	2,823
	Auto(Analog)	29	15,800	12,993	3,183
	Auto(Digital)	47	80,700	47,637	12,684
	SUB-TOTAL	175	1,07,376	69,509	19,804
Rajshahi	Magneto	65	3,575	2,914	1,748
	C.B	40	5,758	4,751	3,332
	Auto(Analog)	14	5,600	4,197	1,982
	Auto(Digital)	32	68,844	38,242	8,184
	SUB-TOTAL	151	83,777	50,104	15,246
Country Total	Magneto	290	18,029	14,467	9,757
	C.B	126	21,264	17,982	12,240
	Auto(Analog)	84	55,598	45,182	10,484
	Auto(Digital)	168	6,51,187	5,28,300	1,78,630
GRAND TOTAL		668	7,46,078	6,05,931	2,11,111

Table-3
BTTB Telephone Exchange Status as on 30 June, 2003.

Region	Type	Number	Capacity	Connection	Pending demand
Dhaka (S)	Magneto	06	534	383	3,997
	C.B	02	200	166	101
	Auto(Analog)	04	1,800	1,409	519
	Auto(Digital)	15	164,953	139,659	20,108
	SUB-TOTAL	27	167,487	140,717	24,625
Dhaka (N)	Magneto	37	2,649	2,151	1,347
	C.B	05	790	736	736
	Auto(Analog)	02	400	279	112
	Auto(Digital)	37	244,407	191,263	48,921
	SUB-TOTAL	81	248,246	194,429	51,116
Dhaka (E)	Magneto	04	344	312	599
	C.B	00	00	00	00
	Auto(Analog)	00	00	00	00
	Auto(Digital)	24	95,500	87,506	34,336
	SUB-TOTAL	28	95,844	87,818	34,935
Chittagong	Magneto	73	4,167	3,130	4,148
	C.B	28	4,711	3,941	4,214
	Auto(Analog)	18	5,120	3,754	2,086
	Auto(Digital)	27	125,264	101,115	33,753
	SUB-TOTAL	146	139,262	111,940	44,201
Khulna	Magneto	53	3,418	2,385	1,107
	C.B	30	5,305	4,390	1,525
	Auto(Analog)	19	6,800	4,820	1,314
	Auto(Digital)	73	114,605	73,427	10,486
	SUB-TOTAL	175	130,128	85,022	14,432
Rajshahi	Magneto	22	1,352	1,051	924
	C.B	13	1,875	1,390	1,236
	Auto(Analog)	02	800	468	621
	Auto(Digital)	25	44,808	28,373	5,388
	SUB-TOTAL	62	48,935	31,282	8,177
Rangpur	Magneto	35	1,855	1,532	387
	C.B	19	2,540	2,051	901
	Auto(Analog)	08	2,900	2,051	753
	Auto(Digital)	25	41,575	30,214	5,288
	SUB-TOTAL	85	48,870	35,848	7,329
Sylhet	Magneto	22	1,830	1,298	1,485
	C.B	09	1,690	1,129	1,400
	Auto(Analog)	02	1,000	859	1,187
	Auto(Digital)	15	37,701	26,479	12,955
	SUB-TOTAL	48	42,221	29,765	17,037
Country Total	Magneto	252	16,149	12,242	13,904
	C.B	107	17,111	13,803	10,113
	Auto(Analog)	53	18,820	13,640	6,592
	Auto(Digital)	240	868,913	677,036	171,243
	GRAND TOTAL	652	920,993	716,721	201,852

2.2 Public Telephones :

Several years back public telephone services used to be provided through coin boxes in the urban areas and land line/ wireless Public Call Offices (P.C.O's) in the rural areas. Service quality of these public telephones had been far from satisfactory. To improve the public telephone service, Card Phone systems were introduced in 1992 with programs of replacing the old coin boxes and P.C.O's . By June 2003, about 1,515 card phone booths were installed in different parts of the country . All card phones have access to nation wide dialing while 661 of them have international direct dialing facility. Due to better and easy public accessibility to telephone this card phone service has become popular in the country . A massive program of installing card phones has been taken to cover all thanas and rural growth centres of the country.

2.3 Telegraph Services :

Telegraph system, the oldest means of telecommunication service, is losing importance gradually due to introduction of more modern telecommunication systems . In the fiscal year 2002-2003, the total number of domestic telegram messages were 282,042 and that of international telegram was 36,516 Number of Telegraph Offices were 849. A comparison of year wise telegram messages are shown in Table-4.

Table - 4
Year wise Telegram Messages.

Year	No. of National Messages	No. of International Messages
1998-1999	759,537	108,309
1999-2000	440,488	72,082
2000-2001	726,766	106,468
2001-2002	641,378	55,934
2002-2003	282,042	36,516

2.4 Telex Service :

The first digital Telex exchange in Bangladesh was established in May 1981. At the end of the fiscal year 2001-2002, the total line capacity of the telex exchanges was 2,000 and the number of subscribers was 1,390 while at the end of the fiscal year 2001-2002 the total line capacity of the telex exchanges was 2,000 and the number of subscribers was 1,230. Introduction of FAX and other modern systems has rendered the growth of telex service declining.

2.5 GENTEX and Bureau Fax Service :

GENTEX service was introduced in 1989 and later on Bureau fax service was introduced. The number of offices providing GENTEX services are 135. Through this service the telegraph offices are inter linked.

2.6 Nation Wide Dialing (NWD) Services :

In Bangladesh Nation-wide long distance telephone dialing system was first introduced in 1983 employing NEAX 61E version of NEC exchange to link all the major cities of the country. Before that there were Subscribers Trunk Dialing (STD) services based on Analog EMD toll switching system to link only a few cities of the country. By June, 2003; 236 stations including all 64 district headquarters and 172 Upazillas/ Growth centres were brought under direct dialing system. Total 33,781 NWD circuits were working by June, 2003. Details about the circuits are given in Table -5.

Table-5
Capacity & Working Circuits in the Trunk Automatic Exchanges (TAX's) as on 30 June 2003

Name of TAX	Capacity					Working Circuits					Total	
	NEC	AI catel	ZTE	Erric-sion	S-12	NEC	AI catel	ZTE	Erric-sion	S-12	Capa-city	Working
Dhaka	10861	7768	-	11500	182	4369	7752	-	7200	-	30311	19321
Chittagong	1603	4080	-	-	-	320	4080	-	-	-	5683	4400
Khulna	2509	3120	-	-	-	218	2760	-	-	-	5629	2978
Bogra	-	3840	-	-	-	-	2708	-	-	-	3840	2708
Barisal	-	-	2100	-	-	-	-	1800	-	-	2100	1800
Kushtia	-	-	840	-	-	-	-	684	-	-	840	684
Comilla	-	-	1080	-	-	-	-	1080	-	-	1080	1080
Mymensing	-	-	-	-	5460	-	-	-	-	810	5460	810
GRAND TOTAL	14973	18808	4020	11500	5642	4907	17300	3564	7200	810	54,943	33,781

2.7 Manual National Trunk Service :

Direct Manual Trunk Circuits working with Dhaka are shown in the Table 6.

Table-6

Region	Circuits in 30 June, 2002	Circuits in 30 June, 2003
Dhaka	15	15
Chittagong	11	11
Khulna	16	16
Rajshahi	10	07
Total	52	49

2.8 Operators Trunk Dialing (OTD) Service :

This service has been introduced recently in all the upazillas to get access to the upazillas by direct dialing to the OTD numbers connected in upazillas where there is no automatic telephone exchange. In this system one or two telephone numbers of district automatic telephone exchange are extended up to upazilla level through UHF radio links. The telephone operators of the manual telephone exchanges can, through these numbers, connect subscribers of the upazilla with any subscribers of other auto exchanges of the country by dialing respective NWD codes.

2.9 Transmission System in Bangladesh :

Bangladesh is a riverine country, as the country's long distance transmission systems are mainly composed of microwave, UHF and VHF radio links. The use of optical fibre is still limited within city areas for interconnecting local exchange and Remote Switching Units (RSU) in Multi Exchange Networks and also for interconnections between switching exchanges and microwave stations. BTTB major microwave radio links, as listed in Table-7 are shown in Figure.1

Table-7
Major Backbone Microwave Links as on 30th June, 2003.

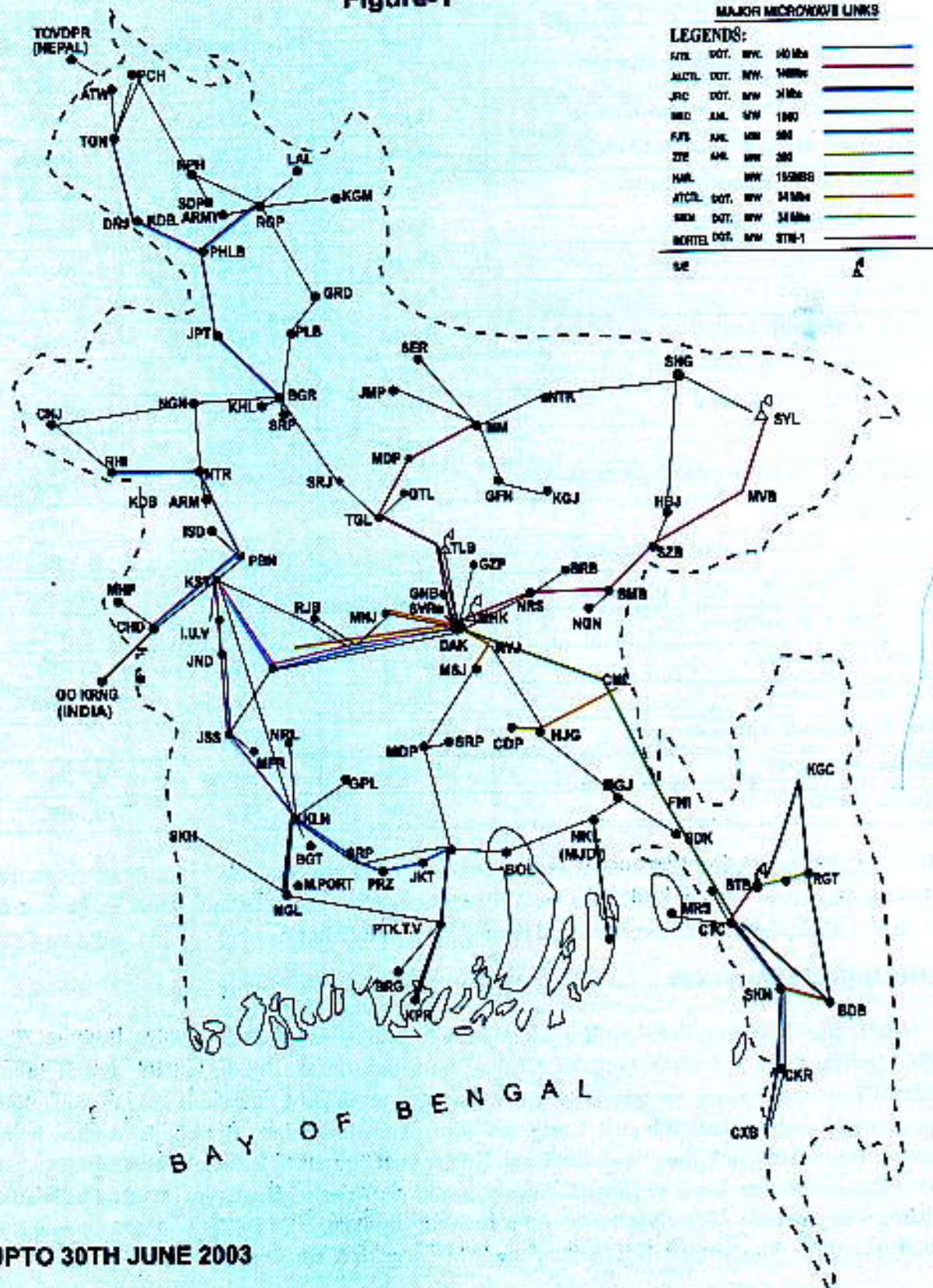
Link	Type	Radio Channel Capacity	Make
Dhaka-Comilla-Feni-Chittagong	Analog	1800	NEC
Dhaka -Faridpur- Magura- Kushtia-Khulna	Digital	140 Mb/s	Fujitsu
Dhaka -Faridpur-Magura-Kushtia-Khulna	Digital	STM-1	Nortel
Dhaka - B. Baria-Moulavibazar-Sylhet	Digital	140 Mb/s	Alcatel
Dhaka -Tangail-Mymensingh	Digital	140 Mb/s	Alcatel
Dhaka- Munshigonj	Digital	34 Mb/s	Alcatel
Dhaka - Manikgonj	Digital	34 Mb/s	Alcatel
Comilla - Hajigonj- Chandpur	Digital	34 Mb/s	Alcatel
Bogra-Joypurhat-Phulbari-Dinajpur-Thakoregaon	Analog	960	Fujitsu
Rajshahi -Natore- Chuadanga	Analog	960	Fujitsu
Bogra -Phulbari- Rangpur	Analog	960	Fujitsu
Bogra- Naogaon- Natore- Pabna-Rajshahi	Digital	155 Mb/s	Nortel
Khushtia- Chuadanga	Analog	960	Fujitsu
Chittagong - Satkania- Chiringha- Cox'sbazar	Digital	155 Mb/s	Harris
Chittagong -Betunia	Digital	140 Mb/s	Alcatel
Chittagong - Cox's Bazar	Digital	34 Mb/s	JRC
Betunia - Rangamati	Analog	300	ZTE
Satkania- Bandarban	Digital	155 Mb/s	Harris
Barisal -Patuakhali -Khepupara	Digital	34 Mb/s	JRC
Khulna - Monglaport	Digital	34 Mb/s	JRC
Khulna- Barisal	Digital	34 Mb/s	JRC

All Upazilla Headquarters (the smallest administrative units) are connected with their respective district headquarters through UHF links most of which are now digital radio systems. Also some of the district headquarters are interconnected through digital UHF links.

2.10 Optical Fibre Link :

High capacity Optical Fibre System with Spur link is in operation in the country from the year 1998. Optical fibre Networks between Dhaka-Chittagong, Dhaka-Brahmanbaria, Lakshmipur-Maizdi-Choumohani-Feni, Kushtia-Meherpur-Chuadanga & Bogra-Panchagarh (Along with Spur link Rangpur-Nilphamari, Rangpur-Kurigram, Rangpur-Lalmonirhat, Netrokona-Mymensingh-Sherpur, Pabna-Sirajgonj, Rangamati-Betunia, Khulna-Satkhira) have been completed by the June, 2003. The installation work of Optical Fibre networks between Dhaka-Bogra & Brahmanbaria-Sylhet are in progress. After completion of this networks by June, 2004 BTTB will have a complete backbone optical fibre network from Chittagong to Panchagarh & Dhaka to Sylhet.

Figure-1



UPTO 30TH JUNE 2003

2.11 International Telecommunication :

To meet the existing & future demand of overseas traffic, BTTB is continuously trying to increase number of international circuits with other countries. By June, 2003 BTTB, through four Satellite Earth Stations in Betbunia, Talibabad, Mohakhali & Sylhet (Table-11) established 3,730 international direct circuits with 37 operators of 26 countries and transit circuits with 171 countries shown in table 8 & 9.

Table-8
Overseas Circuits Arrangement of Bangladesh as on June, 2003.

Sl No	County	Voice Circuit					VFT Data CCT		
		BTB E/S	TBD E/S	MHK E/S	SYL E/S	M/W	Total	VFT	Data
1.	Australia	-	-	58	-	-	58	-	-
2.	Bahrain	15	-	-	-	-	15	-	-
3.	Canada	-	-	81	-	-	81	-	* 2/2 Mbps
4.	China	-	-	08	-	-	08	-	-
5.	France	-	-	28	-	-	29	-	1
6.	Germany	-	-	30	-	-	30	-	-
7.	Hongkong	60	-	27	-	-	88	1	1
8.	India(Cal)	-	-	29	-	88	117	1	-
	India (Delhi)	-	-	28	-	-	28	-	2
9.	Indonesia	-	-	08	-	-	08	-	-
10.	Italy	-	-	29	-	-	29	1	-
11.	Japan(KDD)	-	-	169	-	-	169	1	-
	Japan(ITJ)	08	-	-	-	-	08	-	-
12.	Korea(KT)	-	-	60	-	-	60	-	-
	Korea(Dacom)	-	-	60	-	-	60	-	-
13.	Kuwait	30	-	-	-	-	30	-	-
14.	Malaysia	-	-	58	-	-	58	-	-
15.	Nepal	-	-	-	-	12	12	-	-
16.	Netherland	-	-	12	-	-	12	-	-
17.	Oman	46	-	-	-	-	46	-	-
18.	Pakistan (KR)	29	-	-	-	-	29	1	-
19.	Qatar	30	-	-	-	-	30	-	-
20.	Singapore	89	-	60	-	-	149	1	3
	Star Hub(Singapore)	-	-	29	-	-	29	-	-
21.	S. Arabia	150	-	597	-	-	747	-	-
22.	Srilanka	-	-	8	-	-	08	-	-
23.	Thailand	-	-	16	-	-	16	-	-
24.	UAE	-	-	356	-	-	356	-	-
25.	UK (BT)	-	179	119	120	-	418	3	-
	BT IPLC	-	-	-	-	-	00	-	07
	GDXC UK	-	-	89	-	-	89	-	-
	UK (C & W)	-	-	58	-	-	58	-	-
	C&W (Internet)	-	-	-	-	-	30	-	* 4/2 Mbps
	NFG UK	-	-	29	-	-	29	-	-
26	USA(MCD)	-	-	238	-	-	238	-	-
	USA(AT&T)	-	119	119	-	-	238	-	-
	USA(Sprint)	-	-	140	-	-	140	-	-
	USA (Startec)	-	-	30	-	-	30	-	-
	USA (ION)	-	-	89	-	-	89	-	-
Total		457	328	2,725	120	100	3,730	10	14

Table-9
Growth of International Voice

Year	Circuit
June, 1999	2,081
June, 2000	2,302
June, 2001	2,767
June, 2002	3,327
June, 2003	3,730

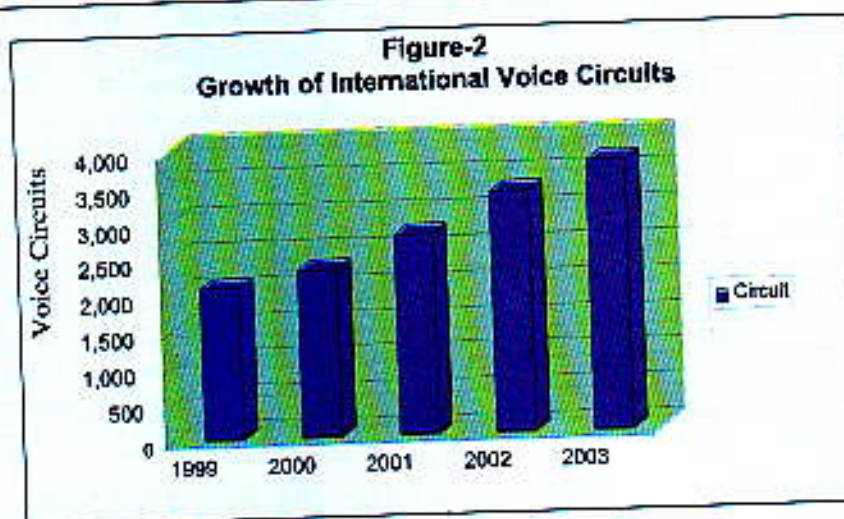
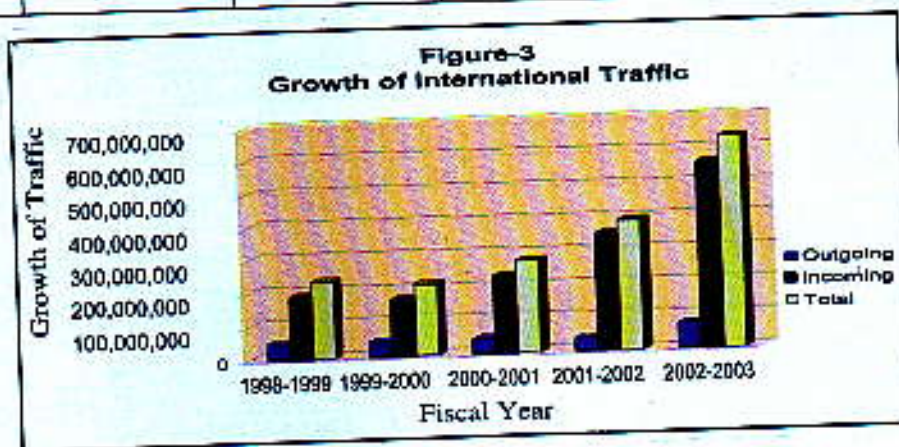


Table-10
Paid minutes of International

Year	1998-1999	1999-2000	2000-2001	2001-2002	2002-2003
Outgoing	45,112,586	43,917,940	43,559,021	39,269,674	76,553,864
Incoming	187,284,651	173,292,576	235,700,284	355,504,881	564,005,295
Total	232,397,237	217,210,516	279,259,305	394,774,555	640,559,159



International Leased Circuits.

BTTB's International Leased Circuits directly link customer to a designated overseas location around the globe. A fixed monthly rate makes this service particularly cost effective for customers.

International telephone call facilities of BTTB.

1) International Direct Dialing (IDD)

Subscribers may call overseas directly without operator assistance. Rates are calculated in 30 seconds units. BTTB also offers economy rate (25% discount) for late night & weekly & other Govt. holidays besides its normal rate .

Normal call charge	Discount call charge
From. 02-01 GMT to 14-00 GMT	From. 14-01 GMT to 02-00 GMT & Weekly and Government holidays.

2) International Operator Assisted Call.

i) Person to Person Call :

An operator assisted service, for placing calls to a specific person. Charges do not begin acquiring until the desired party is reached and the caller is not billed if the party does not answer. BTTB's standard rate applies for the first three minutes and additional two minute charges for P.P. facilities.

ii) Telephone to Telephone call :

An operator assisted service for placing call to a specific telephone number is also available. The minimum charge for this call is three minutes .

Telecommunication Satellite & Earth Stations:

A single telecommunication satellite in geo-stationary orbit 36,000 Kilometers above the earth can provide telecom services to one-third of the entire world. Advanced digital transmission technologies and more sophisticated use of radio wave in recent years have facilitated large volume of satellite transmission around the globe. To facilitate transmission of incoming & outgoing overseas calls through satellite BTTB has established 4 Earth stations till to date .The first earth station was installed at Betbunia near to Chittagong in 1975. At present 462 (voice 457+VFT 2+ Data 3) International circuits with 8 countries are working through this earth station. The second earth station was installed in 1982 at Talibabad. At present 331 (voice 328+ VFT 3) international circuits with 2 countries are working through this earth station. The third earth station which consists of largest International circuit facilities was installed in 1994 at Mohakhali. Now 2,741 (voice 2,725+ VFT 5+ Data 11) international circuits with 20 countries are working through this earth station. At last the fourth earth station has been established at Sylhet in 1995 by British Telecom assistance at to facilitate only BT-Sylhet traffic. 120 International circuits are working through this earth station. Moreover 100 Terrestrial International circuits between 2 countries are working via Microwave. These earth stations operating with different INTELSAT satellites located in the Indian Ocean Region .

Table-11.

Name of E/S	Standard	Carrier	Working with INTELSAT
Betbunia	A	IDR	60° E IOR
Talibabad	B	IDR	60° E IOR
Mohakhali	A	IDR	64° E IOR
Sylhet	F3	IDR	62° E IOR

International Switching Centres :

International switching centres are mainly responsible for immediate selecting and connecting the appropriate circuit for incoming calls and sending the necessary information to the receiving country's switch to complete the calls. At present BTTB has three international switching centres (ISC) of which two are located at Moghbazar & one at Mohakhali. ISCs of Moghbazar is of type NEAX-61K & NEAX-61E while ISC at Mohakhali is of NEAX-61E type.

International maritime Satellite Communication :

INTELSAT satellites links with fixed Earth Stations for overseas communication while INMARSAT (International maritime Satellite Communication) provides mobile communication services for ships and aircrafts. INMARSAT service is the mobile satellite communication system that links the mobile earth station on vessel or aircrafts with land earth stations around the world via INMARSAT satellite in geo-stationary orbits 36,000 kilometer above the equator. This service makes it possible to get in touch with virtually any location around the world 24 hours a day with high quality communications ranging from telephone & telex to facsimile and data communications. Recent development of portable terminal has made it possible for customers to take advantage of INMARSAT service from remote locations also. Till to date BTTB has five INMARSAT-A Terminals which are operating through one LES (Land Earth Station) located in Jeddah. Besides this according to IMN number allocated by BTTB, there are two numbers B type (Land Mobile), 34 numbers C type (Maritime Mobile) and 5 numbers Mini-M type Terminal working in commercial basis.

Internet facility :

BTTB is now providing Internet access services. The services include dial in access service, leased access services for enterprises, access for local ISPs, mail, Web hosting and .bd name registration and DNS services. It has now a backbone connectivity of (2+2) Mbps with Teleglobe Canada and another (4+2) Mbps backbone with C&W, UK.

International Correspondence :

International Telecommunication also depends on countries sharing their information with the rest of the world. Close working relationships among different international organization and a spirit of international co-operation are essential in this regard. By strengthening relationship with various international organizations BTTB aims to contribute to the advancement of International telecommunication in Bangladesh. In this context BTTB maintains relation with International Regional groups likewise International Telecommunication Union (ITU), Intelsat, INMARSAT APT etc. for sharing the service facilities and responding to the request of mutual interest.

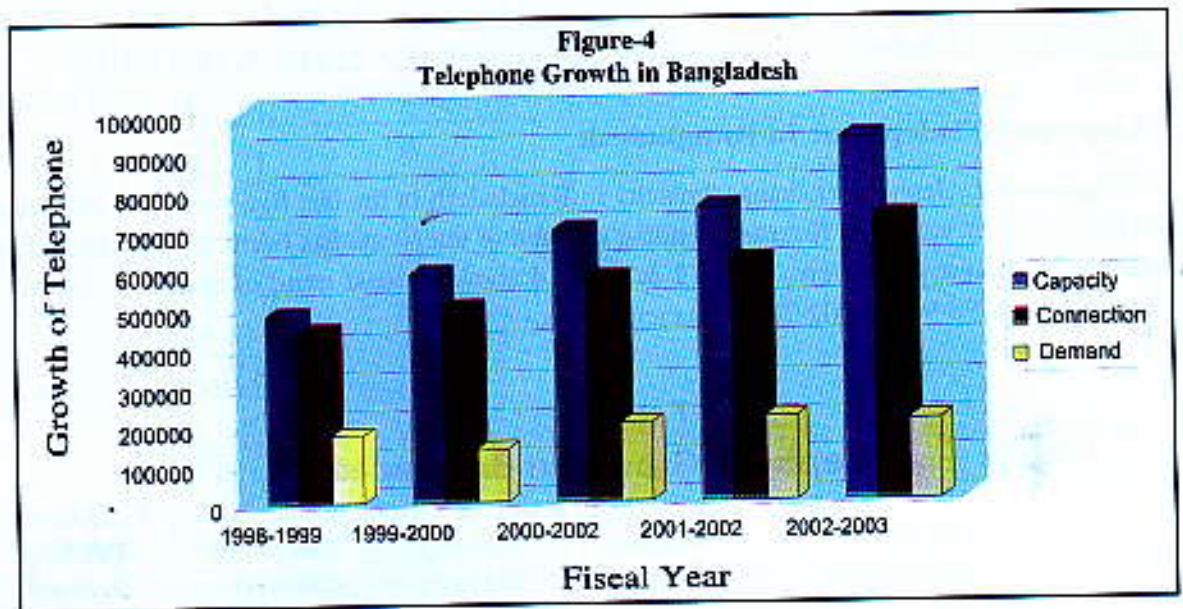
3.0 PLANNING AND DEVELOPMENT OF TELECOMMUNICATION SERVICES.

3.1 Growth of Telephone in Bangladesh

The growth of telephone exchange capacity in Bangladesh in the last five years was on average only 89,000 lines per year. The recorded pending demand of telephone has been increasing at a faster rate than the telephone expansion. Table-12 & Fig.- 4 show the past trend of telephone growth in Bangladesh from 1998-99 to 2002-2003 financial years.

Table-12
Telephone Growth in Bangladesh

Year	Type of Exchange	Number Exchange	Exchange Capacity	Telephone Connection	Pending Demand
1998-1999	Manual	479	44,301	36,341	17,394
	Auto(Analog)	108	141,520	129,796	75,842
	Auto(Digital)	44	288,501	266,831	78,860
		631	474,322	432,968	172,096
1999-2000	Manual	476	45,845	39,045	21,769
	Auto(Analog)	102	139,420	115,606	18,220
	Auto(Digital)	65	3,94,529	336,652	95,125
		643	579,794	491,303	135,114
2000-2001	Manual	440	41,815	34,672	18,903
	Auto(Analog)	91	1,07,720	70,690	18,307
	Auto(Digital)	131	5,39,825	4,59,518	1,61,900
		662	6,88,920	5,64,880	1,99,110
2001-2002	Manual	416	39,293	32,449	21,997
	Auto(Analog)	84	55,598	45,182	10,484
	Auto(Digital)	168	6,51,187	5,28,300	1,78,630
		668	7,46,078	6,05,931	2,11,111
2002-2003	Manual	359	33,260	26,045	24,017
	Auto(Analog)	53	18,820	13,640	6,592
	Auto(Digital)	240	868,913	677,036	171,243
	Total	652	920,993	716,721	201,852



3.2 List of Projects for 2002-2003.

Following Projects were implemented under BTTB during the fiscal year 2002-2003.

1. Greater Dhaka Telecom. Network Improvement (Phase-II).
2. 2,66,000 Lines Digital Telephone Installation (including conversion).
3. Installation of high capacity Optical fibre System between Dhaka-Chittagong including spur transmission links.
4. Installation of Digital Telephone Exchanges at Sreepur, Kapasia, Kaligonj, Kaliakoir & Tongi Upazilla H/Q and Growth Centres at Board Bazar, Konabari & Rajendrapur under Gazipur district.
5. Installation and Expansion of Digital Telephone Exchanges in various districts of Bangladesh.
6. Establishment of International Telecom. System through Submarine Cable.
7. Installation of Digital Telephone Exchanges at Mujib Nagar Complex in Meherpur district.
8. Introduction of Internet Service in all districts on emergency basis.
9. Installation and replacement of Radio Links in different upazillas of Bangladesh.

3.3 Installation of Digital Telephone lines under BTTB in year 2000-2003.

Table-13

Sl. No	Name of the project/Programme	Description		Total Installed Capacity
1	Greater Dhaka Telecom Network Improvement Project (Phase-II)	Complete rehabilitation of fire damaged 12,000 lines capacity Chawkbazar exchange (under JBIC loan)		Rehabilitation only
2	2,66,000 Lines digital telephone installation (including conversion of 76,000 lines analog telephone)	Gulshan	12,100	
		Mirpur	10,000	
		Moghbazar	14,000	
		Motijheel	17,000	
		Sher-e-Banglanagar	10,000	
		Uttara	14,000	
		Sub-Total	77,200	
		Agrabad	7,000	
		Khulna	7,300	
		Rajshahi	7,500	
		Sylhet	7,000	
	Project Total			106,600
3	Installation of Digital Telephone Exchanges at Sreepur, Kapasia, Kaligonj, Kaliakoir & Tongi Upazilla H/Q and Growth Centres at Board Bazar, Konabari & Rajendrapur under Gazipur district	Tongi		2,600
	Project Total			2,600

Sl. No	Name of the project/Programme	Description	Total Installed Capacity		
4	Installation and Expansion of Digital Telephone Exchange in various districts of Bangladesh	Subscriber lines in main exchanges : Manikgonj-3000, Netrokona-2000, Kushtia-2000, Lalmonirhat-2000, Munshigonj-3000, Bagerhat-3000, Sirajgonj-2000, Jhalakathi-2000, Khagrachari-2000, Lakshmipur-2000, Madaripur-2000, Kishorgonj-2000, Gopalganj-2000, Barisal-5000, Iswardi-1000, Shariatpur-1000, Sunamgonj-3000, Habigonj-3000.			
		Sub- Total (Main exchanges)	42,000		
		Subscriber lines in Remote exchanges			
		Narsingdi	Shibpur Ghorasal	256 512	
		Gaibandha	Gobindagonj	256	
		Natore	Lalpur Hatgurudash	256 512	
		Nawabgonj	Shibgonj Rohanpur	256 256	
		Bogra	Gaboli Nandigram Sherpur	256 256 512	
		Munshigonj	Tongibari	256	
		Pirojpur	Mothbaria Najirpur	512 256	
		Feni	Sonagazi Dagonbhuyan Chagalnaiya	256 512 512	
		Jessore	Monirampur	512	
		Nilphamari	Domar	256	
		Dinajpur	Parbatipur Banglahili	256 512	
		Jhenaidhah	Harinakunda	256	
		Kushtia	Daulatpur Kumarkhali	512 512	
		Magura	Mohammadpur	256	
		Comilla	Homna	256	
		Mymensingh	Mukttagacha	512	

Sl. No	Name of the project/Programme	Description		Total Installed Capacity
		Manikgonj	Daulatpur	256
			Shibalnya	256
			Singair	256
		Pabna	Bera	256
		Satkhira	Kalaroya	512
			Shamnagar	256
		Bhola	Lalmohan	512
		Joypurhat	Pachbibi	512
		Jhalakathi	Nalchiti	256
		Bagherhat	Monglaport	512
			Mongla	512
		Naogaon	Mohadebpur	256
		Faridpur	Sodarpur	256
		Rajbari	Pangsha	256
		Chuadanga	Jibannagar	512
		B. Baria	Nabinagar	512
		Sherpur	Nakla	256
			Nandibari	512
		Panchagarh	Tetulia	256
		Shariatpur	Goshalrhat	256
		Barguna	Patharghata	256
		Barisal	Muladi	256
			Bakergonj	256
			Babugonj	256
		Sunamgonj	Dharmapasha	256
		Kishoregonj	Tarail	256
		Patuakhali	Mirjagonj	256
		Jamalpur	Islampur	256
			Dewangonj	256
		Lakshimpur	Ramgonj	512
		Sub Total Remote Exchanges		19,456
Project Total				61,456
5	RR Programme for Installation of Remote exchanges at 92 Upa-zillas			2,556

3.4 Installation/ Expansion of Transmission Links

Table-14

Sl. No.	Name of Project	Name of Route/ Link	Means of System	Type of System	Bandwidth of Route / Link
1	266,000 lines Digital Telephone Installation	Manikgonj-Faridpur	MW	SDH	STM-1/ 155 MBPS
		Faridpur-Magura	MW	SDH	STM-1/ 155 MBPS
		Magura-Jessore	MW	SDH	STM-1/ 155 MBPS
		Jessore-Khulna	MW	SDH	STM-1/ 155 MBPS
		Magura-Jhenaidah	MW	SDH	STM-1/ 155 MBPS
		Kushtia-Pabna	MW	SDH	STM-1/ 155 MBPS
		Pabna-Natore	MW	SDH	STM-1/ 155 MBPS
		Natore-Rajshahi	MW	SDH	STM-1/ 155 MBPS
		Natore-Naogaon	MW	SDH	STM-1/ 155 MBPS
		Naogaon-Bogra	MW	SDH	STM-1/ 155 MBPS
		Rajshahi-Nawabgonj	MW	PDH	34 MBPS
		Bogra-Gobindagonj	MW	PDH	34 MBPS
		Gobindagonj-Gaibandha	MW	PDH	34 MBPS
		Jamalpur-Mymensingh	MW	PDH	34 MBPS
		Mymensingh-Gafargaon	MW	PDH	34 MBPS
Gafargaon-Kishoregonj	MW	PDH	34 MBPS		
Habigonj-Moulavibazar	MW	PDH	34 MBPS		
Sylhet-Sunamgonj	MW	PDH	34 MBPS		
2	Installation of a high capacity Optical Fibre System between Dhaka-Chittagong including spur transmission links				

Sl. No.	Name of Project	Name of Route/ Link	Means of System	Type of System	Bandwidth of Route / Link
3	Installation and Expansion of Digital Telephone Exchange in various districts of Bangladesh.	Chittagong-Satkania	MW	SDH	STM-1/ 155 MBPS
		Satkania-Bandarban	MW	SDH	STM-1/ 155 MBPS
		Satkania-Chiringa	MW	SDH	STM-1/ 155 MBPS
		Chiringa-Cox's Bazar	MW	SDH	STM-1/ 155 MBPS
		Madaripur-Shariatpur	MW	SDH	STM-1/ 155 MBPS
		Sadarpur-Faridpur	MW	SDH	STM-1/ 155 MBPS
		Faridpur-Rajbari	MW	SDH	STM-1/ 155 MBPS
		Bagerhat-Khulna	MW	SDH	STM-1/ 155 MBPS
		Khulna-Gopalganj	MW	SDH	STM-1/ 155 MBPS
		Gopalganj-Madaripur	MW	SDH	STM-1/ 155 MBPS
		Lakshmipur-Bhola	MW	SDH	STM-1/ 155 MBPS
		Barisal-Bhola	MW	SDH	STM-1/ 155 MBPS
		Bogra-Joypurhat	MW	SDH	STM-1/ 155 MBPS
		Barisal-Jhalakathi	MW	SDH	STM-1/ 155 MBPS
		Jhalakathi-Pirojpur	MW	SDH	STM-1/ 155 MBPS
		Pirojpur-Bagerhat	MW	SDH	STM-1/ 155 MBPS
		Jessore MW-Jessore Xge.	OFC	SDH	STM-1/ 155 MBPS
		Sirajgonj-Shahjadpur	OFC	SDH	STM-1/ 155 MBPS
		Shahjadpur-Pabna	OFC	SDH	STM-1/ 155 MBPS
		Mymensingh-Netrokona	OFC	SDH	STM-1/ 155 MBPS
		Narsingdi MW-Narsingdi Xge	OFC	SDH	STM-1/ 155 MBPS
		Rangpur-Lalmonirhat	OFC	SDH	STM-1/ 155 MBPS
		Rangpur-Kurigram	OFC	SDH	STM-1/ 155 MBPS
		Barguna MW-Barguna Xge	OFC	SDH	STM-1/ 155 MBPS
Kishoregonj MW-Kishoregonj Xge.	OFC	SDH	STM-1/ 155 MBPS		

3.5 Programme for Expansion of Transmission Systems in Bangladesh.

Long distance transmission systems in Bangladesh are mainly composed of microwave, UHF & VHF radio links. The optical Fibre links are used in some cities only. BTTB has intensified its project in order to improve the quality and quantity of the national long distance transmission backbone network. Transmission routes under implementation will introduce ring formation in some areas of backbone transmission networks, which will enhance better system reliability within the respective transmission ring. According to the BTTB's projects under implementation, upto district level all analog transmission links will be replaced by digital links. Some will have digital PDH (Plesiochronous Digital Hierarchy) multiplexing version and some will have digital SDH (Synchronous Digital Hierarchy) multiplexing arrangement. Inter-district Optical Fibre transmission links have already been installed in few routes. Dhaka-Chittagong Optical Fibre Cable route with bandwidth of STM-16 has come into operation.

Introduction of Optical Fibre transmission routes in the country will open up new horizon for implementation of broadband telecommunications transmission system. A list of major transmission routes/ links under implementation through different projects are given in Table-15 :

Table - 15
Programs undertaken for Installation of new Major Digital
Transmission Links

Sl. No.	Name of Project	Name of Route/ Link	Means of System	Type of System	Bandwidth of Route / Link
1.	2,00,000 lines digital telephone installation in Bangladesh.	Dhaka - Bogra routes (via Gazipur, Mymensingh, Tangail & Sirajgonj)	OFC (Optical Fibre Cable)	SDH	622 Mbps
2.	Installation & Expansion of Telephone Exchanges at different district headquarters (under chinese Supplier's Credit)	Chuadanga - Meherpur	OFC	SDH	155 Mbps
3.	"	Meherpur - Kushtia	OFC	SDH	155 Mbps
4.	"	Thakurgaon - Panchagarh	OFC	SDH	155 Mbps
5.	"	Dinajpur - Saidpur	OFC	SDH	155 Mbps
6.	"	Rangpur - Thakurgaon	OFC	SDH	155 Mbps
7.	"	Rangpur - Lalmonirhat	OFC	SDH	155 Mbps
8.	"	Rangpur - Saidpur	OFC	SDH	155 Mbps
9.	"	Saidpur - Nilphamari	OFC	SDH	155 Mbps
10.	"	Rangpur - Kurigram	OFC	SDH	155 Mbps
11.	"	Rangpur - Palashbari	OFC	SDH	622 Mbps
12.	"	Bogra - Palashbari	OFC	SDH	622 Mbps
13.	"	Sirajgonj - Shahjadpur	OFC	SDH	155 Mbps
14.	"	Shahjadpur - Pabna	OFC	SDH	155 Mbps
15.	"	Mymensingh - Sherpur	OFC	SDH	155 Mbps
16.	"	Mymensingh - Netrokona	OFC	SDH	155 Mbps
17.	"	Satkhira - Khulna	OFC	SDH	155 Mbps
18.	"	Rangamati - Betbunia	OFC	SDH	155 Mbps
19.	"	Bogra - Joypurhat	MW	SDH	155 Mbps
20.	"	Satkania - Bandarban	MW	SDH	155 Mbps
21.	"	Chittagong - Satkania	MW	SDH	155 Mbps
22.	"	Satkania - Chiringa	MW	SDH	155 Mbps
23.	"	Chiringa - Cox's bazar	MW	SDH	155 Mbps
24.	Installation of digital telephone Exchanges in four Upazilla's under Gazipur district	Gazipur - Kaliakair	MW	PDH	34/8 Mbps
25.	"	Gazipur - Kaligonj	MW	PDH	34/ 8 Mbps
26.	"	Gazipur - Kupasia	MW	PDH	34/ 8 Mbps
27.	"	Gazipur - Sreepur	MW	PDH	34/ 8 Mbps

3.6 Installation of Internet & Data Communication facilities through PSPDN.

Bangladesh Telegraph and Telephone Board has implemented a project for installation and commissioning of a Packet Switched Public Data Network (PSPDN). BTTB has introduced Internet Services for the subscribers. BTTB has plans to enhance the facilities available in the existing DDN (Digital Data Network). BTTB is gradually expanding its data network to act as facility provider to private ISPs (Internet Service Providers) in order to contribute fast growing of internet services and IT (Information Technology) sector in Bangladesh. During the fiscal year 2002-2003, BTTB has made expansion of PSPDN, DDN and Internet Services through implementation of projects namely Greater Dhaka Telecom. Network Improvement Project (Phase-II) and introduction of Internet Services in all districts on emergency basis project and through implementation of some programs under maintenance budget. Internet Services has been introduced by BTTB in all district towns and some Upazilla towns of Bangladesh by June, 2003. Enhanced network facilities has also been provided to ISPs.

4.0 FINANCIAL STATEMENT OF BTTB.

4.1 Revenue Income for 2002-2003.

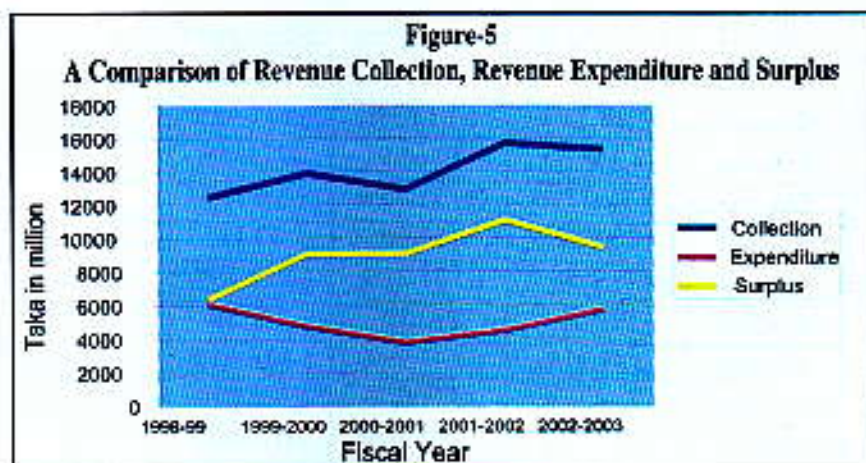
Actual revenue collection for the financial year 2002-2003 was Tk. 15,448.00 million against the budgeted revenue of Tk. 16,000.00 million. There was a shortage of Tk. 552.00 million from the budgeted amount. This collected revenue was 2.4% less than the collected revenue of 2001-2002 financial year. In the year 2002, Telephone installation & call charges had been reduced by 40% and that of Internet Charges by 50%. In spite of substantial reduction of tariff, BTTB could achieve almost similar level of revenue of the previous year.

A comparison of revenue collection, expenditure & surplus for the last five years from 1998-99 to 2002-2003 are shown in Table-16 and Figure - 5.

Table-16
A Comparison of Revenue Collection, Revenue Expenditure and Surplus
(Taka in million)

Year	Revenue collection	Expenditure	Surplus
1998-1999	12542.48	6167.84	6374.64
1999-2000	14006.76	4864.82	9141.94
2000-2001	13052.19	3904.54	9147.65
2001-2002	15830.52	4635.41	11195.11
2002-2003	15448.00	5884.31	9563.69

1 US Dollar = Tk. 58.00



4.2 Revenue Collection.

The statement showing billed amount, revenue collection and receivables for the year 2001-2002 and 2002-2003 are shown in Table-17. Table -18 shows the service wise revenue collection for the year 2001-2002 and 2002-2003. Service wise revenue collection along with the percentage of yearly increase/ decrease of such collections for the periods from 1998-99 to 2002-2003 are shown in the Table-19 and Fig.- 6.

Table -17
Revenue Collection and Revenue Receivable.

	Taka in Million	
	2001-2002	2002-2003
Receivable amount as on opening day of fiscal year	5,605.27	6475.46
Bills issued during the fiscal year	16,700.70	14031.97
Total Receivable amount during the year	22305.97	20507.43
Actual Receipt in the year	15830.51	15448.00
Receivable amount carried over to the opening day of next	6475.46	5059.43

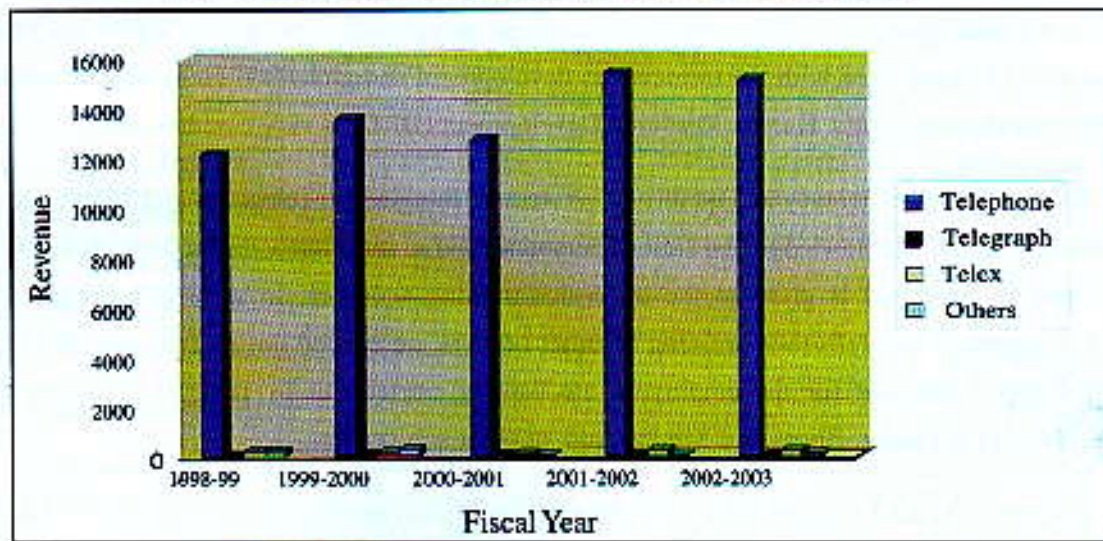
Table-18
Service wise Distribution of Revenue Collection in 2001-2002 and 2002-2003
(Taka in Million)

Name of Service	2001-2002		2002-2003	
	Taka in Million	Percentage of Total	Taka in Million	Percentage of Total
Telegraph	08.09	0.05%	06.84	0.04%
Telephone	15385.30	97.19%	15139.87	98.01%
Telex	228.19	1.44%	212.55	1.38%
Others	208.93	1.32%	88.74	0.57%
TOTAL	15830.51	100%	15448.00	100%

Table-19
Rate of Change of Year wise Revenue Collection Against Different Service
(Taka in Million)

Service	Item	1998-1999	1999-2000	2000-2001	2001-2002	2002-2003
Telegraph	Revenue	12.27	12.07	10.54	08.09	06.84
	Growth	(-) 18.23%	(-) 1.63%	(-) 12.68%	(-) 24%	(-) 15.44%
Telephone	Revenue	12,138.30	13,564.91	12733.08	15385.30	15139.87
	Growth	(+) 2.22%	(+) 11.75%	(-) 6.13%	21%	(-) 1.6%
Telex	Revenue	200.28	157.66	87.18	228.19	212.55
	Growth	(+) 98%	(-) 21.28%	(-) 44.70%	162%	(-) 6.86%
Others	Revenue	191.64	272.12	221.38	208.93	88.74
	Growth	(-) 47.31%	(-) 41.99%	(-) 18.65%	(-) 6%	(-) 57.52%
Total	Revenue	12,542.48	14,006.76	13052.19	15830.52	15448.00
	Growth	(+) 0.72%	(+) 11.67%	(-) 6.81%	22%	(-) 2.4%

Figure-6
Year Wise Revenue Collection Against Different Services



4.3 Annual Development Programme (ADP) for Capital Investment.

Every year capital is invested through national Annual Development Programme (ADP) of the government for the projects which creates fixed assets for BTTB. The annual Development Programme for the year 2002-2003 and the actual amount spent under this programme for eighteen projects are furnished in Table-20.

Table - 20

BTTB Investment in 2002-2003 through ADP on 18 (Eighteen) projects :
(Taka in Million)

Item	Local Currency	Foreign Currency	Total
Allotment	4233.86	2170.00	6403.86
Expenditure	4041.69	2047.60	6089.28
Surplus	192.17	122.40	314.58

5.0 HUMAN RESOURCES DEVELOPEMENT (HRD) & SOCIAL WELFARE ACTIVITIES.

5.1 Number of Revenue Posts in BTTB.

There are 20,527 different categories of revenue posts (working position) in BTTB which are classified into following four service classes.

Class I Service :	772	Posts
Class II Service :	535	Posts
Class III Service :	15,013	Posts
Class IV Service :	4,207	Posts
Total :	20,527	Posts

5.2 HRD activities in BTTB.

As the basic operator for telephony, overseas carrier and transmission network BTTB has enormous responsibility to keep pace with the tremendous development and globalization of telecommunication and information technology. Human Resource Development (HRD) is very essential for this purpose.

To enhance the efficiency and quality of services of Bangladesh Telegraph and Telephone Board, to update the technical knowledge and skill of personnel and to install new technology in the Telecom. sector special emphasis is given to the in-service training activities. In service training for newly recruited engineers and refresher training of other officers are carried out in Telecom. Staff College (TSC), Gazipur and that for the employees are usually carried out in Telecom. Training Centres (TTCs) located at Dhaka, Bogra and Khulna and in other sub-centres.

The Telecom. Staff College (TSC) at Gazipur (near Dhaka) established in 1987 with ITU & UNDP assistance has already put its marks as one of the leading institutes for telecom. training in this region. It has all the infrastructural facilities and equipment including resource personnel to establish itself as the regional training centre.

5.2.1 Courses conducted in TSC, Gazipur (2002-2003)

Sl. No.	Name of Course	Participantes	Duration of the Course
Regular Course			
1.	ADE / Batch, 2001	28	02 Years
Refreshment Course			
1.	Optical Fiber Communications	14	06 Days
2.	Computer Orientation (COT)	04	10 Days
3.	Shanghai Bell Switching	12	10 Days
4.	Earthing (ER)	15	02 Days
5.	SDH/ PDH	18	01 Days
6.	B-Level Switching	16	45 Days
7.	Basic Operator Mtce. (1st Batch)	21	15 Days
8.	Basic Operator Mtce. (2nd Batch)	28	40 Days

5.2.2 Training in TTCs :

Training activities of Telecom. Training Centres at Dhaka, Khulna, Bogra and other Sub-centres for the year 2002-2003 are as follows :-

Category of Course	No. of Courses	No. of Participants	Man-month
Regular Course	10	569	3,791.00
Refresher Course	06	329	987.00
Special Course	03	58	18.86
Total	19	956	4,796.86

5.2.3 Foreign Training :

82 Officers and officials of Bangladesh T&T Board received foreign training in about 16 different Courses in Telecom. and Relevant subjects. Course held during 2002-2003 fiscal year in Canada, Chin, India, Japan, Malaysia, Philipines and South Africa, Turkey and UK. The foreign training activities for the year 2002-2003 are described as follows :-

Sl No.	Name of Course	No. of Participants	Enterprise agencies	Duration
1.	B-level Switching System	20	CMEC, China.	08 days
2.	Digital Switching System & Data Communication	04	Netas, Turkey	63 days
3.	Advanced Training on Switching & Transmission Equipment	11	Netas, Turkey	63 days
4.	Advanced Telecom. Outsite Plant Engineering	01	JICA, Philippine	26 days
5.	Traffic Accounting & Revenue Spectrum.	03	CTO, Canada	13 days
6.	Operation & Maintenance of SDH	03	CTO, Malayasia	12 days
7.	Group training course on International Optical Fiber Sub-marine Cable system.	01	Japan	47 days
8.	TDMA/ DRMASS System	02	CTO, South Africa	05 days
9.	ICT (Info Communication Executive seminar)	02	JICA, Japan	14 days
10.	A-level switching	10	CMEC, China	95 days
11.	Microwave system	08	CMEC, China	21 days
12.	Rural communication & wireless IP technologies	01	APT, Japan	12 days
13.	BHN human development training programme	02	Japan	23 days
14.	Data Communication Network	07	CTO, India	12 days
15.	Digital network/ Planning & Management	04	CTO, London	12 days
16.	ATM/ SDH Transmission	04	CTO, London	12 days

5.2.4 Participation in foreign factory testing/ seminar/workshop/meeting :

43 Officers of Bangladesh T&T Board participated in 20 different types of factory testing/seminar/workshop / meeting abroad during 2002-2003.

5.3 Social welfare activities in Bangladesh T&T Board.

Bangladesh Telegraph and Telephone Board with its limited resources provides different facilities to the members of its staff.

Following sanctions made to meet-up several expenditures on welfare activities in the Bangladesh Telegraph and Telephone Board in the 2002-2003 fiscal year.

Sl No.	Head of Expenditures	Allocation & Actual Expenditure
1.	Sanction of benevolent fund to the employees of Bangladesh T&T Board.	Tk. 17,53,000.00
2.	Sanction of education fund for the dependents of Bangladesh T&T Board employees.	Tk. 9,50,000.00
3.	Sanction of grant to about 40 educational institutes including schools, colleges, mosques, madrasahs under Bangladesh T&T Board to meet-up partial need of their yearly budget.	Tk. 23,95,000.00
4.	Sanction of grant to the different Clubs, Associations, Recreation/ Cultural shows etc.	Tk. 10,000.00
5.	Sanction of grants for central sports including games as Volley ball, Cricket, Kabadi and other indoor games.	Tk. 3,00,000.00

End.