

CHAPTER VII

TRANSPORT AND COMMUNICATION*

SUBSTANTIAL progress was evidenced in the development of transport and communication facilities including roads during the Five Year Plans and the Annual Plans, in the State.

New roads and bridges were constructed and the existing ones were improved. The road length which was 1,00,786 in 1982 rose to 1,21,266 km (about 20% increase), in 1992. During the same period the surfaced roads which stood at 60,033 went up to 80,135 km (33.78% increase). Of the total 1,21,266 km road length that existed on 31st March 1992, the share of national highways and state highways was 1.65 percent and 9.31 percent respectively. Major district roads and other district roads constituted 14.89 and 2.62 percent respectively. The roads under the jurisdiction of Irrigation Department, T.D.B and Forest Departments were to the length of 7.74 percent, 24.74 percent and 2.13 percent respectively.

Together with expansion of road facilities, the facilities of railways, airways, waterways, post, telegraph, telephone etc. saw expansion, and these aspects are also discussed in this chapter.

National Highways

The National Highways are maintained by the State P.W.D out of the funds made available by the Central Government. The length of National Highway in the State in 1982 was 1,968 km which was increased to 1,997 km in 1992-93. Details of the seven National Highways in the State are as shown below:

* This chapter in the original volume is in part II, and the information here is in continuation of that chapter.

<i>National Highway No.</i>	<i>Name of the NH</i>	<i>Length in the State (in Kms.)</i>
4.	Madras - Kolar - Bangalore - Hubli - Belgaum - Pune - Bombay	700
4A.	Belgaum - Khanapur - Anmod - Panaji	84
7	Varanasi - Nagpur - Hyderabad, Kumool - Bagepalli - Bangalore - Hosur - Krishnagiri - Salem - Madurai - Kanyakumari.	128
9	Pune - Sholapur - Humnabad - Hyderabad - Vijayawada	75
13	Chitradurga - Hospet - Bijapur - Sholapur	390
17	Panvel - Panaji - Karwar - Kundapur - Udupi - Mangalore - Cannanore - Calicut - Trichur	300
48	Bangalore - Nelamangal - Kunigal - Hassan - Sakleshpur - Mangalore	320
Total		1,997

Under the Road Development Plan 1981 - 2000, the target fixed for the National Highway's length in Karnataka was 3,900 km. Now the State has only 6.8 percent of the total length of National Highways in the Country. And this length is less per 1000 sq.km of area when compared to Kerala and Tamilnadu. To make good the deficit, it is proposed to declare the following 13 roads as National Highways in the State.

<i>Sl.No.</i>	<i>Name of the road</i>	<i>Length in Km.</i>
1.	Gooty on NH-7 in Andhra Pradesh - Guntakal - Bellary - Hospet - Koppal - Gadag, Hubli - Karwar (to join NH-17)	400
2.	Bangalore - Mysore - Nanjangud - Gundlupet - Ooty Coimbatore (to join NH-17) in Tamilnadu	200
3.	Mysore - Shrirangapattana - Nagamangala - Chiknayakanahalli - Huliya - Hiriyur-Bellary-Siruguppa-Shahapur Gulbarga -Humnabad (to join NH-17)	332
4.	Tumkur - Arasikere - Shimoga - Sagar - Honavar (to join NH-19)	722
5.	Bangalore - Mysore - Madikeri - Mangalore (to join NH-17)	385
6.	Belgaum - Bijapur - Gulbarga - Humnabad (to join NH-9)	364
7.	Belgaum - Bagalkot - Raichur - Mehaboobnagar in Andhra Pradesh.	336
8.	Chitradurga - Holalkere - Hosadurga - Chikmagalur - Mudigere - Belthangadi - Bantwal - Mangalore (to join NH-17)	283
9.	Dharwad - Londa - Anmod - Panaji (to join NH-17)	93
10.	Padubidri - Karkala - Sringeri - Tirthahalli -Shikaripur - Shiralkoppa - Hubli - Bagalkot - Humnabad	750
11.	Sira (on NH-4) Bangalore - Poona Road, Madhugiri - Gauribidanur - Chikballapur - Chintamani - Srinivasapur - Mulbagal (on NH-4) Bangalore-Madras Road.	160
12.	Chitradurga - Shimoga - Chikmagalur - Sakleshpur - Madikeri - Tellichery	330
13.	Bangalore - Kanakapur - Malavalli - Mysore - Nanjangud - Sultan Battery - Kozhikode	240
13(a).	Bangalore - Mysore - Hunsur - Virajpet - Calicut road upto state border	270

Periodic traffic census has revealed an increase of about 30% traffic annually, on the National Highways. From 1956-57 to 1990-91, an amount of Rs.176 crore has been spent for the improvement of the existing National Highways in the State. During the Eighth Five Year Plan, a provision of about Rs.253 crore and Rs.33.40 crore respectively has been allotted for the road improvement works and bridge works. The National Highways included for development in the State were No.4,7,9,13,17 and No.48.

For the past one decade, 30 km of the National Highway No.4 has been widened from two lane to four lane. About 50 km of National Highway-9, 87 km of NH-13,72 km of NH-17 and 122 km of NH-48, were widened from single lane to two lane. Under the Asian Development Loan Assistance, a length of 25 km of the NH-7, has been taken up for converting it into four lanes (km 8.00 to km 33.00-Bangalore to Tamilnadu border - near Hosur). Its estimated cost of about Rs.48.81 crores will be met by the Central Government.

Table No.7.1

Table showing the total road length in Karnataka under the control of various agencies from 1982 to 1992 (length in Kms)

Sl. No.	Year as on 31st March	Road Length in charge of					Total
		P.W.D.	Zilla Parishads	Irrigation Department	T.D.B.	Forest Department	
1.	1982	65,595	-	6,139	26,620	2,432	1,00,786
2.	1983	66,247	-	6,256	26,962	2,439	1,01,904
3.	1984	66,556	-	6,256	27,719	2,442	1,02,973
4.	1985	78,277	-	6,256	25,631	2,446	1,12,610
5.	1986	78,446	-	6,256	25,775	2,446	1,12,923
6.	1987	78,776	-	6,256	25,890	2,468	1,13,390
7.	1988	31,179	47,750	6,377	26,482	2,467	1,14,255
8.	1989	31,215	47,812	6,377	27,173	2,476	1,15,053
9.	1990	31,225	47,881	6,377	29,137	2,516	1,17,138
10.	1991	31,314	48,189	7,335	29,526	2,562	1,18,926
11.	1992	31,348	48,267	9,321	29,678	2,582	1,21,266

On 1-4-1987, the Zilla Parishads were formed and other District Roads and Village roads were transferred to them, from P.W.D. for better maintenance and constructing new roads.

(Source : All Tables on roads are from P.W.D. of the state)

Table No.7.2

Table showing the physical and financial progress achieved in the road development during the Annual Plans and Five Year Plans.

Sl.No.	Details	Unit	Actual achievements during				
			Annual plans 1978-79 and 1979-80	Sixth plan 1980-85	Seventh plan 1985-90	Annual plan 1990-91	Annual plan 1991-92
1.	Formation and improvements to roads	km	1,669	3,497	1,394	443	509
2.	Asphalting of roads	km	488	1,331	1,043	372	319
3.	Bridges	Nos.	376	846	482	148	225
4.	Tribal Sub Plan	Km.	16	132	125	31	34
5.	Construction of roads in Sugar Factory Areas (formed & improved)	Kms.	401	807	99	35	57
6.	Minimum Needs Programme	Nos.	88	380	408	140	174
7.	Integrated Comprehensive Rural Communication Programme (length formed and improved)	Km.	1,730	1,803	37	37	12
8.	Master Plan for Rural Roads, 1st Phase CD works.	Nos.	-	3,344	178	85	98
9.	Approach road to Harijanwadas	Km	-	300	1,056	367	387
10.	Halli Heddari	Nos.	-	2	123	58	95
11.	Sethubandhana	Nos.	-	208	895	195	358
	Expenditure incurred	Rs. in lakhs	2,613.91	10,405.87	14,185.00	3,821.57	4,904.6

Table No.7.3

Details of road development under various surfaces from 1982 to 1992

Sl.No.	Year as on March 31	Surfaced road (CC road BT/WBM)		Total	Road length per 100 sq.km		
		Unsurfaced road length (MUD)	Total		Surfaced	Unsurfaced (MUD)	Total
1.	1982	60,033	40,753	1,00,786	31	21	52
2.	1983	61,838	40,066	1,01,904	32	21	53
3.	1984	63,588	39,385	1,02,973	33	21	54
4.	1985	68,105	44,505	1,12,610	36	23	59
5.	1986	69,813	41,110	1,12,923	36	23	59
6.	1987	71,424	41,966	1,13,390	37	22	59
7.	1988	73,832	40,423	1,14,255	39	21	60
8.	1989	75,551	39,502	1,15,053	39	21	60
9.	1990	76,626	40,512	1,17,138	40	21	61
10.	1991	78,274	40,652	1,18,926	41	21	62
11.	1992	80,315	40,951	1,21,266	42	21	63

* CC - Cement Concrete, BT - Black Top, WBM - Water - bound Macadam

Table No.7.4

Distribution of road length under various categories from 1982 to 1992

Sl.No.	Year	National High-ways	State High-ways	Major District Roads	Other District Roads	Village Roads	Total	Irriga-tion Dept.	T.D.B.	Forest Dept.	Total
1.	1982	1,968	7,813	12,901	9,049	33,864	65,595	6,139	26,620	2,432	1,00,786
2.	1983	1,968	7,912	12,901	9,049	34,417	66,247	6,256	26,962	2,439	1,01,904
3.	1984	1,968	7,912	15,972	7,095	33,609	66,556	6,256	27,719	2,442	1,02,973
4.	1985	1,968	7,912	15,981	7,082	45,334	78,277	6,256	25,631	2,446	1,12,610
5.	1986	1,968	7,912	15,999	7,072	45,495	78,446	6,256	25,775	2,446	1,12,923
6.	1987	1,968	7,912	16,016	7,082	45,798	78,496	6,256	25,890	2,468	1,13,390
7.	1988	1,968	11,199	18,012	3,167	44,583	78,929	6,377	26,482	2,467	1,14,255
8.	1989	1,968	11,255	17,992	3,189	44,623	79,027	6,377	27,173	2,476	1,15,053
9.	1990	1,968	11,260	17,997	3,188	44,693	79,106	6,377	29,137	2,518	1,17,138
10.	1991	1,997	11,282	18,035	3,179	45,010	79,503	7,335	29,526	2,562	1,18,926
11.	1992	1,997	11,288	18,063	3,179	45,088	79,615	9,391	29,678	2,582	1,21,266

Other District roads and village roads were transferred from the control of P.W.D. to Zilla Parishads (1-4-1987), for further construction and maintenance.

Road Development Plan 1981-2001

A road development plan for the period 1981-2001, was formulated in 1987, by the Ministry of shipping and transport (transport wing), Government of India. According to it, efforts are on in Karnataka, to implement the following programmes and to achieve the targets in a phased manner, depending on the availability of funds: (1) In respect of State Highways, improving and raising the standard of existing road length where ever it is needed. Increasing the length of the State Highways by upgrading Major District Roads. (2) Connecting all villages in the State with all-weather roads. (3) Construction of link roads to all the Harijanwadads (4) Providing roads to all the hamlets. (5) Construction of Other District Roads to the Mandal Panchayat Headquarters, if they are not connected with such roads.

Road Traffic Census, Transport Survey and Sample Survey of Road Traffic: The periodical Traffic Census and Transport Surveys started in 1959, are being continued. The Traffic Census and Transport Surveys are being conducted in all the P.W.D. and Zilla Parishad roads in the State. The sample survey of 1991-92 reveals that when compared to traffic census conducted in 1987-88, the average traffic on National Highways rose from 22,252 to 40,092 metric tonnes. Thus in a span of four years there was an increase of 80.17% traffic

intensity. The average traffic volume of the NH (National Highway) which stood at 3,499 M.T. during 87-88, went upto 6,294 during 1991-92, and in this respect there was 79.88% net increase. Annual percentage increase works out to 19.97%.

Table No.7.5

The average traffic intensity during 1991-92 with regard to State Fund roads as compared to detailed Traffic Census of 1987-88 is as shown below.

<i>Category of the Road</i>	<i>Average traffic intensity per day 1987-88</i>	<i>In metric tonnes 1991-92</i>	<i>Percentage increase</i>	<i>Annual percentage increase</i>
State Highways	4,983	9,222	85.07	21.27
Major District Roads	2,387	4,184	25.28	16.82
Other District Roads	1,098	1,890	72.13	18.03
Village Roads	1,001	1,639	63.74	15.94
Total	9,469	16,935	78.85	19.71

The above table shows, that there was a sharp rise in respect of average traffic intensity on State Fund Roads, from 9,469 metric tonnes during 1987-88 to 16,935 in 1991-92. This works out to a net increase of 78.85% and annual increase to an extent of 19.71%.

Table No.7.6

Average traffic volume on all the State Fund roads during 1991-92 when compared to 1987-88 is given below.

(All types of vehicles - per day of 24 hours)

<i>Category of the road</i>	<i>Average traffic volume</i>		<i>percentage increase</i>	<i>Annual percentage increase</i>
	<i>1987-88</i>	<i>1991-92</i>		
State Highways	1,023	1,865	82.31	20.58
Major District roads	619	1,033	66.88	16.72
Other district roads	318	505	58.81	14.70
Village roads	288	458	59.03	14.76
Total	2,248	3,861	71.75	17.94

Between 1987-88 to 1991-92, the average traffic volume rose from 2,248 to 3,861 on all State Fund roads. As a result, the net increase in the percentage was 71.75 and the annual increase was 17.94.

Taking over of important roads from the local bodies: - The State Government has adopted a policy to take over roads of public importance for

improvement and maintenance. Such roads are roads connecting State Highways and districts and those roads having heavy traffic. Improvements are effected in a phased manner depending on the availability of funds. The Government has taken over about 49,489 km length roads, from Taluk Development Boards and other agencies, till the end of 1986-87. When Zilla Parishads were formed (1987) all the village roads and other District Roads were brought under the control of Zilla Parishads from the P.W.D. Besides, the T.D.B. roads also came under the control of Zilla Parishads.

On 18th February 1992, the government has transferred 10,000 km length of roads from the control of Zilla Parishads to the P.W.D., to improve them at the rate of 50 km per Assembly constituency. And such roads are being upgraded into major district roads. Year-wise (in km) details of roads taken over were as follows: 1986-87: 5464.00; 1987-88: nil; 1988-89: nil; 1989-90: 8.50; 1990-91: 47.20; 1991-92: 10,000

There was phenomenal growth in all categories of roads and quality of their surface was also improved.

The cement concreted and asphalted road length, rose from 27,387 km, in 1982 to 36,229 km, in 1992. An increase of about 32.38 percent in a span of eleven years. In this period, the water bound macadam surface went up from 24,374 to 32,297 km, (32.50 percent increase). As a result of improvements, unmetalled roads decreased from 13,834 km to 11,089 km.

Table No.7.7

Details of the surface-wise roads from 1982 to 1992 are as given below.

Year (31st March)	Total road length incharge of P.W.D. (in Kms)				Total
	Cement Concrete	Black topped	Water bound macadam surface	Unmetalled	
1982	367	27,020	24,374	13,834	65,595
1983	365	27,769	24,978	13,135	66,247
1984	361	28,679	25,438	12,078	66,556
1985	359	29,830	29,033	19,055	78,277
1986	359	30,479	29,952	17,656	78,446
1987	359	31,243	30,671	16,503	78,776
1988	320	32,353	32,049	14,207	78,929
1989	311	33,222	32,491	13,003	79,027
1990	298	33,977	32,435	12,396	79,106
1991	293	35,117	32,567	11,526	79,503
1992	262	35,967	32,297	11,089	79,615

Note: The road length under Cement Concrete decreased owing to its recoating with B.T. surface.

Table No.7.8

District-wise total road length for some recent years is as given below (length in km)

	1982	1984	1986	1988	1990	1991	1992	% to the Total
Bangalore (U)	-	-	-	2,348	2,349	2,406	2,572	2.12
Bangalore (R)	6,249	6,255	7,069	4,713	4,744	4,729*	4,721	3.89
Belgaum	6,614	6,266	6,687	6,726	6,784	6,898	6,928	5.71
Bellary	3,729	3,816	4,316	4,354	4,433	4,524	4,472	3.68
Bidar	2,443	2,447	2,834	2,791	2,772	2,810	2,810	2.31
Bijapur	6,163	6,232	6,811	7,119	7,085	7,238	7,280	6.00
Chikamagalur	4,738	4,731	4,836	4,929	5,449	5,406*	5,606	4.62
Chitradurga	5,556	5,583	6,128	6,149	6,169	5,926*	6,441	5.31
Dakshina Kannada	4,389	4,559	4,830	4,792	4,761	4,866	4,868	4.01
Dharwad	6,140	6,250	6,946	7,069	8,383	9,882	9,369	7.25
Gulbarga	4,574	4,645	5,307	5,295	5,978	6,095	6,633	5.46
Hassan	5,205	5,254	6,056	6,318	6,580	6,619	6,757	5.46
Kolar	5,452	5,453	5,901	5,900	5,901	5,977	5,978	4.92
Kodagu	2,457	2,461	2,686	2,682	2,686	2,789	2,842	2.34
Mandya	7,720	7,739	8,104	8,181	8,178	8,046*	8,043	6.63
Mysore	8,163	8,287	8,927	8,984	8,992	8,912*	9,045	7.45
Raichur	4,886	4,951	5,401	5,451	5,480	5,514	5,586	4.60
Shimoga	6,961	7,064	7,349	7,344	8,642	7,417*	7,942	6.54
Tumkur	4,702	5,781	6,803	6,825	6,823	7,346	7,348	6.05
Uttara Kannada	5,095	5,199	5,932	5,985	5,949	6,026	6,025	4.96
Total	1,00,786	1,02,973	12,923	1,14,255	1,17,138	1,18,926	1,21,266	

* In some districts of the State, the road length was decreased due to reduction of figures pertaining to I.T.Roads and T.D.B. Roads.

Development of Hyderabad Karnataka: The Government has prepared a blue-print for the development of Hyderabad Karnataka Area. Most of the funds are expected to be invested in important segments of the economy like roads and bridges, education, water supply, health etc. In Gulbarga, Bellary, Bidar and Raichur districts, it is proposed to take up construction of roads, bridges and building works, at an estimated cost of Rs.65 crores. In 1990-91 and 1991-92 an amount of Rs.610.60 lakhs and Rs.1,015.08 lakhs was spent on roads and bridges. The works are in various stages of progress.

Road improvement works under Rs.12 Lakhs programme for each constituency: The scheme for the improvement of roads under Rupees Twelve Lakhs

Programme was started in 1990. Under this programme, Rs.12 lakhs will be spent on road works in each Assembly constituency. An amount of Rs.867.08 lakhs was spent during 1990-91 and in 1991-92 Rs.1694.39 lakhs for the works taken up under this programme.

Rural Roads programme: Providing road communication continues to receive the attention of the Government. Several programmes have been launched for the construction and development of rural roads in recent years. They are M.N.P (Minimum Needs Programme), Halli Heddari, Sethubandhana, Master Plan for Rural Roads, 1st Phase C.D. Works etc.

Accessibility of Villages: The number of villages linked with all-weather roads in the State was 12,649 in 1991-92. It accounts for 47 per cent of the total inhabited villages being 27,028 as per 1981 Census. Of the remaining villages, 6,747 were provided with fair weather roads and 7,433 with kutcha roads which accounted for 25% and 27% respectively. The remaining 199 (about 1%) villages were without approach roads.

Minimum Needs Programme: The Minimum Needs Programme was started in 1974-75 and it envisages to provide all-weather approach roads to the villages having a population of 1,000 and above. From 1974-75 to 1991-92 a sum of Rs.53.77 crores were spent for connecting 1,398 villages with all-weather approach roads.

Halli Heddari: This scheme was started in 1984-85 with a view to provide all weather roads to the roadless villages having less than 1,000 population. Till the end of 1991-92, 167 villages (estimated) were connected at a cost of Rs.827.26 lakhs.

Approach Roads to Harijanwadas

In 1983-84, a new scheme to construct approach roads to the Harijanwadas (colonies of the Scheduled Castes) was launched. The details of the road length constructed and its expenditure from 1983-84 to 1991-92 is as shown below, the first figure being year, the second the amount spent in crores of rupees and the third figure standing for total length of roads in km. 1983-84: 2.10; 110; 1984-85: 2.15; 190; 1985-86: 3.03; 160; 1986-87: 4.05; 152; 1987-88: 3.69; 69; 1988-89: 5.14; 314; 1989-90: 4.75; 387; 1990-91: 5.65; 330; and 1991-92: 6.57; 387.

Note: Expenditure includes Minimum Needs Programme under special component plan.

Integrated Comprehensive Rural Communication Programme: This Scheme was launched in 1972-73 for the purpose of carrying out rural road development in the State. An amount of Rs.9.63 crores was spent in the Sixth Plan period.

During this period, about 1,803 km, length road was constructed. From 1985-86 to 1991-92 an expenditure of Rs.1.60 crores was incurred for constructing 77 kms road and some other related works.

Master Plans for Rural Roads - Ist Phase C.D.Works: This scheme was started to provide C.D. (Cross drainage) works having a linear water way of less than 6 metres. From 1985-86 to 1991-92, 346 C.D.Works were completed and expenditure incurred thereon was Rs.234.51 lakhs.

Sethubandhana

The Sethubandhana Programme was started with the aim of constructing cross drainages on non-P.W.D. roads which would be of immense benefit to the rural populace. Year-wise number of C.D.Works completed from 1985-86 to 1991-92 and their cost is as follows; the first figure being the year, second the number of works completed and their total expenditure in lakhs of rupees in each year: 1985-86: 184; 90.07; 1986-87: 184; 82.96; 1987-88: 73; 138.52; 1988-89:219; 138.74; 1989-90: 235; 97.29; 1990-91; 166; 103.83 and 1991-92: 258; 154.09.

Asphalting of roads in village limits: From 1986-87, a new scheme for asphalting roads in village limits for smooth traffic in rural areas and to prevent dust nuisance was introduced. The amount spent in 1986-87 was 43.73 lakhs. During 1987-88 to 1991-92, about 346 km village limit roads were asphaltd at a cost of Rs.492.34 lakhs.

Construction under "People's Participation Programme": This programme was launched in 1986-87, to give high priority to the rural road improvement works having local people's participation. Maximum labour contribution in the construction of such roads should be upto 25% of the estimated cost. This scheme is being executed by the Zilla Parishads. From 1987-88 to 1991-92, an amount of Rs.161.53 lakhs was spent for improving and constructing 113 km road length.

Bridges

The number of bridges that existed as on 31st March 1982 was 64,818 which included culverts, minor bridges and major bridges on all the categories of roads. In a period of one decade (i.e. between 31st March 1982 to 31st March 1992), there has been substantial increase in the number of bridges which stood at 98,197. Comparative details of culverts, minor and major bridges that existed as on 31st March 1982, 31st March 1986 and on 31st March 1992 is as given below:

(in Nos.)

<i>Minor bridges having a linear water way of</i>	<i>31-3-1982</i>	<i>31-3-1986</i>	<i>31-3-1992</i>
Upto 6 mtr (Culverts)	56,267	68,171	87,006
Minor bridges having a linear waterway of more than 6 mtr but less than 12 mtr.	5,330	6,423	7,139
Minor bridges having a linear waterway of more than 12 mt. but less than 18 mtr.	1,299	1,545	1,838
Minor bridges having a linear waterway of more than 18 mtr. but less than 24 mtr.	537	657	826
Minor bridges having a linear waterway of more than 24 mtr. but less than 30 mtr.	491	581	664
Bridges having a linear waterway of 30 mtr. and above	894	1,007	1,204
Total	64,818	78,384	98,677

Statement showing the number of major bridges having a linear waterway of more than 60 mtrs, on all categories of roads in the State as on 31 March 1986 and 1992 respectively on various categories of roads: National Highways: 47; 47; State Highways: 132; 136; Major Districts Roads: 113; 141; Other District Roads: 45*; 16; and Village Roads: 76; 74; Total: 414; 464

* Many of the other district and village roads have been upgraded as Major District Roads; hence the decrease in the number.

Statement showing the number of minor bridges, having six metres to sixty metres linear waterway on March 1986 and March 1992 respectively on various categories of roads: National Highways: 503; 503; State Highways: 2,544; 2,953; Major Districts Roads: 2,641; 3,027; Other District Roads: 1,781*; 1,109; and Village Roads: 2,330; 3,615; Total: 9,799; 11,207.

* Many other District Road have been upgraded as Major District Roads and State Highways; hence the decrease in the number.

Table No.7.9

District-wise number of Major Bridges is shown below, as on 31st March, each year

<i>District</i>	<i>1982</i>	<i>1984*</i>	<i>1986</i>	<i>1988</i>	<i>1989</i>	<i>1992</i>
Bangalore (U) } Bangalore (R) }	25	9	9	9	10	10
Belgaum	73	33	33	33	33	36
Bellary	36	12	13	14	14	15
Bidar	26	14	14	16	16	16
Bijapur	85	46	50	52	52	53
Chikamagalur	28	10	10	10	10	10
Chitradurga	38	19	21	25	25	27
Dakshina Kannada	106	57	58	63	70	63
Dharwad	64	24	24	24	27	27
Gulbarga	79	36	39	40	42	43
Hassan	16	9	9	10	11	11
Kolar	29	8	8	8	8	8
Kodagu	19	10	10	10	10	11
Mandya	23	13	13	14	14	14
Mysore	47	22	22	24	24	26
Raichur	89	34	34	36	38	38
Shimoga	39	13	13	15	16	16
Tumkur	25	13	13	18	18	20
Uttara Kannada	47	18	21	21	20	20
Total	894	400	414	442	458	464

Note: * Till 1983, the bridges having a linear waterway of 30.01 mtr. to 60 mtr have been classified under major bridges. From 1984 onwards, the above categories of bridges have been classified under minor bridges and shown under column 30 to 60 mtrs. Hence, the number of major bridges decreased in 1984 when compared to 1983.

After 1984, the bridges having a linear water way of 60.01 mtr. have been classified as major bridges.

Maintenance and repair to roads: Annually huge amount is being spent on maintenance and repairs of various categories of roads, for the purpose of smooth surface traffic. The expenditure incurred on maintenance of various roads from 1981-82 to 1991-92 is as detailed below, the amount being in crores of rupees: 1981-82: 20.31, 1982-83: 25.13, 1983-84: 27.33, 1984-85: 28.64, 1985-86: 31.27, 1986-87: 42.34, 1986-87: 42.34, 1987-88: 32.71, 1988-89:49.05, 1989-90: 63.78, 1990-91: 69.12 and 1991-92: 84.40.

Ring Road Alignment

A study for the ring road alignment was undertaken on behalf of the Bangalore Development Authority, by the Department of Space, Government of India and the Karnataka Remote Sensing Technology Utilisation Centre, Bangalore. For the first time in the country, remote sensing techniques have been successfully employed to identify and fix, the road alignment/corridors in three specific stretches for the proposed ring road for Bangalore. This study has yielded valuable terrain features like current land use/land cover, land forms, broad soil types, rock assemblages etc, in a short time of one month. It will be of considerable help in selecting the best possible alignments for planning major transportation network and reduce the cost and time involved in routine surveys.

The length of the three stretches identified is about 30 kms, and are as follows: (1) Lottgollahalli to CMTI Campus near Tumkur road (about 4 kms), situated on the North-Western Part of the city. (2) In the Western part, from the west of Nandini Layout to Hosakerehalli (about 13 kms length). (3). Route from Ibbalur to Whitefield, on Sarjapura Road near Krishnarajapuram Railway Station (about 12 kms length).

Add to part II, page 26:

Vehicles and conveyances: During 1982-83, the number of motor vehicles registered and being used in Karnataka was 5,04,232. And it rose sharply to 17,18,494 in 1992-93. Goods vehicles which were 36,510 in 1982-83, almost doubled and were 74,826 in 1992-93. Apart from commercial vehicles, the farm front too received a boost with the increase in the number of tractors from 20,561 in 1982-83, to 52,592 in 1992-93. Now, the Transport Department is one of the major revenue earning departments.

Rules and Regulations relating to motor vehicles: The rules and regulations relating to motor vehicles are being implemented by the Transport Department. They are as follows: (1) The Motor Vehicles Act, 1988 (Central Act 59 of 1988). (2) The Karnataka Motor Vehicles Taxation Act, 1957. (Karnataka Act 35 of 1957). (3) The Central Motor Vehicles Rules, 1989. (4) The Karnataka Motor Vehicles Rules, 1989 and (5) The Karnataka Motor Vehicles Taxation Rules, 1957.

The Transport Department is one among the Major departments in the State. Some of the transport matters like registration of motor vehicles, issue of driving licences to drivers and conductors, grant of permits for transport vehicles, licences to start motor driving schools, issue /suspension or cancellation of fitness certificates, measures for prevention of air pollution, collection of motor vehicles tax etc, are dealt by it.

Karnataka State Transport Authority: Transport Commissioner is the Chairman of the Quasi-Judicial Karnataka State Transport Authority, in accordance

with the Section 68 of the Motor Vehicles Act, 1988. Besides, there are two official members, The authority has powers to grant permits to tourist vehicles, passenger vehicles or goods carriages as per Inter-State Agreements. If conditions stipulated for the permits are violated, the K.S.T.A. has powers to suspend or cancel the permit. Similarly, the Regional Transport Authorities are quasi-judicial bodies and they grant permits to the transport vehicles for Inter-State operation or to renew/cancel permits.

Prevention of Air Pollution: Before implementing anti-air pollution measures, as envisaged in Rule 115 of Central Motor Vehicles Rules, 1989, public awareness programmes were launched by the Transport Department to highlight the hazards of vehicular traffic pollution. Checking of motor vehicles was started in 1990 in Bangalore and other cities. Between 1st April 1991 and 31st March 1992, petrol vehicles numbering 26,175 and 2,466 diesel vehicles were issued, emission test certificates. For the violation of prescribed emission standards, 949 offenders were booked and prosecuted during 1992. The Transport Department is controlling and regulating the working of emission testing centres. There are 18 emission testing centres in the State and out of them 15 centres are in Bangalore and one each at Mysore, Dharwad and Mangalore. The department also uses its 30 smoke meters and 76 gas analysers for enforcement work on air pollution. Besides five licences for starting emission test centres and one diesel emission test centre were issued by the department.

Driving Training Schools: The regional transport officers are empowered to issue licences, for starting driving training schools. Number of motor driving training schools working in each district as on 31st March 1992 were as follows: Bangalore-31, Belgaum-1, Bellary-3, Bijapur-3, Bidar-1, Chikmagalur-1, Chitradurga-4, Dakshina Kannada-33, Dharwad-11, Gulbarga-3, Hassan-4, Kodagu-5, Kolar-3, Mandya-2, Mysore-3, Shimoga-3, Tumkur-3, Uttara Kannada-4, Raichur-1.

Plastic Card Driving Licences: Plastic card driving licences were introduced in Bangalore region for the first time in 1984-85. The scheme acquired popularity and it was extended to all the regions in the State. Plastic card driving licences are being issued in three colours. Of them, blue cards are issued to two wheelers, green cards to the light motor vehicles and red cards to the motor cycles and motor cars. Its manifold advantage are: easy to carry in the pockets and water proof: chances of tampering and mis-use is nil: and it serves as identity card of the drivers and specially in case of accident, it is easy to identify his/her address and blood group. The number of cards issued during 1991-92 was 79,989, of which blue were 50,424, green 6,982 and red 22,583.

Table No.7.10

Table showing category-wise number of motor vehicles registered and being used in Karnataka from 1982-83 to 1992-93.

<i>Year</i>	<i>Two wheelers</i>	<i>Motor cars</i>	<i>Jeeps</i>	<i>Motor cabs</i>	<i>Autorik-shaws</i>	<i>Omni-buses</i>	<i>Stage carriages</i>
1982-83	2,96,675	67,287	12,253	3,932	23,224	3,576	12,067
1983-84	3,50,829	70,896	13,152	5,189	25,998	4,162	12,594
1984-85	4,17,464	84,887	14,789	6,533	28,308	4,567	13,245
1985-86	4,97,391	92,869	16,146	6,728	28,987	4,308	13,013
1986-87	5,97,893	1,01,805	17,521	6,976	32,132	4,877	14,631
1987-88	7,05,520	1,10,315	18,885	7,421	35,275	5,279	15,524
1988-89	8,03,426	1,14,377	19,503	7,502	42,085	5,670	15,258
1989-90	9,31,708	1,24,148	20,624	7,794	45,404	5,103	15,917
1990-91	10,30,751	1,36,799	22,290	8,403	49,763	5,110	KSRTC 13,491 Private Buses: 3,432
1991-92	11,31,302	1,50,658	28,501	9,271	58,787	5,352	KSRTC 14,035 PRIVATE 3,665
1992-93	12,30,210	159,888	25,565	11,294	65,624	6,396	KSRTC 14,989 PRIVATE 3,714

<i>Year</i>	<i>Contract carriages</i>	<i>Goods vehicles</i>	<i>Tractors</i>	<i>Trailers</i>	<i>Others</i>	<i>Total number of vehicles</i>	<i>Percentage increase over previous year</i>
1982-83	550	36,510	20,561	20,729	6,868	5,04,232	-
1983-84	525	40,047	23,062	23,646	8,252	5,78,352	14.7
1984-85	73	42,875	26,675	26,948	10,630	6,76,994	17.1
1985-86	-	44,150	29,193	30,250	11,846	7,74,881	14.46
1986-87	-	47,713	31,607	32,959	11,691	8,99,775	16.12
1987-88	-	50,668	33,585	35,212	13,447	10,31,131	14.50
1988-89	-	53,329	35,334	35,946	14,543	11,46,973	11.23
1989-90	-	57,468	32,235	38,968	14,536	12,99,905	13.33
1990-91	-	63,137	41,640	42,241	15,786	14,32,843	10.23
1991-92	-	70,016	45,210	47,646	17,656	15,82,099	10.42
1992-93	-	74,826	52,592	54,660	18,736	17,18,494	8.62

Table No. 7.11

Table showing District-wise number of newly registered motor vehicles from 1982-83 to 1991-92.

<i>District</i>	<i>1982-83</i>	<i>1983-84</i>	<i>1984-85</i>	<i>1985-86</i>	<i>1986-87</i>	<i>1987-88</i>	<i>1988-89</i>	<i>1989-90</i>	<i>1990-91</i>	<i>1991-92</i>
*Bangalore	17,807	22,980	27,007	40,832	41,377	52,747	55,252	54,787	51,145	54,128
Belgaum	3,492	4,280	4,586	5,415	5,777	6,702	10,430	12,569	8,948	9,176
Bellary	1,418	2,126	2,550	2,699	2,119	2,907	3,343	3,886	3,949	3,881
Bidar	736	663	625	998	1,032	976	988	1,317	1,477	1,543
Bijapur	1,214	1,824	2,432	2,666	2,397	2,904	3,593	4,486	4,511	4,686
Chikmagalur	664	712	1,137	1,639	1,382	1,475	1,570	2,018	1,540	1,939
Chitradurga	1,872	3,580	4,470	4,537	4,240	4,948	5,343	6,114	5,498	8,278
Dakshina Kannada	4,637	5,004	5,564	7,111	6,718	7,476	8,620	8,120	6,958	7,935
Dharwad	2,754	4,034	5,443	6,079	5,769	6,181	8,192	9,459	7,344	7,490
Gulbarga	1,889	1,898	1,811	2,574	2,356	2,671	2,825	3,307	3,252	3,772
Hassan	936	1,132	1,746	2,514	2,858	2,359	2,807	3,107	2,280	2,784
Kolar	1,008	1,364	1,846	2,279	2,477	2,615	2,655	2,838	2,625	3,142
Kodagu	501	556	508	918	1,125	1,333	1,102	1,365	838	2,008
Mandya	702	867	1,072	1,354	1,141	1,624	1,645	2,472	2,175	1,657
Mysore	4,411	5,308	6,405	8,706	8,669	10,512	10,665	11,434	8,599	8,868
Raichur	912	1,602	2,384	2,401	1,803	2,393	2,542	3,540	3,740	3,992
Shimoga	2,021	2,911	3,140	4,048	4,271	4,809	4,714	5,479	4,087	4,993
Tumkur	1,669	2,226	3,540	4,047	3,272	3,999	4,122	4,092	3,244	3,773
Uttara Kannada	789	1,044	1,232	1,854	1,976	2,188	2,222	2,907	2,420	2,058
Total	49,432	64,111	77,488	1,02,671	1,00,759	1,20,819	1,32,410	1,43,297	1,24,630	1,35,603

* Bangalore Urban and Bangalore Rural Districts are included.

Table No.7.12

Table showing the number of motor vehicles registered and being used in Bangalore City From 1982-83 to 1992-93 (as on 31st March).

Year	Two wheelers	Three wheelers	Cars	Jeeps	Taxis	Buses	Trucks	Tractors	Trailers	Others	Total
1982-83	1,35,536	11,063	33,506	3,726	1,276	5,507	10,020	1,823	1,678	514	2,04,649
1983-84	1,62,206	11,880	36,064	4,043	1,607	5,931	10,686	1,510	1,361	757	2,36,045
1984-85	1,89,619	11,348	47,787	4,995	2,027	6,155	11,106	1,493	1,441	1,676	2,77,650
1985-86	2,16,234	10,446	53,150	4,914	1,756	5,168	11,632	755	671	1,963	3,06,589
1986-87	2,36,726	10,524	54,885	5,122	1,717	5,704	11,366	496	446	2,269	3,29,255
1987-88	3,01,877	12,439	64,703	5,741	2,027	6,575	13,013	693	589	3,127	4,10,784
1988-89	3,43,733	15,513	65,916	5,966	2,089	4,247	15,229	893	789	6,500	4,60,875
1989-90	4,01,811	15,591	71,078	5,823	2,218	4,215	16,467	853	762	5,443	5,24,261
1990-91	4,58,860	17,379	82,205	6,376	2,511	4,516	19,149	1,993	1,723	3,815	6,01,059
1991-92	5,00,613	23,096	90,929	6,807	2,773	4,816	21,345	2,190	1,903	4,197	66,152
*1992-93	5,25,317	25,478	89,879	6,474	2,862	5,040	21,353	1,690	1,601	6,910	6,86,628

* Includes Bangalore South Taluk and Anekal.

Add to Part II, Page 29 onwards :

Karnataka State Road Transport Corporation

The passenger services in Gulbarga and Bidar pockets were nationalised on 8th November 1985 and added to the KSRTC network. On 4th November 1987, the Raichur scheme was also implemented. Altogether in nine districts of the State namely, Uttara Kannada, Dharwad, Belgaum, Gulbarga, Bidar, Bijapur, Bellary, Hassan and Raichur, nationalisation of bus services was completed. The five districts where the nationalisation of bus services have been partially implemented are Kolar, Bangalore Rural, Mysore, Chikmagalur and Bangalore Urban.

The Corporation has six regional and 19 divisional offices and 92 depots for administration as well as operation purposes. In two regional workshops at Bangalore and Hubli, new bus bodies are built and reconditioning of major assemblies take place. Two driving training schools have been set up at Hagaribommanahalli and Humnabad for imparting training to the drivers. Printing Presses have been established at Bangalore and Hubli for printing tickets and to provide stationary. The Corporation also has 12 Precured tyre retreading plants at different places in the State.

Concession passes are being issued to students, police personnel, the blind, homeguard and journalists, at the instance of the Government. In order to provide proper medical care to its employees and their families, the Corporation has undertaken construction of 25 bed hospitals one each at Gulbarga, Hubli and Bangalore. A new sports complex was recently opened at Bangalore to encourage sportsmen in the corporation.

Growth of KSRTC, from 1982-83 to 1991-92, was remarkable. Its fleet strength increased from 5,589 passenger buses in 1982-83 to 9,127 during 1992-93. Number of divisions and depots were up from 13 to 19 and 75 to 92 respectively. Besides, its work force went up from 37,122 to 55,386 during the same period. The number of new buses purchased during 1988-89, 1989-90, 1990-91 and 1991-92 were 1,159, 1,028, 747 and 1,139 respectively. The Bangalore City bus services and mofussil services are operated by the BTS North and BTS South divisions of the Bangalore region. Both the divisions operated 1,534 schedules, with a fleet of 1,664 buses as on 31st March 1992. These buses carried about 17 lakh passengers every day. On an average a revenue of Rs.18.59 lakhs per day was earned by the Bangalore region.

The contribution from State and Central Governments towards share capital was in the ratio of 2:1. The state Government's capital contribution to the Corporation, rose from Rs.12.88 crores to Rs.32.00 crores, during the period 1988-89 to 1991-92. The Union government had completely stopped its contribution from the year 1987-88 in line with its policy that contribution will be made to the undertakings which incur no losses. When the Corporation made a profit of Rs.1.30 crores during 1990-91, it received a sum of Rs.4 crores as capital contribution from the Central Government during 1991-92. Financial institutions like LIC, IDBI etc., are lending money to the KSRTC. Given below are the administrative and operational particulars of KSRTC, from 1982-83 to 1991-92.

Table No. 7.13

Sl.No.	Details	1982-83	1983-84	1984-85	1985-86
1.	Divisions	13	13	13	13
2.	Depots	75	76	77	77
3.	Staff employed	37,122	38,863	39,957	42,763
4.	Staff ratio	7.61	7.49	7.37	7.10
5.	Schedules	4,876	5,189	5,419	6,020
6.	Fleet	5,846	6,166	5,554	7,160
7.	Vehicle utilisation (kms)	276.2	276.0	280.0	289.0
8.	Total (kms) operated (lakhs)	4775.01	5162.08	5475.79	6234.52
9.	Traffic revenue (lakhs)	15,400.80	17,775.72	20,094.36	24,860.78
10.	Daily service kms (lakhs)	13.40	14.10	15.00	17.08
11.	Daily traffic revenue (lakhs)	42.08	48.70	54.84	66.11
12.	Earnings per km (paise)	322.5	344.3	367.0	398.8
13.	Daily passengers carried (lakh)	30.00	32.90	34.82	40.49
14.	Rate of fuel consumption	3.92	3.91	3.93	4.12
15.	Rate of breakdowns (per 1000 km)	0.55	0.40	0.35	0.24
16.	Rate of accidents (per lakhs kms)	0.34	0.33	0.31	0.27
17.	Inter state service	241	260	301	318
18.	Bus stations	171	184	193	201

S.No. Details 1986-87 1987-88 1988-89 1989-90 1990-91 1991-92
(Provisional)

1.	Divisions	13	13	13	14	19
2.	Depots	78	82	84	90	92
3.	Staff employed	44,716	47,804	50,706	54,577	55,386
4.	Staff ratio	6.83	6.80	6.78	7.09	7.27
5.	Schedules	6,550	7,025	7,462	7,722	7,602
6.	Fleet	7,804	8,339	8,633	8,994	8,824
7.	Vehicle utilisation (kms)	290.0	294.9	297.4	296.3	293.6
8.	Total (kms) operated (laks)	6,906.70	7,748.83	8,180.53	8,271.83	8,231.00
9.	Traffic revenue (laks)	29,785.70	29,830.65	34,559.54	37,413.23	40,482.4
10.	Daily service kms (laks)	18.92	21.17	22.41	22.66	22.55
11.	Daily traffic revenue (laks)	81.60	81.5	94.68	102.5	110.83
12.	Earnings per km (paise)	431.3	446	457.4	489	602
13.	Daily passengers carried (laks)	39.91	46.20	49.05	54.60	55.61
14.	Rate of fuel consumption	4.30	NA	NA	NA	NA
15.	Rate of break- downs (per 1000 km)	0.15	0.12	0.15	0.15	0.17
16.	Rate of accidents (per laks kms)	0.25	0.25	0.27	0.28	0.28
17.	Inter state service	377	463	465	469	465
18.	Bus stations	208	215	232	240	253

Licensing of drivers and Conductors: In accordance with Section 2 of the Motor Vehicles Act, 1988, no person shall drive a motor vehicle in public place, unless he holds a valid driving licence. Similarly, Section 29 of the Motor Vehicles Act, 1988, stipulates that no person shall act as a conductor of a stage carrier, unless he holds an effective conductor's licence. These licences are issued by the Regional Transport Officers, in their respective jurisdictions. Competency tests in driving are being conducted by the Inspector of Motor Vehicles, R.T.O.s and A.R.T.O.s.

Driving Training Schools: Driving training schools exist in all the districts to impart training to the aspirants, and they are found mostly in urban areas. Among the districts having highest number of training schools, Dakshina Kannada

district stands first followed by Bangalore District (including Rural and Urban district). Of the 39,293 successful trainees in 1991-92, those who have passed in driving light motor vehicles, autorikshaws, heavy passenger vehicles and heavy goods vehicles were respectively 22,278, 12,027, 2,868 and 2,120. Licences to start driving schools, are being issued by the Regional Transport Officers.

District-wise number of driving schools as on 31st March in 1987 and in 1992 respectively were: Bangalore:14;31, Belgaum Nil;1,Bellary1;3 Bidar nil;1,Bijapur: nil;3,Chikmagalur-nil;1, Chitradurga: nil;4, Dakshina Kannada: 9;33, Dharwad:1;11, Gulbarga: 1;3, Hassan:1;4, Kodagu: Nil; 5, Kolar: Nil;3, Mandya:1;2, Mysore: Nil;3, Raichur:Nil;1, Shimoga:1;3, Tumkur:Nil;3 and Uttara Kannada: Nil;4, Total:30;119.

Inter-State Transport: Details of inter-state permits issued to transport vehicles under the reciprocal agreements as on 1990-91 are as follows: Goods transport services (public carriers): (the first figure here is number of permits in force and the second is number of permits counter-signed and in force.) Karnataka-Tamilnadu- 2,864;3,143, Karnataka- Andhra Pradesh: 5,178;5,256, Karnataka-Maharashtra: 4,784;4,696, Karnataka -Kerala: 239;1,078, Karnataka- Goa: 112;532 and Karnataka-Madhya Pradesh: Nil; 14.

Table No.7.14

Passenger transport vehicles as on 1991-92.

(permits issued)

States	Buses	TouristTaxis	Motor Cabs
Karnataka Tamilnadu	85	94	71
Karnataka Andhra Pradesh	381	-	47
Karnataka Kerala	93	75	36
Karnataka Maharashtra	65	-	-
Karnataka Goa.	20	35	01
Total	644	204	155

Source: Transport Department, Karnataka

National Permits: The Rule 6 of the National Permit Rules, 1975, was amended by the Government of India, to increase the minimum age of the vehicle from four years to nine years, from the date of its first registration for getting a permit. It is also stipulated in the rules, to stop the operation of the vehicles, after expiry of nine years, by rendering the permit invalid unless it is replaced by a new vehicle. The number of national permits in the State rose sharply from 2,582 in 1986-87 to 7,890 in 1990-91. The increase in the number of national permits is attributed to the liberalisation of the related rules. And the highest number of national permit vehicles were found in Bangalore district (1834) followed by Belgaum (1615) and Dakshina Kannada (1502), in the year 1990-91.

South Zone Permit Schemes for taxis: Under the South Zone permit scheme, the quota of permits was enhanced from 100 to 400, for tourist motor cabs to operate in Karnataka, Tamilnadu, Andhra Pradesh, Kerala, Goa and the Union Territory of Pondicherry, on a single point tax without counter-signature. At the end of 31st March 1991, the South Zone permits issued and in force were 355.

All India Tourist Permit Scheme: The Motor Vehicles Act of 1988 (replacing the Act of 1939) liberalised the issue of permits for all-India Tourist vehicles. Accordingly as on 31-3-1991, there were 64 tourist omnibus permits and 1,082 tourist motor cab permits in force.

The Composite Permit Scheme (Zonal Permits), was abolished by the Government of India from 1-4-1986. Holders of these permits were allowed to operate their vehicles till its expiry. They were also permitted to opt for national permits in lieu of Zonal permits. Particulars of different types of inter-state permits in force from 1987 to 1991 were as follows:

Table No. 7.15

Year	National permits	All India Tourist permits		South Zone permits for tourist taxis
		Omnibuses	Motor cabs	
31-3-1987	2,582	49	377	396
31-3-1988	3,531	48	378	386
31-3-1989	4,808	49	377	396
31-3-1990	6,220	64	583	380
31-3-1991	7,890	64	1,082	355

Speed Pass: Issue of speed pass scheme to goods vehicles was started in August 1989. Such pass will contain all the particulars of the vehicle including the validity of the documents. The scheme is continued.

Master Pass: On the lines of speed pass, master passes are being issued to the non-transport vehicles, to enable the registered owners to carry the master pass instead of all the documents. This scheme has been extended to Mangalore, Mysore and Dharwad cities also.

Pre-paid Taxi service: The pre-paid taxi service was introduced for the first time at Bangalore Airport on 17th March 1990, to provide efficient and reasonable taxi services to the travelling public. Soon it became popular and on 26th Sept. 1990, another pre-paid taxi counter was started at the City Railway Station. At both the places, the counters are managed by the department, and a service charge of two rupees for each trip is being collected. Bangalore city has been divided into five divisions and taxi fare is fixed for each division.

During 1990-91, the air port counter arranged 20,040 trips and City Railway Station counter 1,608 trips.

Add to Part II, page 39 :

Table No.7.16

Road Accidents and fatalities and injuries in the State from 1987 to 1992.

<i>Year</i>	<i>Mechanical defect</i>	<i>Negligence of drivers</i>	<i>Others</i>	<i>Total</i>	<i>No. of persons injured</i>	<i>No. of persons killed</i>
1987-88	145	15,439	429	16,013	19,310	2,680
1988-89	189	17,589	651	18,429	23,197	3,265
1989-90	100	19,625	494	20,219	21,194	3,599
1990-91	85	18,704	333	20,113	23,893	3,295

Add to Part II page 48 :

RAILWAYS

Indian Railways have initiated several development projects like unigauge, track doubling, electrification etc., for expansion of railway network in the Country. The metre gauge track conversion of 178 kms of the Dharmavaram- Bangalore City line was completed and opened for traffic in January 1983 itself. Work of the Mysore-Bangalore City broad gauge line which was actually started in 1979, was completed in August 1992, and opened for passenger traffic on 16th April 1993. The amount spent for converting 138.25 km route, was Rs.136.26 crores. Along this track, out of 390 existing bridges 56 were retained, 22 were strengthened to suit broad gauge standard and 287 bridges were rebuilt. New stations have come up at Nayandahalli, Mandya, Channapatna and Yeliyur. Metre gauge route signalling system was replaced by installing, latest colour light signalling with centralised panel operation. In the year 1991-92 at a cost of Rs.11.50 crores, the existing metre gauge from Mysore to Ashokapuram is being converted to broad gauge. In tune with it, workshops at Ashokapuram are also being modified, to switch over to the overhauling of broad gauge rolling stock. Recently completed broad gauge line, will enable fast movement of passenger and freight traffic and boost tourism at Mysore. It provides inter-city passenger service between Mysore and metropolitan cities like Delhi, Bombay, Madras and Calcutta through Bangalore. A preliminary survey is being conducted to electrify this line.

With the opening of Dharmavaram-Bangalore and Bangalore-Mysore, broad gauge routes, it became inevitable to convert the Bangalore city-Yeswantpur - Yelahanka line also. The conversion work of this section was started in January 1992 and completed in January 1993, at a cost of Rs.13.97 crores. This section was opened for passenger traffic on 19th February 1993. For a length of 17.50 km, 35 bridges were strengthened and about 2,000 tonnes of rails and 29,000

sleepers were used. Earlier, north bound trains to Bombay, Delhi, Hyderabad etc., were taking circuitous route through Biyyappanahalli, K.R. Puram and Channasandra. After conversion of this line, the distance to the said cities is shortened by 11 km. This stretch of 17.50 km can also form a part of circular railway system of Bangalore when implemented.

For the past few years, there has been substantial increase in the movement of passenger and freight trains between Bangalore and Madras. The broad gauge line between Bangalore-Jolarpettai, is one of the most important routes in Southern Railway. Through this section, freight and passenger traffic is moved to and from Kerala, Karnataka and Tamilnadu. Prompted by the heavy traffic on this section, the line from Bangalore City to Krishnarajapuram was doubled way back in 1980, and that of Jolarpettai-Kuppam in 1981. Yet another part between Krishnarajapuram and Whitefield, was doubled and commissioned for traffic in 1986. The final phase of the doubling work, in the remaining portion of 81.31 km, between Whitefield and Kuppam was started on 19th Feb 1993. The estimated cost of the doubling project is Rs. 108.72 crores. Electrification work of the Bangalore City-Jolarpettai section was completed in 1992, and the first electric train was operated on 19th may 1992.

The 54-km Bellary-Rayadurga metre guage, was changed to broadguage in 1993 and commissioned for traffic. The expenditure incurred for this project was Rs. 19.15 crores. Two major bridges and 83 minor bridges were newly built on this route. This part of the track which links Rayadurga in Ananthpur district of Andhra Pradesh, is of great help to the economic and social development of the region.

Guage conversion work of 69 km Bangalore City-Tumkur line was completed in one year's time. It was inaugurated for passenger traffic on 18th July 1993. This line forms part of the 469 km Bangalore City-Hubli guage conversion project. The second stretch of 96 km from Tumkur to Arsikere is completed and opened on 27th November.1993. The whole project is expected to cost Rs. 232 crores. Other routes, proposed for conversion during 1993-94 are: 1. Rayadurga-Chitradurga-Chikjajur (134km); 2. Arsikere-Birur-Chikjajur (115 km); and 3. Birur-Shimoga (63 km). By the end of this year, gauge conversion of 235 km line from Arsikere-Hassan-Sakleshpur, will be taken up at an estimated cost of Rs. 180 crores. The Project would be completed in about two year's time.

Project for conversion of metre guage into broad guage between Hospet-Londa-Goa was sanctioned. After completion of this line, movement of fertilisers from Goa region to Nandyal-Guntur-Nagarjunasagar areas will be easier. Similarly, food grains can be transported from the coastal districts, through broad guage network *via* Guntur-Narasaraopet to the neighbouring Karnataka and Goa. The South Central Railway has included electrification project of Renigunta-Guntakal/Hospet line, in its 1992-93 plan. Transportation of iron ore for export, is the aim of this 448 km railway route. New lines proposed for conversion

are the Miraj-Londa 188 km track and 144 km Hubli-Hospet route. The work of former is already in progress.

Reservation facility is fully computerised at Bangalore City railway station and soon it will be extended to the Bangalore Contonment station. This station is also being developed as the second coaching terminal for Bangalore area. The existing goods shed facility will be shifted from there to Baiyyappanahalli. Additional facilities were provided at the satellite goods terminal at Whitefield to cope up with the increased freight traffic. For which an amount of one crore was already spent.

The Container Corporation of India is a Public sector undertaking of the railways, and one modern inland container handling depot is being constructed by it, near Whitefield. For the benefit of the travelling public in the city limits, satellite railway stations are planned at important places. Two such places are Yelahanka and Krishnarajapuram. A new look will be given to the City Railway Station, at a cost of Rs. 25 Lakhs. At present, there is only one terminus for the railway users in Bangalore. But the steady increase in the number of trains originating and terminating, has blocked further expansion of Bangalore City railway station. In view of the urgency of constructing a second terminus for the rail users, it is proposed to construct an auxiliary terminal near Bangalore, at a cost of about Rs. 15 crores. It is also planned to construct several by-passes at Bangalore and Yeswanthpur at a cost of about Rs.17 crore.

Wheel and Axle Plant :The giant Wheel and Axle plant was set up at Yelahanka, near Bangalore in 1984. The total cost of the project was Rs. 146 crores. This plant is manufacturing wheels and axles for the railway carriages with latest design and technology. In 1987-88, the plant has produced 23,007 wheelsets, 4,585 wheels and 5,005 axles were rolled out, whereas in 1991-92, 69,887 wheels and 4,370 axles worth Rs.152 crores. At a cost of Rs.41.05 crores, further expansion of the plant is on cards. (for details, see chapter V, Industries)

Konkan Railway Project

The Konkan Railway Corporation is an undertaking of the Government of India, duly constituted for the purpose of executing Roha-Mangalore new broad guage project. Construction related work of this project in Uttara Kannada and Dakshina Kannada Districts are being executed by the Chief Engineers of Karwar Zone and Udupi Zone respectively. Distance of the proposed line passing through Uttara Kannada is about 130.50 km. In Karwar zone as on 31st March 1993, out of the 13 major bridges four were completed and among the 310 minor bridges 140 were completed. The remaining 75 bridges were under various stages of progress. Two longest bridges of the Konkan Railway are located in this zone. They are 2.2 km long Sharavati bridge and 1.2 km long Kali river bridge. Considerable progress has been achieved in the construction of seven railway station buildings and seven over/under bridges. Tunnelling work is under various stages of progress in all the ten tunnels. A tunnel near Karwar

(No.8), is one of the longest and has a length of 2,960 metres. Another tunnel at Honavar (No.5 & 5A), is a shield tunnel and the type of its construction is unique. To accelerate the pace of the tunnel work, the Corporation has imported heavy machinery from Sweden and the same has been deployed at the work spots. Total cost of project in this zone is Rs.240 crores and of which a sum of Rs. 104 crores has been spent.

A PSC sleeper factory was started at Kaikini in Uttara Kannada (near proposed Murdeswar station), to produce three lakh PSC sleeper. Till the end of December 1992, this factory has produced 1,28,412 sleepers, among them 60,949 sleepers were supplied to the Udupi zone for track linking work between Mangalore and Udupi. In Udupi Zone, Udupi-Mangalore section was opened for traffic and trains are operating now.

An agitation for and against, over the proposed railway alignment in Goa, affected the progress of the Konkan Railway Project. The delay may cost railway exchequer heavily.

Add to part I, P.55 :

Table No. 7.17

Length of Railways in Karnataka from 1979-80 to 92-93 (in Kms)

<i>Year</i>	<i>Broad gauge</i>	<i>Metre gauge</i>	<i>Narrow gauge</i>	<i>Total</i>
1979-80	482	2,242	148	2,872
1980-81	484	2,243	148	2,875
1981-82	485	2,296	148	2,929
1983-84	569	2,220	148	2,937
1985-86	685	2,222	148	3,055
1988-89	685	2,222	148	3,055
1992-93	834	2,106	148	3,089

The total number of railway stations as in 1992-93 was 395 in Karnataka.

Add to Page 55:

Length of Railway Line in Karnataka as on 31-3-1993.

Railway route length (in kms)

Sl. No.	District	Broad Guage	Metre Guage	Narrow Guage	Total	No. of Railway Stations	
1.	Bangalore	178.32	110.31	52.40	341.03	49	S.R
2.	Bangalore(R)						
3.	Belgaum	-	219.72	-	219.72	25	S.C.R
4.	Bellary	114.95	216.08	-	331.02	36	S.C.R
5.	Bidar	78.73	-	-	78.73	9	S.C.R
6.	Bijapur	-	208.22	-	208.22	28	S.C.R
7.	Chikmagalur	-	94.23	-	94.23	11	S.R.
8.	Chitradurga	-	162.70	-	162.70	21	S.R
9.	Dakshina Kannada	34.03	114.29	-	148.32	19	S.R
10.	Dharwad	-	127.00	-	127.00	13	S.R
		-	193.72	-	193.72	28	S.C.R
11.	Gulbarga	119.52	-	-	119.52	12	S.C.R
		87.26	-	-	87.26	11	C.R
12.	Hassan	-	200.91	-	200.91	19	S.R.
13.	Kodagu	-	-	-	-	-	-
14.	Kolar	101.60	-	96.06	197.66	25	S.R.
15.	Mandya	61.00	22.13	-	83.13	14	S.R
16.	Mysore	8.25	111.65	-	119.90	24	S.R
17.	Raichur	50.78	55.33	-	106.11	15	S.C.R
18.	Shimoga	-	125.85	-	125.85	17	S.R
19.	Tumkur	-	97.47	-	97.47	14	S.R
20.	Uttara Kannada	-	46.40	-	46.40	5	S.C.R
Total		834.44	2106.00	148.46	3088.90	395	

Note: SR-Southern Railway; SCR- South Central Railway; CR-Central Railway

There are no railway lines in Kodagu though a Mysore-Madikeri railway proposal was under discussion from 1881. Uttara Kannada has broad-guage lines laid under the Konkan Railway project, but are not under operation as yet

WATER TRANSPORT

Add to Part II Page 67:

Ferries and Inland Waterways

The Ferries and Inland Water Transport are a branch of the Department of Ports and Inland Water Transport. The schemes launched by it, are intended to serve the transport needs of the rural population. In recent years, two dumb wooden boats, two dumb fibre glass boats and two mechanised steel boats were acquired for inland water transport by the Department. Another steel mechanised boat was proposed to be purchased. In 1992-93, a sum of rupees ten lakhs was allocated for the development of Inland waterways. Out of it, rupees four lakhs were to be spent on providing ramp at Ambaragodlu-Kalasavalli Ferry. The outlay for 1993-94, is rupees twelve lakhs and this amount will be spent on maintenance, purchasing of one mechanised boat for Korti Ferry, construction work of ramp at Ambargodlu-Kalasavalli Ferry and on others. During 1991-92, the departmental ferries, transported 6,81,411 persons, 1,795 scooters/motor cycles, 325 carts, 619 vans, 349 trucks, 3,000 buses, two carts, 389 jeeps, 34,360 bicycles, 1,655 animals and 9,935 quintals of goods. The revenue collected (ferry charge) was Rs. 5,91,039 and expenditure Rs. 20,26,138.

The Sharavathi bridge on the national highway No.17 was closed for traffic. Hence from August 1991 onwards, ferry service across the Sharavati river is being operated between Honavar and Kasarkode. Now at this ferry, five LCTs, each with a carrying capacity of two loaded trucks/buses, are being operated round the clock. Each LCT is transporting about 150 buses/trucks per day, except during low tides. More LCTs will be pressed into service, depending on the traffic intensity at this ferry point.

As on 31-3-1992, there were 477 ferry services in the State as against 672 in 1982. Bridges have been constructed at many places to dispense with the use of ferry services. Of these ferries, 22 were run by the government directly and 48 ferries operated by private parties under the control of the government on auction-cum-lease basis. The remaining 407 ferry services were in the private hands. It is envisaged to spend Rs. 60 lakhs, for the all-round development of the ferry services in the State during VIII Plan period. The district-wise distribution of ferries in the State is as follows: 1. Bangalore Rural -3; 2. Tumkur-1; 3. Mysore-49(2DM, 7 ACL); 4. Hassan-12; 5. Mandya-12; 6. Shimoga-49(2 DM, 2 ACL); 7. Chitradurga-15; 8. Chikmagalur-5; 9. Dharwad-26 (1 DM, 3 ACL), 10. Uttara Kannada-63 (4 ACL), 11. Gulbarga-48 (2 DM, 16 ACL); 12. Bidar-7; 13. Belgaum-21 (4 DM, 2 ACL); 14. Bijapur-34 (7 DM, 5 ACL); 15. Raichur-33; 16. Bellary-39 (1 DM), 17. Dakshina Kannada-55 (3 DM, 9 ACL); 18. Kodagu-5. (DM:Departmentally Managed; ACL-Managed Departmentally through auction-cum-lease).

Ocean Transport

Implementation of various development schemes in the previous plans, have lead to the increase in the traffic at the ports of Karwar, Belikeri, Tadri, Bhatkal, Kundapur, Hongarakatta, Malpe, and Mangalore old port. The Karwar port

was selected for developing it into an all-weather port in stages. The other ports selected for development due to more traffic potential were Belikeri, Tadri, Honavar, Bhatkal, Kundapur, Hongarakatta, the Old port of Mangalore and Malpe. The New Mangalore Port is administered by the NMPT Board and controlled by the Government of India. In 1983-84, the ports of Karwar and Tadri, were notified as customs ports for ship breaking. They were thrown open for ship breaking and three foreign ships were obtained for these ports for ship breaking. There are 13 minor/intermediate ports in the State water transport sector. (Ports at Majali, Tadri, Honavar, Murdeshwar, Bhatkal, Kundpur, Hongarakatta, Malpe and Mangalore Old Port). It is proposed to spend Rs. 1,750 lakhs for the development of ports, during VIIIth Plan period. The main plank of the VIIIth Plan, is to expand the cargo handling capacity of Karwar and Mangalore Old Port and also completing the on-going works at various ports. A brief account of each port is as given below:

Karwar Port: Karwar port has been considered as one of the finest natural ports in the world. The port is also backed by a vast hinterland of about 1.70 lakhs sq.kms, encompassing as many as eleven districts of the state, besides two border districts of Andhra Pradesh (Ananthapur and Kurnool). This hinterland is rich in minerals, forest, agriculture and marine wealth. The latest survey of the National Council of Applied Economics and Research, New Delhi, predicts an estimated seven million tonnes of annual traffic for this port during 1995-96. The main export items comprises of iron/manganese ore, granite blocks and agricultural, forest and marine products, while imports include fertilisers, rock phosphate, salt and other goods. All these advantages have prompted the State Government to develop the port into an all-weather port. The related work is under various stages of progress.

In the first stage a steamer berth of 355 metres, along with connected facilities was constructed at a cost of Rs. 21 crores. Lighterage facilities are provided for handling cargo traffic. About 30 tonnes capacity weigh bridge is installed at the port and harbour communication is functioning by installing VHF sets. It is proposed in the second stage, to provide an alongside facility for 40,000 DWT ore carrier with faster ore loading facility of a minimum of 10,000 tonnes per day, for handling annual traffic of two to three million tonnes of ore without the rail link from Hubli to Karwar. In the VII Plan, an outlay of Rs. 4.6 crores was provided for constructing two additional berths of 10.5 mtrs, draft, along with connected facilities. Works will be undertaken when traffic stabilises.

Improvement of port facilities provided in the second stage, by obtaining mechanical ore loading system to handle 60,000 DWT ore carrier, is planned in the third stage of development. It is catering to five to six million tonnes of ore per year if Hubli-Karwar rail link is established. The imports and exports from the Karwar port during 1991-92, was 1,79,629 M.tonnes and 57,425 M.tonnes respectively. In the same period, 51 ships arrived at this port.

Belekeri. No development works were undertaken in the port during Seventh Plan, but it is proposed to construct a wharf at an estimated cost of Rs. 75 lakhs. A sum of Rs. 10 lakhs, proposed to be spent on dredging, and for soil investigation and Rs. 5 lakhs for hydrographic survey. In 1990-91, the port handled export of 2,29,545 M.tonnes of iron/manganese ores.

Tadri: In view of the decrease in the cargo traffic through this port, no development works were undertaken in the VII Plan. During VIII Plan, a provision of two lakhs has been made for the work of hard surfacing the wharf area. The traffic handled at this port was 5,533 M.tonnes, in 1991-92. There is a vast potential for ship breaking activities at this port.

Bhatkal Port: Due to lack of commercial traffic through this port, no development programme was envisaged in the Seventh Plan. Only a sum of Rs. five lakhs has been allotted for dredging work during Eighth Plan period.

Kundapur Port: During previous Plans, one transit shed, a sheet piled roof and others were constructed at this port. In the VIIIth Plan, it is planned to spend Rs. 75 lakhs for the development of the port. It is proposed to construct two breakwaters, to train the river. Dredging work will also be undertaken. The cargo traffic handled through this port was 11,236 M.tonnes, in 1991-92.

Hangarakatta port: No expenditure was incurred on development works of the port, during previous plans. It is proposed to construct one RCC Jetty, at an estimated cost of rupees eight lakhs, during the VIII Plan period.

Malpe: The port has been well developed over the years, as a fishing harbour. The commercial traffic, through this port is on the increase. Hence it is proposed to provide one wharf and other facilities, at a cost of Rs.85 lakhs, during the period of Eighth Plan. In 1991-92, the cargo traffic handled through this port was 35,528 M.tonnes.

Mangalore port: The old port is administered by the State Government. There is a lighterage wharf in this port and 14 jetties are owned by private people and two jetties belong to the department. One wharf having a length of 252 Mtrs. was constructed during Seventh Plan. Construction work of transit sheds and breakwater is under progress. One mounted crane with the capacity of 18 tonnes was obtained for this port. This port provides, sea transportation to the Lakshdweep islands. There is vast scope for ship breaking activities at this port.

In 1987, the State Government has accorded sanction for the first stage development of the port, at an estimated cost of Rs. 12.50 crores. Later, a provision of Rs. 9.40 crores was made in the VIII th Plan, for the construction of 252 metre wharf, two breakwaters, purchasing of cranes and dredgers etc. Out of them, construction of wharf has been started on 30th June 1989 and

transit shed work and dredging is under progress. Steps have been taken to instal VHF sets for the communication system at the port. When the on-going development works are completed, there is a likelihood of increase in the navigational activities of the port. During 1991-92, the imports and exports, through this port was to the tune of 37,800 M.tonnes and 23,294 M.tonnes respectively.

Honavar Port: During earlier Plans, one transit shed and four jetties were constructed. Provision was made for 1.2 M and 1.8 M draft lighterage wharves. It is envisaged to spend Rs. 75 lakhs, for the development of the port during the Eighth Plan period. About 3,560 M.tonnes of cargo, was handled in this port during 1991-92.

Add to part II. Page No. 74:

New Mangalore Port: The New Mangalore Port has been developed into a major port in the country and is being administered by the Government of India. The Centre had spent a sum of Rs. 37.78 crore in the first stage and Rs. 41.66 crores during second stage for the development of the port. The work for an additional general cargo berth was started in 1981 and completed in 1984. Pending work of the additional cargo berth on the western side (eastern dock) was taken up in 1987 and completed in November, 1989. A Plan outlay of Rs.60 crores, for the port development during Eighth Plan was also approved by the Centre. Apart from it, some more facilities are expected to be created at this port, for the benefit of user agencies who have also agreed to meet its expenditure. These facilities are for the following purposes: To handle crude and P O L Products for Mangalore Refineries and Petro-Chemicals Ltd; handling coal for the proposed thermal station at Nandikur; port facilities for importing coal for M/s. Jai Prakash Engineering and Steel Co., Ltd., and for handling imported LPG at Mangalore.

In the New Mangalore Port, there are six general cargo berths which are capable of handling 30,000 DWT general cargo ships, drawing a draft of 9.15 Mtrs. There is also a shallow draft berth for handling ships upto 6 Mtr draft. Now to meet the increased general cargo, it is planned to construct two more general cargo berths on the Western dock. Its estimated cost will be about Rs. 30 crore.

In 1985, a comprehensive master plan on the traffic projection of the Port, till the turn of the century was drawn up. The highlights of the master plan is as follows:

Anticipated traffic projection for 2000 A.D.

(In million tonnes).

Description	1995-96	2000-01
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Dry Bulk	8,150	9,900
Liquid Bulk	7,280	8,320
Break Bulk	1,245	1,335
Total	16,675	19,555
Containers	24,590	41,660
No. of ships	750	800

Add to part II page 118:

Export and Imports handled through some ports of Karnataka from 1982-83 to 1992-93
(In M.tonnes)

Year	Karwar	Belikeri	Honavar	Kundapur	Mangalore (old)
1982-83					
Export	1,50,618	1,70,579	20,356	52,176	1,17,501
Import	1,58,834	-	1,812	4,150	35,453
1983-84					
Export	56,016	2,65,465	24,695	69,853	98,066
Import	1,58,671	-	1,573	3,042	1,11,478
1984-85					
Export	10,571	3,69,497	19,594	45,841	97,772
Import	2,70,021	-	827	3,982	2,13,091
1985-86					
Export	18,543	2,66,148	11,590	50,985	62,580
Import	1,75,315	-	1,423	2,654	1,88,030
1986-87					
Export	-	3,52,048	8,557	37,175	49,081
Import	1,86,063	-	689	3,182	1,331,147
1987-88					
Export	4,081	2,27,959	5,034	17,103	68,827
Import	51,652	-	342	1,502	13,724
1988-89					
Export	2,879	2,15,326	6,660	10,687	43,852
Import	1,81,789	-	216	768	1,66,116
1989-90					
Export	3,202	2,34,057	4,324	12,763	30,399
Import	2,27,508	-	47	746	1,11,345
1990-91					
Export	45,401	2,29,545	1,690	12,050	24,412
Import	1,91,524	-	-	-	76,411
1991-92					
Export	57,425	30,000	3,330	10,673	23,294
Import	1,79,629	-	230	563	37,800
1992-93					
Export	72,740	60,895	1,33,69	5,538	23,626
Import	2,46,839	-	240	-	34,748

Add to part II, page No. 118:

Commodity-wise traffic handled in New Mangalore Port from 1980-81 to 1992-93 (in M.tonnes)

Name of the Commodity	1980-81	1985-86	1989-90	1990-91	1991-92	1992-93
IMPORTS						
1. P.O.L	3,10,111	4,11,772	5,77,491	6,12,115	6,21,892	6,30,321
2. Food Grains	4,269	-	-	-	-	2,57,755
3. Fertilizer	2,07,279	2,19,235	1,04,593	82,539	1,41,100	2,40,520
4. Cement	87,026	44,093	-	-	-	-
5. Scrap	20,673	80,899	1,03,869	88,617	66,614	28,118
6. Edible Oil	-	47,218	47,648	59,644	15,883	6,000
7. Wooden logs	-	65,413	2,32,523	3,14,778	1,71,930	1,58,978
8. Coal	-	-	-	31,567	42,446	-
9. Phosphoric Acid	-	-	61,666	81,994	1,29,666	89,887
10. Liquid Ammonia	-	17,204	15,692	27,700	45,168	20,521
11. Other Commodities*	9,347	1,10,186	1,50,329	75,180	63,369	97,632
Total =(A)	6,38,705	9,96,020	12,93,811	13,74,134	12,98,068	15,29,732
EXPORTS						
1. Iron Ore & Pellets	2,500	22,60,139	58,77,336	61,25,480	64,92,384	50,82,382
2. Coffee	63,486	42,961	47,115	44,287	50,189	22,625
3. Manganese Ore	12,800	32,565	-	-	-	-
4. Chrome Ore	30,000	47,300	23,505	16,500	16,500	15,852
5. Granite stones	1,74,134	2,14,659	3,75,422	4,50,810	3,57,673	4,14,686
6. Reeper cargo	4,530	1,627	-	615	1,439	847
7. Cashew Kernels	1,865	262	852	431	141	186
8. Batteries	2,813	2,794	6,001	2,303	5,695	-
9. Other commodities**	31,252	87,211	36,847	16,299	51,483	21,377
TOTAL=(B)	3,23,380	26,89,518	63,67,078	66,58,725	69,75,504	55,57,955
TOTAL (A+B)	9,62,085	36,85,538	76,60,889	80,32,859	82,73,572	70,87,687
No. of ships handled	227	309	400	457	492	453
No. of Containers handled (In TEUs).	474	1,813	1,236	1,063	1,855	1,924
Quantity of containerised cargo handled (In tonnes)	2,700	8,828	8,552	9,668	15,568	16,019.

*Care Cargo, Wood Pulp, Lime Stone, Pipes Etc., Coated pipes, Cardamom, Pepper, Plywood.

**Canned Fruit products etc.

Add to part II Page No.89:

AIR TRANSPORT

Both the Indian Airlines and Private Air Taxi Companies are operating flights in the State. In the Indian Airlines network, Bangalore airport ranks fifth in respect of revenue earnings. Bangalore airport could fetch Rs.10.750 crore, as against a target of Rs. 12.210 crore during 1992-93.

The Bangalore airport will remain open from 0500 hours to 22.50 hours daily and during this period 15 to 20 flights are handled by the Indian Airlines. Its fleet consists of four Air bus 300, ten Air bus 320, one Boeing 737. On an average there are about 60,000 incoming passengers and 60,000 outgoing passengers at this airport per month. Of the two terminals at the airport, terminal I is being used to handle flights to Bombay, Delhi, Calcutta, Pune, Ahmedabad and Goa. Terminal II handles flights to Madras, Coimbatore, Cochin, Trivandrum and Mangalore. The incoming passengers are routed through departure III. This airport is considered as an alternative airport for diverting flights from Mangalore, Cochin, and Calicut during Monsoon season. In such exigencies, stranded passengers will be provided with alternate flight or transported by vehicles.

Indian Airlines is handling about 650 tonnes of incoming cargo and 650 tonnes of outgoing cargo every month. Besides about 1,500 tonnes of international cargo carried by Air Cargo Charter Companies. They are Lufthansa (DC-8, three times a week), Kuwait Airways (B707, twice a week), Singapore Airlines (B-737, twice a week), Air India (DC-8, once a week), Air France (B-747, once a week) and Alitalia (DC-8, once a week). Bangalore Station is headed by Station Manager.

Under the 'Open Skies Policy' of the Centre, Private air-taxi companies are also operating their aircraft from Bangalore to Delhi, Bombay and Hyderabad. They are Jet Airways, East-West Airlines, Damania Airways and Modi Luft. There are 40 air ticket selling agents in Bangalore and out of 15 airline companies, five have regular offices here. Mangalore is also connected by air. The Indian Airlines operates daily one flight from Bombay to Mangalore, weekly four flights each between Bangalore-Mangalore and Mangalore-Madras. Due to poor traffic, the Belgaum-Bangalore flight was cancelled in 1984. Now Vayudoot is flying its aircraft between Bombay-Belgaum thrice a week, since 15th April 1989. From September 1993, the East West Airlines has begun operating one flight from Bombay to Belgaum daily, except on Sundays. In May 1989, Vayudoot started its services from Bangalore to Hubli on alternate days. But within four months Vayudoot flights were stopped and Hubli is no longer on the air map of the country.

Details of Indian Airlines flights to and fro from Bangalore is as follows:

Bombay-daily three flights; Ahmedabad-weekly three flights; Calcutta-weekly six flights; Cochin-weekly three flights; Coimbatore-weekly four flights; Delhi-two flights daily; Goa-weekly twice; Hyderabad-daily one flight; Madras-daily two flights; Mangalore-weekly four flights; Pune-weekly three flights; Trivandrum-daily one flight.

Flights operated by the Private Air Taxi companies to and fro Bangalore are Modi Luft; Bombay-daily one flight; Delhi-daily one flight; Hyderabad-daily one flight; East-West Airlines: Bombay-Daily one flight; Jet Airways-Bombay-daily one flight; Damania Airways Ltd: Bombay-daily one flight.

Table No.19

Statistics of Bangalore Station of the Indian Airlines from 1978 to 1992-93.

Year	Passengers Nos.	Incoming			Outgoing	
		Cargo in tonnes	Mail in tonnes	Passengers Nos.	Cargo in tonnes	Mail in tonnes
1978	2,25,713	1,862	461	2,74,369	3,124	435
1979	2,61,313	1,862	435	2,64,902	3,302	398
1980	2,59,244	2,011	486	2,60,417	3,572	440
1981	3,31,805	2,856	553	3,41,467	3,997	421
1982	3,72,262	3,332	566	3,95,971	4,880	412
1983	3,84,810	3,727	630	4,36,784	4,656	472
1984	4,64,466	5,221	681	5,08,026	7,564	431
1985	5,36,802	6,314	860	5,50,643	7,964	407
1986	5,64,167	6,101	843	5,64,264	7,998	393
1987	6,19,557	6,206	1,036	6,11,532	9,096	418
1988	6,21,809	6,464	667	6,07,173	9,430	510
1992-93	5,36,338	5,104	-	5,58,039	6,711	-

Cargo handled by the Mangalore Airport in 1991-92 was incoming 99 M. tonnes; Outgoing - 57 M. tonnes.

Flying Training School

The State Government run flying school at Bangalore is imparting training to the youth of the State in flying. Candidates in the following categories are being provided training in flying: Cadets of the N.C.C Airwing; Hobby flying to private licence holders; Youth of the State to qualify to get private pilot's licence and commercial pilot's licence; and unemployed commercial pilot's for the renewal of licence. In addition to it, carrying out joy flights, charter flights and providing flying to scientists and engineers of the defence are also some

of the activities of the school. During 1991-92, out of nine candidates undergoing training for commercial pilots licence, three have completed the course. In the same period, 98 students were undergoing training for the private pilots licence course.

Add to Part II, Page No. 88:

Passport Office: The Passport office at Bangalore (1978) has issued following number of passports from 1982 to 1992: 1982: 63,319; 1983: 68,949; 1984: 67,720; 1985:76,119; 1986:70,602; 1987: 41,860; 1988: 48,536; 1989: 67,052; 1990: 69,120;1991: 58,259 and 1992: 1,23,150. There has been a demand to open one more unit at Mangalore as traffic to Gulf countries is heavy from the coastal area.

Postal Services

Add to Part II, Page No.89:

Karnataka Postal Circle was formed on 1-4-1960. It comprises of three regions. They are Bangalore, South-Karnataka region and North Karnataka region. The postal circle is headed by Chief Post Master General and Bangalore region has been placed directly under his control. The South and North Karnataka regions are headed by Post Master General with headquarters at Bangalore and Dharwad

Table No. 7.20

Region- wise distribution of postal and RMS units in the State as on 1st May 1992.

<i>Postal Division</i>	<i>Bangalore region</i>	<i>South -Karnataka region</i>	<i>North-Karnataka region</i>	<i>Total</i>
H.O.	8	28	33	69
D.S.O.	274	777	682	1,733
EDBO.s	377	3,622	3,692	7,601
EDSOs	5	155	141	301
				9,704
RMS Sorting Offices or Mail Offices	6	12	10	28

There is a steady growth of Postal and RMS network since the formation of the Circle. As on 1st Jan 1980, there were 9,124 post offices and on an average each post office served an area of 21.12 sq.km and a population of 3,282. The corresponding statistics as on 31st March 1992 was 9,704, post offices and for every 19.80 sq.kms a population of 4,618. Out of 28 RMS offices, Bangalore and South Karnataka regions had six and 12 respectively. The remaining ten offices were functioning in North Karnataka region.

For effective administration of the postal services, a Circle Management Committee with Chief Post Master General as Chairman has been formed. The other members of the Committee include Post Master General, South Karnataka, Post Master General, North Karnataka, Director of Postal Services, Bangalore region, and Deputy Director of Postal Accounts.

Table No. 7.21

Statement showing distribution of Post Offices & RMS. district/ division-wise in the State as on 31-3-1992.

Bangalore Region:

1	2	3	4	5	6	7
<i>District</i>	<i>Division</i>	<i>HO</i>	<i>DSO</i>	<i>EDSO</i>	<i>EDBO</i>	<i>Total</i>
Bangalore	Bangalore(E)	3	94	1	31	129
Urban	Bangalore(W)	2	64	1	6	72
	Bangalore (S)	2	74	2	25	103
	Channapatna	1	42	2	315	360
Bangalore Rural	Total	8	274	5	377	664

South Karnataka Region

Chitradurga	Chitradurga	2	84	1	387	474
Chikmagalur	Chikmagalur	2	57	15	227	301
Dakshina	Puttur	3	59	64	244	370
Kannada	Udupi	3	61	24	170	258
	Mangalore	2	56	29	64	151
Hassan	Hassan	2	58	2	350	412
Kodagu	Kodagu	1	25	3	186	215
Kolar	Kolar	2	58	2	346	408
Mandya	Mandya	2	54	1	397	364
Mysore	Mysore	2	68	4	166	240
	Nanjangud	2	36	4	318	360
Shimoga	Shimoga	3	84	1	375	463
Tumkur	Tumkur	2	77	5	482	566
	Total	28	777	155	3,622	4,582

North Karnataka Region

Belgaum	Belgaum	4	67	17	235	323
	Chikodi	3	37	31	140	211
	Gokak	2	32	18	123	175
Bellary	Bellary	3	77	-	375	455
Bidar	Bidar	1	32	-	270	303
Bijapur	Bijapur	3	53	8	354	418
	Bagalkot	2	43	-	286	331
Dharwad	Gadag	2	30	26	144	202
	Dharwad	2	39	2	166	229
	Haveri	2	27	14	164	207

1	2	3	4	5	6	7
Gulbarga	Gulbarga	4	69	6	539	618
Raichur	Raichur	2	67	1	429	499
Uttara Kannada	Sirsi	1	38	3	211	253
	Karwar	2	51	15	166	234
Total		33	682	141	3,602	4,458

Every day, on an average 23.74 lakh unregistered articles are handled by the Mail offices in Karnataka. About 50% of this mail (11.56 lakhs), is handled by Bangalore alone. There is an arrangement in 17 post offices for delivering mail, thrice a day, in 258 post offices twice a day and only one delivery in the rest of the post offices. Three-delivery system is confined to Bangalore City only.

Table No.7.22

Quantum of mail handled by the mail offices in Karnataka Postal Circle.

	1990-91	1991-92
Unregistered articles	22,24,817	23,74,448
Registered articles (including insured)	92,534	90,881
Registered parcels	8,719	7,415
Money orders	60,656	41,382
High value money orders	5,244	4,772

Table No.7.23

Mail handled in the mail offices of Bangalore

	1990-91	1991-92
Unregistered articles	11,36,119	11,56,263
Registered articles (including insured)	45,782	43,350
Registered parcels	4,847	3,416
Money orders	17,476	19,271
High value money orders	4,847	2,189

The three speed post centres working in the State are located at Bangalore, Mysore and Mangalore. In Bangalore alone, there are 33 speed post booking centres. Similarly Mangalore and Mysore have six and three centres respectively, for booking speed post at the post offices. In Bangalore, there were 14 delivery offices for speed post articles. Point to point speed post service is available in the following stations, from Bangalore and *vice-versa* : 1. Hubli, 2. Dharwad, 3. Ranibennur, 4. Belgaum, 5. Manipal, 6. Davanagere, 7. Gulbarga and 8. Ananthapur. Point to Point speed post is also available to Bombay from Gulbarga, Belgaum, Hubli and Dharwad. The facility for booking international speed post articles are available at Bangalore GPO, Bangalore HO, Mangalore HO and Mysore HO.

Number of letter boxes which stood at 8,557, in the State in 1960, rose to 27,348 at the end of 31st March 1992, an almost 319% percent increase

over three decades. The spread of letter boxes in the State is as follows: Urban areas 6,167, backward areas 14,629, tribal areas 1,154, hilly areas 3,372 and hilly tribal areas 2,026.

In the postal circle, there are seven night post offices which provides postal facilities to the customers, even after their normal working hours. Such working hours are from 4 p.m. to 8 p.m. Names of post offices are Bangalore G.P.O., Chickpet S.O., Mysore H.O., Mangalore H.O., Davangere H.O., Belgaum H.O. and Hubli H.O.

Modernisation is underway at the required stages in the department for speedy disposal of the mail traffic. Recently ten P.C.Computers were acquired for three post offices. It is proposed to instal some more Computers during 1993-94. The postal life insurance work was computerised in the State in 1986 itself. Two philatelic Bureaux in the State are at Bangalore GPO and Mangalore HO. At the following places, district Philatelic counters are functioning: Belgaum HO, Bijapur HO, Davanagere HO, Dharwad HO, Hampanakatta (Mangalore) HO, Hospet HO, Hubli HO, Mandya HO, Mysore HO, Rajajinagar HO, Shimoga HO Udupi HO, and Madikeri HO. Total revenue derived from the sales at Philatelic bureau in 1991-92 was Rs. 94,05,000, as against Rs.46,44,740 earned during 1990-91.

In 1988, Victor Dhanraj of Bangalore GPO, was adjudged as best Postman and Meghadoot award was conferred on him. Again in 1992, the Meghadoot award was bagged by M.G.Ramanna, Postman of Hosanagar S.O. in Shimoga Postal division. The Postal Training Centre at Mysore, continues to impart training to the newly recruited candidates like postal assistants, sorters, inspectors and others.

Telecommunications

Add to Part II, Page No.96:

There is a rapid expansion of telephone system in the State, during the past one decade. The total number telephones in use during 1982 was 83,258, and it increased to 3,75,043 in 1992. Again this figure rose to 4,34,456 lines when 59,413 new telephones were added in 1992-93. Of these new connections, the share of Bangalore City alone was 17,666. There were 739 telephone exchanges in 1982 as against 1,707 in 1992. During 1992-93, 92 new telephone exchanges were opened which brought the total number to 1,799.

With the opening of 287 new STD/ISD routes, their number went upto 590 in 1992-93. All the district headquarters as well as 159 taluk headquarters were brought under STD network. In addition, 51 revenue sub-divisional headquarters were also linked with STD. During the same period (92-93), 767 STD points were newly opened with a view to facilitate greater access to the non telephone owning public and the total STD points rose to 2,800. Including

new connections provided to 1,207 village panchayats, there were 5,644 village panchayats linked with the telephone network. For the convenience of the travelling public, 207 public telephones have been opened on the national highways. Free phone connections were made available to 598 tribal villages and 48 public hospitals at various district headquarters.

Statistics on Telephones in Karnataka Telecommunication Circle for some years (including Bangalore Telecommunication Circle): 1982-83: 13,513; 1983-84: 13,644; 1984-85: 14,554; 1985-86: 19,226; 1986-87: 28,740; 1987-88: 14,457; 1988-89: 28,700; 1989-90: 29,305; 1990-91: 32,936; 1991-92: 42,790; and 1992-93: 59,413.(new connections)

Growth of Telephones in Bangalore Telecom District from 1982 to 1993: 1982: 57,658; 1984: 63,200; 1985: 72,152; 1986: 73,541; 1989: 85,475; 1991-92: 1,39,503

Statistics of Karnataka Telecom Circle as on 31-3-1992.

1. Total number of Telephone exchanges: 1,707; 2. Main Automatic exchanges I: 30; 3. Main Automatic Exchanges II: 107; 4. Main Automatic exchanges III: 1,570; 5. Total exchanges capacity: 4,25,976; 6. Total working connections: 3,75,043; 7. Total telephones including extensions: 2,35,988; 8. People on waiting list (14+9) notional telex: 1,31,970; 9. Telex exchanges: 23; 10. Telex capacity: 3,190; 11. Telex waiting list: 462; 12. Telex working connections: 3,079; 13. Subscriber Trunk Diallings: 284; 14. Long distance public telephones: 1,114; 15. Local Public Telephones: 6,322; 16. Combined Offices (Post & Telegraph): 4,039; 17. Central Telegraph Offices : 5; and 18. Departmental Telegraph Offices: 63.

Source: Karnataka Telecom Circle.

Table No. 7.22

Telex exchanges in Karnataka Telecom as on 31-3-1992.

<i>Name of the exchange</i>	<i>Equipped Capacity</i>	<i>Working connections.</i>	<i>Total on waiting list.</i>
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
Name of the exchange			
Bangalore	2,260	2,168 +28	417
D.Kannada TD**	270	248	1
TDM, Belgaum	100	90	4
TDM, Mysore	150	145+9	9
TDM, Hubli	150	122+16	6
TDM,Davanagere	40	36	3
TDE, Hassan	*notional	13	3
TDE, Kolar	20	15	1
TDE, Tumkur	notional	19	1
TDE, Bidar	20	13	-
TDE, Bijapur	notional	11	-

1	2	3	4
TDE, Bellary	60	49	-
TDE, Gulbarga	40	30	-
TDE, Raichur	40	23	-
TDE, Madikeri	notional	8	-
TDE, Shimoga	40	37	5
TDE, Uttara Kannada	notional	19	-
Total	3,190	3,079	462

*Notional -No independent exchanges at these places, but connected to Bangalore Exchange. TD-Telecom District; TDM- Telecom District Manager, TDE-Telecom District Engineer.

Source: Karnataka Telecom Circle

Table No. 7.23

District-wise distribution of telephone exchanges, Telephones and Telegraph offices as on 31st March 1992.

Sl. District No.	Telephone exchanges	Telephones	Telegraph offices (CTD & DTO)
1. Bangalore	100	1,48,820	191
2. Belgaum	133	22,144	395
3. Bellary	74	9,228	127
4. Bidar	49	4,430	110
5. Bijapur	113	10,500	324
6. Chikmagalur	83	7,159	116
7. Chitradurga	91	11,582	221
8. Dakshina Kannada	171	43,782	498
9. Dharwad	116	21,307	335
10. Gulbarga	103	8,804	219
11. Hassan	77	8,415	98
12. Kodagu	63	6,813	84
13. Kolar	88	9,139	171
14. Mandya	49	5,346	111
15. Mysore	89	25,426	334
16. Raichur	64	7,541	159
17. Shimoga	93	9,137	167
18. Tumkur	73	6,653	188
19. Uttara Kannada	79	8,818	225

Source: Karnataka Telecom Circle.

Add to Part II, Page No. 103:

Radio

After 1980, three more stations were commissioned in the State at Hassan(1991), Chitradurga(1991) and Hospet (1992), raising the total number of stations from six to nine. Among these stations Bangalore and Dharwad stations have high power transmitters. The stations at Hospet and Chitradurga are F.M.local whereas Hassan has a non-local FM Station. New stations at Raichur and Madikeri will be opened shortly and Bijapur and Karwar are two other places where they propose to have new station in future.

All India Radio, Bangalore, has a programme jurisdiction over Bangalore, Kolar, Tumkur and Mandya Districts. The districts of Dharwad, Bijapur, Belgaum and Uttara Kannada are served by Dharwad station. Stations at Mysore and Mangalore, have programme jurisdiction over Mysore and Mangalore districts respectively. The station at Bhadravathi serves Shimoga and Chitradurga districts and other FM stations are serving the respective districts in which they are working. For broadcasting Vividh Bharathi Programmes, there are separate low powered transmitters at Bangalore and Dharwad. Both the stations are attached with regional news units and they bring out three regional Kannada news bulletins daily.

Programmes on topics like agriculture, horticulture, dairying, ecology, health etc., have been formulated and broadcast. About 92% of the State's population is covered by radio stations and its contribution to the socio-economic changes in the society is quite significant.

Television

Bangalore City came to have an interim T.V.Relay Centre in 1981 . It was relaying programmes of Bombay and Madras T.V.Stations on selected days of the week. But programmes could be locally produced and telecast only in December 1983. The full fledged production centre of the Bangalore Doordarshan was commissioned in 1988. Prior to May 1989, the programmes produced and telecast was to the tune of 2 hours and 10 minutes from 6.30 p.m to 8.40 p.m. Later, there was an increase in the programme duration by one hour and the duration of Kannada news was from ten minutes to fifteen minutes. In August 1990, all the transmitters in Karnataka were connected to Bangalore Doordarshan Kendra and the Kendra is telecasting programmes from 5pm to 8.30 pm. Apart from Kannada programmes, the Kendra is also telecasting programmes in Tamil, Telugu, Marathi, Malayalam, Urdu, Kodava, Konkani and other Indian languages. Throughout Karnataka, 28 transmitters are working by relaying programmes from Bangalore Kendra. Of them 25 have 100 watts capacity, two have 10 KW and only one transmitter has one KW capacity. The total area covered by Doordarshan

in the State is about 86% and population of 72%. Bangalore is one of the seven cities provided with a second channel and it was inaugurated from 2nd October 1993.

Table No. 7.24

Details of T.V.transmitters working in the State as on 18-5-1993 and are linked with the Bangalore Doordarshan Kendra.

Sl. No.	Location of the Transmitter	Power	Population covered in Lakhs			Date of Commissioning.
			Urban	Rural	Total	
1.	Gulbarga	01KW	4.3	12.3	16.6	03-09-77
2.	Mangalore	100W	3.1	3.0	6.1	21-07-84
3.	Davanagere	100W	2.5	2.5	5.0	23-07-84
4.	Shimoga	10KW	27.00	80.00	107.0	12-01-92
5.	Bijapur	100W	1.5	2.3	3.8	24-08-84
6.	Bellary	100W	2.0	2.0	4.0	03-09-84
7.	Gadag	100W	1.5	2.9	4.4	10-09-84
8.	Raichur	100W	1.3	2.1	3.4	13-09-84
9.	Dharwad	100W	3	2.8	6.1	28-09-84
10.	Mysore	100W	5.1	2.9	8.0	01-10-84
11.	Belgaum	100W	3.0	3.5	6.5	08-10-84
12.	Hospet	100W	2.0	2.0	4.0	12-10-84
13.	Hassan	100W	2.0	2.0	4.0	14-11-86
14.	Madikeri	100W	0.3	2.1	2.4	31-01-87
15.	Udupi	100W	0.3	2.5	2.8	14-03-87
16.	Chikmagalur	100W	0.8	2.3	3.1	04-11-87
17.	Bidar	100W	0.8	1.8	2.6	30-03-88
18.	Karwar	100W	0.5	0.6	1.1	28-03-89
19.	Chitradurga	100W	0.7	2.4	3.1	05-07-89
20.	K.G.F.	100W	1.4	1.3	2.7	15-09-89
21.	Athani	100W	0.3	3.4	3.7	30-09-89
22.	Tiptur	100W	0.3	3.2	3.5	22-10-89
23.	Ranibennur	100W	0.6	1.0	1.6	20-10-89
24.	Sirsi	100W	0.4	0.5	0.9	25-10-89
25.	Chikodi	100W	0.8	1.2	2.0	29-10-89
26.	Bantwal	100W	0.4	0.8	1.2	29-10-89
27.	Sandur	100W	0.2	2.0	2.2	31-03-90
28.	Bangalore Main Kendra	10KV	42.8	79.7	122.5	01-11-81

Source: Bangalore Doordarshan Kendra.

TOURISM

Tourism Department

Tourism department is striving for the development and promotion of tourism in the State. It is implementing State and Central Government Tourism policies and executing schemes which are entrusted to it from time to time. During Seventh Plan period, stress was laid on providing more facilities to the domestic tourists. The department undertook Press Campaigns for the Mysore Dasara, Explore India-92, World Tourism Day etc., participated in the Dasara Exhibition, International Trade Fair at New Delhi, India Tourism and Industrial Fair at Madras and host of other exhibitions having publicity in mind.

It has also brought out Video Films, hand books and folders on several unique aspects of Karnataka.

To expose varied cultural heritage of the State to the outside as well as domestic tourists, it is proposed to organise festivals annually, at all the district head-quarters. As a part of it, held Chaitrasri festival at Kemmannagundi in Chikmagalur District and Lakkundi festival in Dharwad District in 1992-93. Proposals have been sent to the Centre, seeking financial assistance for conducting four national festivals, namely, Vijayanagara-Hampi, Hoysala-Mahotsava (Belur-Halebid), Navaraspur-Pattadakal festival and Kodagu festival.

Over the years, the department has constructed wayside facilities, cottages, restaurants etc., at a number of tourist spots. Under the Centrally-sponsored schemes, the Centre has sanctioned 14 projects in 1992-93. They are development of Hoysala Visitor's Centre at Halebidu at a cost Rs. 20 lakhs, Chalukya Visitor's Centre at Cholachagudda near Badami at a cost of Rs. 20 lakhs, flood lighting of Srikantheshwara Temple at Nanjangud, Mohammed Gawan Madarasa at Bidar and upgrading properties maintained by the K.S.T.D.C. There is provision for purchase of boats for water sports and adventure. An amount of Rs. 74.85 lakhs was released as first instalment in 1992-93, to commence the work on these projects.

Under the State Schemes, the ongoing works in progress are construction of restaurant at Makedatu in Kanakapura Taluk, tourist resort at Dattatreyapectha in Gangapur (Gulbarga District), floodlighting of Kittur Rani Channamma Samadhi (II Phase) at Bailahongal and tourist facilities at Anmod (U.K. District). In 1992-93, works were taken up to provide tourist facilities at B.R. Hills (Mysore District), Chandravalli (near Chitradurga) and at Minakanagurki in Gowribidanur taluk. Proposals on seven schemes, on adventure tourism have been submitted to the Centre, in 1992-93. The Schemes include rock climbing Centre at Ramanagaram (est.cost Rs. 22.57 lakhs), aero-adventure sports centre at Mysore (Rs. 29.80 lakhs) and development of camping site (Jungle camp) at Belagodu

in Kodagu District (Rs. 37 lakhs) are very prominent. The Centre has already released Rs. 17.00 lakhs as first instalment towards taking up Belagodu Jungle camp work, in addition to Rs. six lakhs sanctioned by the State Government.

Arrangements for the celebration of Mahamastakabhisheka (December 1993) at Shravanabelagola are in full swing. The Centre is also providing Rs. 81 lakhs for the construction of Yatrivas and two Sulabh Shouchalayas at Shravanabelagola and one each at Belur and Halebidu. The Department conducted guide training camps at Belur, Mysore, Bijapur, Hampi, Chitradurga and training licences were issued to the candidates. Announcement of 'Tourism Policy' and Package of incentives by the State Government to the tourism industry is a major achievement in 1992-93. The proposed subsidy ranges from 15% to 25%, subject to a maximum of Rs. 25 lakhs. As a follow-up measure a State Level Seminar was conducted in July 1992.

Tourism Development Corporation

The State owned Tourism Development Corporation has an authorised share capital of five crores. Recently, the Government has released grants for the development of Beach Resorts Projects at Malpe (D.K.) and for expansion of tourist home at Madikeri. The hotel wing of the Corporation is running a chain of hotels and restaurants, under the name 'Mayura Group' (18 hotels, 8 restaurants, 3 boat clubs). The Tourism Department has handed over wayside facilities at Melkamanahalli, Yadiyur, Kamalapur, Mulbagal and also the Yatrivas at Mysore to the Corporation for administration. The Transport division of the Corporation has a fleet of 27 Super Deluxe Coaches and they will be used for conducted tours. These Coaches are also hired on contract basis for private people. The transport division has branches at Mysore, Mangalore and Hospet and from these places, the Corporation buses are operated on conducted tours.

The Jungle Lodges and Resorts Ltd., is a subsidiary company of the Corporation, and which was established for the development of Wild Life Tourism in the State.

Government of India Tourist Office

The Tourist office of the Government of India was opened in 1983 at Bangalore and functioning under the control of Regional Office, Madras. It is co-ordinating with the State Government in respect of tourist development activities and provides information or assistance to the tourists visiting Karnataka. The main function of the tourist office is to collect, disseminate travel information on India for the tourists. It keeps close touch with the local travel industry for promoting travel to India and particularly Karnataka. It provides guidance to the entrepreneurs in travel industry for approval of hotel projects and to classify hotels. The Tourist office is conducting short guide courses for issue of licences

to Government of India approved guides. In consultation with the State Tourism Department, the department identifies places of tourist interest in the State and helps to get financial assistance from the Ministry of Tourism, New Delhi, for development.

India Tourism Development Corporation: The India Tourism Development Corporation (ITDC), is a public sector undertaking of the Ministry of Tourism, Government of India, established with a view to strengthen infrastructure and to provide travel services mainly where the private sector is not operating services. The I.T.D.C. manages, the Ashok Group of Hotels in the country and operates transport services at important tourist centres. The three I.T.D.C. Group hotels in the State are Ashoka Hotel, Bangalore, Hassan Motel, Hassan, and Rajendravilas Imperial Hotel, Mysore (former Lalitha Mahal Palace).