

CHAPTER VII

COMMUNICATIONS

Httara Kannada district had more waterways than roads. From very early times, goods were carried as head loads or on ass or bullock backs. The areas above the ghat were accessible to people from Dharwad, Belgaum and Shimoga district even during the first century A.D. There were routes to connect Belgavi and Banavasi, Hanagal and Pala, Dharwad or Hubli and Haliyal, Halasi and Supa. Only, places on the coast were not easily accessible. Ibn Batuta (14th century) speaks about a road along the coast connecting important ports and towns. Ports like Bhatkal and Kumta were connected by seasonal roads to up-ghat regions and Paes and Barbosa (16th century) speak of the road connecting Bhatkal with Vijayanagar, passing through Bankapur. Caesar Frederics (1567) speaks of his travel from Goa to Ankola on roads, riding a palanquin. Haider built some military roads, opening passes called as Haider Ghats. Traces of Haider's foot-paths remained near the Binaga and Kadra Hills. (There is also a view that it is not Haider's path but *heddari*, a 'main road' in Kannada). At the time of the advent of British the hill passes mainly used were the Tinai, Anshi, Kaiga, Arebail, Devimane and the Gersoppa. During the British operations in support of the Peshwa in 1802, six 12 pounders with military stores and provisions were moved from Goa to Haliyal across the Tinai pass, when the pass was opened and repaired. The British started building narrow roads and had many passes opened. This provided easy access to the Bombay-Karnataka region. During the second half of the 19th century there were seventeen chief passes, two in Karwar—the Gopshitta and Kaiga, two in Honavar—Hogevadi and Gundilkatta, six in Supa—Tinai, Kuveshi, Digi, Kundal, Dhokarpa and Anshi, two in Yellapur—Ganeshgudi and Arebail, four in Sirsi

Vaddi, Devimane, Nilkund, and Dodmane and one in Siddapur-Gersoppa. The most important of them were the Arebail, Devimane and Gersoppa. In 1845 First pass upto Honavar was opened. In 1848 measures were taken to open a new route to Kumta. In 1850-60 great advance was made in opening communication with Western Coast through the district. Since the district was under the Madras Presidency, the English immediately started linking Bellary to Karwar by the construction of a new road for helping speedy movement of troops from Madras to Karwar, *via* Bellary. They also proposed to build another road from Karwar to Kaiga. As there were a number of agricultural fields crossing midway of construction, local people were reluctant to offer or donate space for the proposed road. However, a local leader Narayanappa Telang took the lead by donating road space and persuaded others to do so. Peter Mundy (1637) had gone to Ikkeri from Bhatkal through the Hogewadi pass which is 30 km from Bhatkal, and this path was surveyed in 1873-74 and the old bullock track was opened again. The Kadra-Belgaum road, passing through the Anshi pass was connected with Supa through roads *en route* the passes of Tinai, Kuveshi, Digi and Kundal. A 40-km road ran from Tinai to Supa, and was fit for wheeled carriages. The Kuveshi pass was on the Goa frontier, and this road was said to be built in 1858. The Digi-Sanjhode road of 15 km length was also completed in 1858, and it was connected to the Anshi pass road, leading to Supa. The Karwar-Dharwad road was connected by another road leading to Supa through the Anshi pass, and from Anshi to Supa it was 60 km. The Kadra-Belgaum road connected to Yellapur through the Ganeshgudi hill pass road. But there was not much traffic on this road.

The Arebail pass was about 20 km south of Yellapur and the metalled and bridged Karwar-Dharwad road about 18' to 24' wide ran over this. This was one of the chief passes of the district. Till 1859 it was only passable by foot and by bullock cart. Among the Sirsi passes, the Vaddi pass had a road of about 50 km length from Sirsi to Hillur. This was not negotiable for carts. The Devimane pass was at about 30 km south of Sirsi. was crossed by the bridged Kumta-Dharwad road. The Nilkund hill pass, about 30 km west of Sirsi, had a cart road upto the foot of the pass from Kumta to Amdalli on the Dharwad-Kumta Road. The Dodmane hill-pass about 50 km west of Sirsi had bullock-track from Bilgi to Mankibail, and joined the Nilkund road. The Gersoppa hill pass in Siddapur was about 25 km southwest of Siddapur and was crossed by metalled road from the port

of Gersoppa to Talguppa. This was the position during the 19th century in the district.

ROADS

At the advent of British rule, there were four main lines of roads beginning from the North viz., the Kadra-Belgaum road *via* Supa, Haliyal and the Anshi pass 85 km long, the Karwar-Dharwad road *via* Yellapur and Arebail pass about 120 km long, the Kumta-Dharwad road *via* Sirsi and the Devimane pass, about 125 km long, and the Ankola-Belki coast road about 120 km long. The first road was passable in fair seasons. During rainy seasons many bamboo and wood foot bridges had to be constructed. The Karwar-Dharwad road *via* Yellapur and the Arebail pass was meeting the Dharwad frontier at Sanglikop. This road was metalled and bridged. The Kumta-Dharwad road *via* Sirsi and the Devimane pass met the Dharwad frontier at Yergatti. This road was almost metalled, except at Divgi, five km from Kumta, where the Tadri was crossed by ferry boats, later this road was bridged. The Ankola-Belki road was cart road, about 116 km long. Many branch lines joined these trunk roads also. The Kumta-Dharwad road was joined by many branch lines viz., 1. Mundgod-Yellapur road, 2. Pala-Bankapur road, 3. Ekkabmi-Samasgi road, 4. Sirsi-Banavasi road, 5. Sirsi-Yellapur fair weather road, 6. Sirsi-Kodkani road, 7. Sampekhand-Kumta cart road and 7. Katgal-Uppinapattan road, the last one connecting the highest navigable point of the Aghanashini at Uppinapattan. The Karwar-Dharwad road was joined by branch lines like 1. Yellapur-Bankapur cart road, 2. Yellapur-Kaiga cart road, 3. Yellapur-Barballi fair weather road and 4. the Yellapur-Haliyal fair weather road. The Hebbul-Sanikatta road reaches the mouth of the Tadri, the Agsur-Sirsi road, passable for carts leads to the top of the Vaddi pass. The Kadra-Belgaum road was met by four branch roads and four passes. The four passes were Kuveshi, Kundal, Digi and Dokarpa. There were other five roads not connected with any of the trunk roads. They were (1) The Gersoppa-Talguppa road (1854), (2) The Siddapur-Sagar road of eight km, (3) Banavasi-Sorab fair-weather road of seven km, (4) The Konar-Kodibag bridged road of about four km, an extension of Karwar-Dharwad road and (5) the Osada-Tinai fair-weather road *via* Jagalbet. By 1922-23, the total road length in this district under P W D was 1,165 km of which 651 km were metalled. The roads were later classified as Provincial highways,

Major District Roads, Other District Roads and Village Roads. During the post-war period there were 496 km of Provincial Highways, 405 Major District Road, 79 km of Other District Roads, 112 km of village roads totalling to 1092 km. The roads were maintained by Municipalities, District Board and the Public Works Department. The road lengths under different categories in 1945 were Provincial Highways (length in km) 629, Major District Roads 450, Other District Roads 80, Village Roads : Karwar tq including Supa petha 48, Ankola tq 28, Kumta tq 24, Honavar tq including Bhatkal petha 56, Haliyal tq 17, Yellapur tq including Mundgod Petha 26, Sirsi tq 20 and Siddapur tq 15, totalling 224.

The road lengths under different local bodies of the district in 1935-36, 39-40, 45-46 and 54-55 were 995 km, 673 km (150 km metalled), 1088 km (173 metalled) and 1,099 km (112 km metalled) respectively. By 1956, a total road length of 948 km was under the control of P W D 837 km under T D B, 635 km under Forest Department making 23 km of road length for every 100 sq km of area in the district. By 1966, there was improvement particularly under T D B roads which rose to 2,070 km making a road length of 31 km for every 100 sq km. Despite its ruggedness and dense forest its road system though deficient, was comparable favourably with the State average. During 1972, the road length per 100 sq km of area was 38 km for the district as against 39 km for the State. The road lengths under various classifications as on 31-3-84 were as follows : Electricity Board Road 79 km, Village Panchayat roads 1,464 km, Roads in charge of Municipalities 343 km, Fisheries Road 68 km, T D B Roads 1,500 km, Forest roads 476 km, Village Roads 1,695 km, Other District Roads 123 km, Major District Roads 608 km, State Highways 641 km and National Highway 156 km, totalling to 7,153 km.

Forest Roads : These roads are used for transporting forest produce from jungle areas to the towns. In the year 1965 there were 635 km of Forest Roads and in 1984 the length was 476 km as most of these roads were classified as Other District Roads. *Fisheries Roads* : These roads were made to facilitate quick transport of fish from the landing areas to marketing centres. These were constructed in 1974 linking the fishing village to the Highways. By 1983 (Nov), there were 68 km of Fisheries Roads numbering 44, the taluk-wise break-up being ; Karwar 13.8 km, Ankola 4.6 km, Kumta 11.6 km, Honavar 6.8 km, and Bhatkal 31.2 km. A sum of Rs two lakhs was spent during 1982-83 for the improvement of Fisheries Roads. *Village*

Roads : Village Roads connect one village to another and leads to a State Highway or District Road. In 1956 there were 837 km of village roads under TDB besides 635 km of Forest Roads in this district. *Other District Roads and Major District Roads* : These are the Roads within the districts and are leading to Highways. There were 68 km of ODR in 1956. *State Highways* : The State Highways are maintained by the State Public Works Department and 680 km of SH were existing in the district in 1956. In 1984 the road length under SH was 641 km with 181 km under Sirsi Division and 460 km under Karwar Division. These Highways were (1) S H 42 (connecting Ankola with Jaladarigi village leading on to Gooty, in Andhra Pradesh *via* Yellapur, Kalghatgi, Hubli and Bellary) (2) S H 95 (connecting Mundgod and Tadas), (3) S H 95 connecting Khanapur with Sadashivgad *via* Londa and Supa, (4) S H 58 connecting Tumkur on NH 4 with Honavar on NH 17 *via* Gubbi, Bhadravati, Sagar and Talguppa, (5) S H 48 connecting Kumta with Kadamodgi village-border leading to Andhra Pradesh *via* Siddapur, Shikaripur, Honnali, Chitradurga and Pavagad and (6) S H 93 connecting Khanapur on National Highway 4 with Talguppa *via* Haliyal, Yellapur, Sirsi to Siddapur. These Highways are in both the Divisions. *National Highways* : The total road lengths under NH are 156 km with Karwar-Bhatkal road till the frontier of Dakshina Kannada (140 km), Belgaum-Londa-Panaji Road (16 km). As on March 84, there was a road length of 5,199 km extending Electricity Roads, Village Roads, Municipal Roads and Fisheries Roads forming 5.05 per cent of State Roads, ranking 12th in the State. The taluk-wise lengths, percentage to this district and rank are as follows : Ankola 349 km (6.54%, 7th), Bhatkal 218 km (4.19%, 11th), Haliyal 552 km (10.62%, 4th), Honavar 331 km (6.37%, 9th), Karwar 340 km (6.54%, 8th), Kumta 323 km (6.21%, 10th), Mundgod 337 km (7.25%, 6th), Siddapur 735 km (14.14%, 2nd), Sirsi 689 km (13.25%, 3rd), Supa 817 km (15.72%, 1st) and Yellapur 468 km (9%, 5th). The road length per 100 sq km in this district as on 31-3-84 was 50 km whereas for the State it was 54 km and for the Nation 45.70 (1981).

The total expenditure incurred by the PWD between 1978-79 and 1981-82 for original road making and repairs were Rs 303.02 and 306.66 lakhs respectively. Though, formation of new roads and improvement and maintenance are the work of Public Works Department, there are roads maintained by Taluk Boards, Forest Department and Irrigation Department also. The table on p. 500 shows the road

length in charge of different departments from 1956 to 1984 for some years.

For the purpose of maintenance of roads, Taluk Board Roads and other roads have been taken over as State Fund Road, and the road length taken over from 1958-59 to 1981-82 was 5,059 km.

As the traffic increased, the roads are widened. By 1983-84 152 km (48 km of N H, 104 km of S H) were having the double lane width in the district. The State Highways having the double lane width in the district are Karwar-Bellary Road (48 km+43 km) and Talguppa Honavar Road (13 km). Planting trees on either side of the roads was also geared up and by 31-3-1982 the number of avenue trees on various roads in the district were 16,204 for a total road length of 5,095 kms. The road network is being planned to connect many villages in the district.

The following is the list of 103 villages not connected by road in the district as on 31-3-84: Ankola tq (7): Varilben, Mallani, Shirkuli, Shinganmakki, Bile Hoingi, Marugadde and Kendige. Bhatkal taluk (8): Hadil, Agga, Beshe, Kerehittal, Bastigal Migte (Hadin), Hajjil, Helkarni and Koppa. Haliyal taluk (6): Guledakop, Bhimanalli, Badashirgur, Marnalli, Chotakanshirda and Gardolli. Honavar taluk (15): Adkar, Mandelkurve, Hosgod, Hirebail, Hulegar, Horechalli, (Kabbinahakkal), Begodi, Hadgeri, Shirkur, Balematt, Kulkod, Melkod, Pavinkurve, Mahime and Tumbolli. Karwar taluk (5): Devkar, Hartuga, Lande, Kamargaon and Goyar, Kumta taluk (17): Kolimanjguni, Morba, Kurigadde, Pattabele, Tannirhonde, Algal-kurve, Madine, Chimmolli, Basolli, Algar, Hegde Hosalli, Divalli, Abbolli, Honagere, Haravalli, Bidrageri and Yennamadi. Mundgod taluk (4): Sanavalli, Umachagi, Tattihall and Halharvi. Siddapur taluk (3): Honnekomba, Bannige and Yelugar (Kachagar). Supa taluk (13): Devulli, Kunagini, Vatile, Donshet, Tulasgeri, Birkhol, Vilwedabe, Pusheli, Bamanwadi, Amruthapalli, Badpoli, Zalawali and Santri. Sirsi taluk (3): Hebre, Mugwalli and Kandalgi and Yellapur taluk (22): Savane, Jaddigadde, Jakkolli, Hunsemene, Halsinkop, Baichgod, Hitlasar, Halgod, Mudangi, Ilehalli, Bankanal, Bendigeri, Heggapur, Chikkumane, Marahalli, Kanur, Baginkatta, Honagadde, Nagarkan, Gotguli, Kodlagadde and Baragadde.

(Distance in Km)

Year	Total Road-Length in PWD						TDB roads (VR)	Forest roads (VR)	Total	Surfaced road length	Unsurfaced road length
	NH*	SH**	MDR***	ODR+	VR@	Total					
1956	—	680	200	68	—	948	837	635	2,420	1,022	1,398
1961	—	725	341	244	305	1,615	240	398	2,553	1,208	1,345
1966	—	743	375	271	702	2,070	750	636	3,456	1,619	1,837
1969	—	743	375	249	773	2,140	649	711	3,500	1,775	1,725
1974	156	592	376	250	976	2,350	870	748	3,968	2,146	1,722
1975	156	592	376	250	978	2,352	870	751	3,973	2,206	1,767
1976	156	641	367	251	1,315	2,730	1,329	460	4,519	2,206	2,313
1977	156	641	367	251	1,326	2,741	1,329	492	4,562	2,206	2,356
1978	156	641	367	251	1,587	3,002	1,088	492	4,582	2,248	2,334
1979	156	641	367	251	1,788	3,203	1,123	476	4,802	2,326	2,476
1980	156	641	367	251	1,792	3,207	1,338	476	5,021	2,424	2,597
1981	156	641	367	251	1,792	3,207	1,338	476	5,021	2,424	2,597
1982	156	641	367	251	1,792	3,207	1,412	476	5,095	2,550	2,545
1983	156	641	367	251	1,804	3,219	1,443	476	5,138	2,602	2,536
1984	156	641	608	123	1,695	3,223	1,500	476	5,199	2,647	2,552

*National Highway **State Highway ***Major District Roads +Other District Roads @Village Roads.

The total length of roads required to connect this is 360 km. In this district, 372 villages are connected by all-weather roads, 187 villages by fair weather roads, 632 villages by *kutch*a and non-motorable roads and 103 villages not connected by any roads.

Rural Communication Programme

The Rural Communication Programme was started in 1959-60 in order to make all the villages accessible by road by forming fair weather roads. The standard of these roads is expected to be of only gravel or earth surface meant mainly for cart traffic. These roads link villages with the nearest important roads, market places and rail heads. The average cost of construction was estimated at Rs 6,000 per mile with estimated maximum limits of Rs 10,000 per mile in some tracts in 1960. By 1982, a total length of 944 km of roads have been completed under this Programme and these were transferred to Taluk Development Boards. As on 1981-82 the road length so transferred was 575 km and the total expenditure on them between 1970-71 to 1981-82 was Rs 174.48 lakhs.

Bridges

Prior to 19th century, the rivers and rivulets were crossed only by ferries, boats, etc. The earliest bridges were wooden bridge across the Bennehalla, iron bridge at Koney, Hallikere iron bridge, Birchi wooden bridge, Thattihalla bridge, Sidilgundi iron bridge and Bedti wooden bridge. The details of the major bridges constructed prior to 1945 are as follows: 1) Koney iron bridge 1864, 2) Sidilgundi iron lattice bridge 1872, 3) Bridge on Divgihalla 1874, 4) Handimadi wood bridge 1874, 5) Hallikere iron bridge 1874, 6) Tattihalla brick-arched bridge 1875, 7) Alnavar arched bridge 1877, 8) Bedti wood bridge 1879, 9) Anegudi bridge 1879, 10) Birchi wood bridge 1882, 11) Bennihalla wood bridge 1883, 12) Bridge across the Nujjinala 1883, 13) Anegunoli granite stone masonry bridge 1922, 14) Bedti granite stone masonry bridge 1926, 15) Bridge on Shigenadi Nala 1928, 16) Sakholi bridge, 1928, 17) Handimadi granite stone bridge 1941, 18) Sunksal bridge 1942 and 19) Bridge on Tungund Nala 1945. Construction of bridges had to be improved in view of heavy road traffic in the district. The number of bridges having a linear waterway of more than 30 metres from 1956 to 1982 has been given in the table on p. 502.

(in Metres)

Year as on 31st March	No. of bridges having a linear waterway between				Total
	30-91	91-152	152-304	above 304	
1956	14	—	—	—	14
1961	23	—	1	—	24
1966	26	—	3	—	29
1969	30	4	3	1	39
1974	31+6*	4+1	3	1+1	46
1978-82	32+6	4+1	3	1+1	47

*Bridges on National Highways.

As on 31-3-1982, the total number of bridges in the District, having a linear waterway of more than 30 metres were 47, of which 10 on National Highways, 24 on State Highways, 5 on major district roads, 4 on the other district roads and 4 on village roads. The number of minor bridges in the District as on 31-3-1984 were 3,364 of which 2,577 in Karwar Division of the Public Works Department and 787 in Sirsi Division. The Karwar Division consists of coastal taluks and the number of minor bridges are more than thrice the number in the up-ghat region. The break-up of the total number of bridges taluk-wise as on 31-3-1982 was as follows, major bridges being given in brackets: Ankola 75 (4), Bhatkal 304 (2), Haliyal 26 (4), Honavar 274 (3), Kumta 468 (1), Karwar 576 (3), Mundgod 13 (nil), Siddapur 86 (7), Sirsi 585 (7), Supa 40 (3), Yellapur 25 (3). Total : 2,472. Of these major are 37.

The Expenditure incurred on bridges on State Fund Roads in the District for the years 1979-80, 1980-81 and 1981-82 was Rs 27.47 lakhs, Rs 23.92 lakhs (including Rs 1.49 lakhs for repairs) and Rs 29.43 lakhs (Rs 4.59 lakhs for repairs) respectively. The notable modern bridges on the National Highway are the bridge across the Sharavati at Honavar and bridge across the Kali at Karwar. The Honavar bridge is the largest bridge in Karnataka having a length of 1,225 metres. The Kali bridge was declared open for traffic on 1st Nov. 83. This bridge makes a thorough way on National Highway 17, to Bombay from Uttara Kannada. The work on the Kali river bridge commenced in 1965, and it took nearly 11 years for completion costing around Rs 390 lakhs. The bridge consists of four intermediate spans of 400' each (122 metres) two penultimate spans of

228' each (69.5 metres) and two ultimate spans of 63'.8" (19.4 metres) each giving on total decklength of 2,183'.4" (666 metres). In Karnataka and probably in the country the main spans in this bridge are the largest spans adopted for concrete bridges. Moveable granites are deployed to cast box girders which are the first of its kind in the State. It is for the first time in the State that a sloping bridge of this type is constructed. Pneumatic process is carried out by the compressed air to remove water from the wells and this process is used for foundation in the State for the first time. This prestigious bridge has consumed approximately 5,500 tonnes of cement 1,440 tonnes of steel, 250 tonnes of high tensile steel and 240 tonnes of structural steel. The bridges completed in 1983-85 served as a causeway across Navitehalla on Karwar-Mallapur Road at a cost of Rs 5.4 lakhs, Janaga bridge across Tattihalla on Hosur-Tattigere Road at a cost of Rs 5 lakhs, and the bridge across the Gangavali river at Hillur at a cost of Rs 46.5 lakhs. This bridge at Hillur has reduced a distance of 25 km towards Yellapur, Gokarn and Mangalore from Hubli.

PUBLIC CONVEYANCE

Till about the first decade of the present century, there were no public motors, cars or other mechanised public vehicles plying on the road in Uttara Kannada. Passengers and goods were carried by carts. The number of carts carrying passengers (given in brackets) and goods in the taluks as in 1901 were, Karwar (19) 256; Ankola (1) 332; Kumta (18) 284; Honavar (8) 239; Haliyal (27) 1,781; Yellapur (50) 1,291; Sirsi (92) 1,417; and Siddapur (13) 581 and the total being (228) and 6,181. In about 1919 one Shankar Nagappa Gaitonde of Kumta introduced car and bus services (Prabhat Motor Services) between Kumta and Karwar. The fare was eight annas (half a rupee). Thereafter P J Motor Service managed by one Purushotham Shet, Bus Services managed by one Kaku Sheth, Sham Rao, Kashimji Shamsuddin of Bhatkal, Nayak Brothers, Laxman Shanbhag (Popular Motor Service) and Nayak & Co., introduced bus services. The Bus fares were two annas (12 paise) from Kumta to Honavar and eight annas (50 paise) between Kumta and Karwar in Shamsuddin Services. The service by Nayak & Co. was between Honavar and Dharwad. There was one limited concern (share holders company) called Chitrapur Service in the district between 1942-53, and a transport company called the United Karnataka Transport Co., Kumta. These two companies started regular bus services in the district.

Trucks started plying as sea trade increased and the roads improved. (As in 1940, the registered vehicles were : passenger buses 18, Motor cars 32, public and private carriers 13). At every place a local agent was collecting materials for export and handed it over to the truck operator on commission basis, which was usually one anna (six paise) per rupee of the hire charges. Huge logs from forests around Gersoppa and Sharavati valley were collected at Honavar, floating them along the Sharavati river and then were sent by country crafts. Similar transport of logs obtained from Dandeli was done from Kadra to Sadashivgad. Private carrier permits were granted to trades. There were 92 vehicles relating to private carrier permits in Uttara Kannada District by 1955 and of them the Nagari Mining Works, Dandeli had 21 trucks, one tractor and eight trailers. Vehicles of various categories in some taluks of the district at that time (1955) were as follows : Karwar-535 cycles, 73 two-bullock carts, six single bullock carts, 22 motor cars, six half-ton lorries and 11 buses. Kumta-Eight cars, 17 passenger buses (figures in respect of carts not available). Haliyal-10 trucks, 8 cars, 109 cycles, 228 two bullock carts, five single bullock carts and 5 State Transport buses. Honavar-six trucks, three passenger buses, six motor cars, 167 cycles, three soda water carts, 35 bullock carts. The total number of goods vehicles (both public and private) registered and licenced in the district in 1955-56 was 279 with 187 public carriers and 92 private carriers. The freight rates under the M V Act was six annas per ton mile, or 12 annas per lorry mile with a surcharge ranging from 25% to 33 $\frac{1}{3}$ %.

State Transport

Before Integration, the State Transport operations in Uttara Kannada District were under the control of Hubli Division. The average number of vehicles on road in this district as on 31-12-1955 were 45 and the operating fleet was of 60. The fares charged were on stage basis, a stage being four miles. The rate per mile was nine paise (3/4 of anna) per passenger. The fare was 3 annas (19 paise) for stage of four miles or 1 $\frac{1}{2}$ annas (10 paise) per sub-stage of two miles subject to a minimum of three annas. There were garages at Sirsi, Karwar and Bhatkal besides a depot at Kumta. The number of schedules attached to Kumta depot were 17, Sirsi garage nine, Karwar garage 11 and Bhatkal garage five. The Kumta depot had a workshop and was carrying out preventive maintenance and minor repairs.

The routes, their names and the average number of passenger that

travelled daily in Uttara Kannada District by State Transport as on December, 1955, are given below

1. From Karwar to Yellapur 64, to Alnavar 127, to Kodibag 13, to Honavar 190, to Kumta 189, to Gokarn 70 and to Ankola 19.
2. From Ankola to Gangavali 31, to Gokarn 24, to Kumta 95, and to Hillur 39.
3. From Haliyal to Alnavar 15.
4. From Yellapur to Hubli 103, to Sirsi 52, and to Bankapur 113.
5. Bankikodla to Hubli 132, to Sirsi 73, and to Kumta 83.
6. From Gokarn to Gangavali 20,
7. From Kumta to Honavar 366, to Honavar (*Via* Hebbankeri) 90, to Hubli 196, to Sirsi 20, and to Gokarn 20.
8. From Honavar to Hubli 224 and Sirsi 121.
9. From Sirsi to Haveri 89, to Hanagal 29, to Banavasi 94 and to Hubli 78.
10. From Bhatkal to Kasarkod 94 to Murdeshwar 58 and to S K Frontier 137.11. From Kasarkod to S K Frontiers 128 and to S K Frontier (*via* Chitrapur) 94.

Goods Transport

The number of total trucks in the district as in 1954-55 was 127 with 71 public carriers (seven in Ankola, five in Karwar, 12 in Sirsi, seven in Honavar, one in Siddapur, 11 in Haliyal, and 28 in Kumta) and 48 private carriers (42 in Haliyal, two in Karwar, one in Sirsi and three in Yellapur). A surcharge upto 30 per cent over the usual rates were charged for operation on rough roads or for transport of heavy material like iron, steel, timber, stone, rubble, etc.

After the Reorganisation, a separate Regional Transport Office was established in Karwar which started functioning from 1-1-1958. As on 31-3-1982, the number of vehicles in the district were 2,650 motor cycles, 560 motor cars, 436 jeeps, 462 autorickshaws, 35 motor cabs, 67 omnibuses, 287 K S R T C buses, 193 private carriers, 856 public carriers, 202 tractors, 170 trailers one delivery van and 83 other vehicles, totalling 6,002.

Karnataka State Road Transport Corporation

The routes in Uttara Kannada district were nationalised with effect from 11-7-1959. The revenue districts of the State does not correspond to the Division of K S R T C and the division operates outside the district limits also. In the district there are 257 monopoly routes. The largest route length operating is Bhatkal-Bombay (824 km) and the shortest route length is Karwar Binaga (5 km). The average number of vehicles on the road as on 1981-82, 82-83 and 83-84 are 242.1, 258.5 and 288 respectively, the operating fleet for the same period are 282, 288 and 298 respectively, and the average

number of passengers travelled per day for the period are 78,680, 82,049 and 1,10,550 respectively. As on 31-3-83, the Uttara Kannada district was operating 112 express buses on 49 routes including five luxury services and seven inter-state services. The K S R T C Bus stands are situated at Sirsi, Mundgod, Siddapur, Yellapur, Haliyal, Dandeli, Karwar, Ankola, Kumta, Honavar, Bhatkal and Murdeshwar and private bus stands are at Sadashivgad and Gokarn. There are city services at Kumta and Karwar.

In Uttara Kannada District, K S R T C is operating 298 buses which will be one bus for every 3,598 population. This is fairly comparable with the neighbouring districts. During 1983-84, K S R T C has introduced 42 numbers of additional vehicles and another 12 vehicles were added by July 1984. An inter-state service from Sirsi to Manthralaya has been proposed to be introduced.

Other Vehicles

The number of two/three wheelers (given in brackets) registered in the district from 1979 to 1983 are as follows: 1979-1,699 (275), 1980-1,955 (342), 1981-2,259 (379), 1982-2,658 (462) and 1983 (July)-3,419 (603). The total number of permanent driving licences issued by Regional Transport Authority, Karwar as on July 1983 was 571 (paid employees) and 4,213 (non-professional persons).

Road Accidents: The causes of road accidents are classified as human errors, mechanical defects of the vehicles and bad condition of roads. In the year 1970-71, the percentage of accidents for the above reasons were 87.54, 4.75 and 7.71 respectively and in 1980-81, they were 94.79, 2.81 and 2.40 respectively. In Uttara Kannada in 1981-82 the total number of accidents were 348 causing 62 deaths and injuries to 279 persons. The number of accidents per 1,000 vehicles was 57 and per lakh population was two. This was 2.89 per cent of State total. The details of road accidents for some years are as follows: 1971-72: 191 accidents (37 deaths, 182 injuries), 1975-76: 322 accidents (49 deaths, 372 injuries), 1980-81: 329 accidents (70 deaths, 371 injuries), 1982-83: 289 accidents (49 deaths, 252 injuries).

RAILWAYS

Ever since the railways were introduced in India, the principal claims of the people of Karwar were the establishment of the port

at Karwar and the railway line between Hubli and Karwar. In 1858, the then Surveyor General A. D. Taylor, the Chief Engineer Sir Arthur Cotton and Mines Expert George Latham commonly opined that Karwar was suitable in all respects to become the rail head at the West Coast in preference to Bombay and Goa. As the iron and other ores were being transported from Hospet, Bellary and other places, rail link to Hubli from Karwar was considered to be economically viable. The development of Marmugao Harbour in preference to Karwar in 1872, came in the way of progress of the Karwar-Hubli rail link. Even though there is a rich hinterland to Karwar, Bombay got importance owing to the Pune-Bangalore railway line. It was estimated that annual export trade from Karwar should be around 13,00,000 tonnes and therefore the Government report of 1862 conspicuously laid stress on the extension of railway to Karwar. In 1869, surveys were undertaken by the Government and lines were proposed by the Kaiga and Arebail passes. Finally the line by the Arebail pass was prepared and land was purchased. But the entire plan was shelved, and in 1876 the ground intended for the railway station was partly given to hospital. This railway project was kept alive by the famine of 1875-76 and finally by 1879, it was dropped. In the Municipal report of the Southern Division for 1881-1882, it is mentioned that some shop keepers of Goa migrated to Karwar thinking the railway line will be constructed. The following were the railway projects envisaged in the government reports during 1860-70.

Project No. 1: 1861-62 a survey of the Shadashivgad-Dharwad-Bellary Railway Project was made and however rejected by the Government of Bombay. *Project No. 2:* Karwar-Gadag railway survey (1869) via Kaiga and/or Arebail pass was taken up. The report stated that the railway from Karwar to Gadag might cost Rs 110 lakhs and the net return could be 4.07 or 3.63 per cent. Trade from Kumta could be shifted to Karwar and that the Karwar Railway could be merged with Southern Maratha Railway. However, this proposed rail-link was also shelved in 1879. The reason given for the rejection of Karwar-Gadag railway was "the impenetrability of the jungle, the unhealthiness of the forests and heavy rainfalls in the Ghat." *Project No 3:* When the Marmugao-Karwar Railway (1876) was envisaged, there was a controversy between the advocates of Marmugoa and Karwar. Finally a decision was taken favouring Goa but reserving the right to build a railway to Karwar if the line to Goa proved to be inadequate for the needs of British Indian subjects. In return for the acceptance of Goa as "sea terminal"

of proposed railway, the Portuguese agreed to waive the privileges of importing wines and spirits at only $2\frac{1}{2}\%$ *ad valorem* at Surat which they were enjoying from the Mughuls, since three centuries, and at the same time agreeing to admit *bona fide* produce of Goa into British India free of duty, and also further agreed to restrict the manufacture of salt and opium. Further, the Government of Portugal agreed to guarantee interest upto 11 lakhs of rupees per annum on a loan to be floated in England for the same purpose. The British Government rejected Karwar's plea because of this financial guarantee offered by Marmugao.

Case for the Line

Karwar's hinterland is extra-ordinarily rich and the links with the hinterland are of importance in more than one respect. The Ghats in the district are the easiest (unlike the Konkan coast) among all the passes of the Western Ghats from the Tapi to the Nilgiris. The Baraballi, the Arebail, and Devimane Ghats are particularly suited for rail links. Of these, the Baraballi Ghat between Yellapur and Mallapur (on the Kalinadi bank) was considered to be the best, the easiest and the cheapest as per the survey carried out by George Latham in 1868 for a broadgauge railway from Karwar to Bellary, because it is here that the Sahyadri and the Malayadri are separated by a wide valley-gap and the Ghat-top in no more than only 1,700 feet MSL. It is recorded that the Ghat seems to have been "pencilled by nature" for a railway line. However, the efforts to put Karwar on the railway map continued and during 1972, a new preliminary engineering-cum-traffic survey connecting Hubli to Karwar was conducted by the Railway Department and the following are the brief technical details of the Project: Length-191.293 km, Gauge 1.676 M-BG; Estimated cost Rs 34.82 crores. In view of the many representations, a traffic re-appraisal survey was conducted in 1977-78, and the estimated cost was Rs. 57.03 crores, and the project is to get a return of 4.6 per cent including the cost of land, and 4.9% excluding the cost of land and wooden sleepers. Finally it has been decided and a sum of Rs 11.72 lakhs has been sanctioned by the Railway Board during June 1984 to update the preliminary engineering-cum-traffic survey. The salient features of the Hubli-Karwar Survey are 1) Length-191.293 km (via Ankola Road) and 196.683 km (via Ankola Town). The break-up of this line are: a) Hubli-Yellapur (Plateau Section): 75.770 km. b) Yellapur-Sunksal (Ghat Section): 55.957 km, and c) Sunksal-Karwar (Coastal Section) 59.566 km. Length in Dharwad District-45.00 km; in U K

District-146.29 (via Ankola Road) or 151.68 (via Ankola Town). The proposed railway stations are Hubli, Gabbur, Mishrikoti, Kalghatgi, Kirwatti, Yellapur, Kanchemane, Ramanguli, Sunksal, Honnali, Ankola Road, Binaga and Karwar. Presently there is a total rail length of 46.40 km in the district. Of these one line connects Alnavar to Dandeli, moving south, and a part of the Londa-Marmugao line passes through the tip of the district having Tinai Ghat and Castlerock stations. The Alnavar-Dandeli line mainly laid to carry forest produce during First World War has four stations viz, Gogtewadi, Shingatgeri, Ambewadi and Dandeli. All the stations have platforms, with waiting hall in Tinaighat and Castlerock and locoshed in Castlerock.

Railway Out Agency: Karwar port was served by a railway out agency in 1951-53. Due to the poor volume of traffic the out agency was closed down. Unlike the out agency which refused heavy or bulk traffic (eg: tiles, timber, etc.), the State Transport accepted all goods that can be carried on the roof of its buses, the daily traffic obtained was only 15 maunds from Hubli to Karwar and 6 maunds from Karwar to Hubli. The State transport also operated a week-end lorry service between Hubli and Karwar. The lorry used to run empty from Karwar to Anieda where it obtained such freight on tiles.

REST HOUSES

There had been a good number of *dharmashalas* in olden days in the district. Some of them were attached to religious institutions like temples and *mathas*. The travellers were provided free boarding and lodging in some. Siddappa's Dharmashala at Siddapur was constructed around 1652 A D by Jayamba, mother of Siddappa, the Bilgi prince. By 1880, there were 57 rest houses at Karwar, six at Ankola, six at Honavar, nine at Supa, four at Yellapur, seven at Sirsi and five at Siddapur. These rest houses were unfurnished, and they were accommodating many families. Each rest house had a well.

Travellers' Bungalows: By about 1880, this district had 24 travellers' bungalows, three district bungalows, and 48 *dharmashalas*. Of the 24 travellers' bungalows, 15 were provincial and nine local fund. The bungalows at Karwar, Kumta, Santgal, Honavar, Yellapur, Sirsi and Kodkani were of the first class and the rest were second class. The earliest known Travellers' Bungalow was at Banavasi,

constructed in 1823. Another Travellers' Bungalow at Pala was constructed in 1824. Travellers Bungalows that existed by about 1880-90 in the district were: 1) Banavasi (1823), 2) Pala (1824), 3) Gokarn (1825), 4) Haliyal (1827), 5) Gundbala (1833), 6) Ankola (1833), 7) Mirjan (1834), 8) Santgal (1842), 9) Honavar (1846), 10) Devimane (1848), 11) Sirsi (1848), 12) Mundgod (1855), 13) Katgal (1855), 14) Kumta (1856), 15) Karwar (1865), 16) Ekkambi (1865), 17) Sirsi (1866), 18) Siddapur (1868), 19) Yellapur (1868), 20) Arebail (1868), 21) Sunksal (1868), 22) Kirwatti (1868), 23) Kodkani (1872), 24) Sadashivgad (1872), 25) Supa (1872), 26) Sampkhand (1885) and 27) Murdeshwar. By 1955, there were rest houses at Sirsi, Bhatkal, Haliyal, Karwar, Kumta, managed by the town municipality, and one *dharmashala* also at Kumta, managed by the municipality. By 1982 (31 March), there were 36 circuit houses, guest houses, rest houses, Travellers' Bungalows and Inspection Bungalows in the district. Besides, there are Forest Rest Houses at Ramanguli, Hattikeri, Kodibag, Naitee, Kadra, Kasarkod, Nisalner, Bhatkal, Haduvalli, Kirtigadde (near Kumta) and Hosakambi managed by the Forest Department and tourist lodges managed by the Tourism Department at Gokarn, Magod Falls and Dandeli. There are rest houses maintained by Karnataka Power Corporation at Ambikanagar, Ganeshgudi and other places and rest houses managed by the Government Employees Association (see Appendix at the end of the volume).

List of I.Bs., T.Bs., etc., under the control of P W D in Uttara Kannada district are: I. Ankola Taluk*: 1) Ankola PWD Store, 2) Belekeri I B, 3) Madangeri I B, 4) Hattikeri I B, II. Bhatkal Taluk: 5) Bhatkal Inspection Bungalow, Circuit House and Store, 6) Murdeshwar I B, 7) Gersoppa I B, III. Haliyal Taluk: 8) Haliyal I B (New), 9) Alnavar (Dharwad Dt.) PWD Store. IV. Honavar Taluk: 10) Honavar I B and PWD Store, 11) Gersoppa I B, V. Karwar Taluk: 12) Karwar Circuit house I B, T B. VI. Kumta Taluk: 13) Kumta I B, 14) Gokarn I B, VII. Mundgod Taluk: 15) Bachanki Rest house, 16) Mundgod I B, 17) Pala I B, VIII. Siddapur Taluk: 18) Siddapur I B, 19) Jog (Shimoga Dt) I B, IX. Supa Taluk: 20) Joida I B, 21) Anshi I B, 22) Kumbarwada I B, 23) Ulvi Rest house, 24) Castlerock I B, X. Yellapur Taluk: 25) Yellapur I B, XI Sirsi tq, 26) Sirsi I B & T B, 27) Ekkambi I B, 28) Banavasi PWD Store, 29) Bandal PWD Store.

*Under the control of the Assistant Engineer PWD at the Taluk Hq.

PORTS

The natural site of Karwar was considered to be eminently suited for development as a port from very early times. The mainland of Karwar and the five islands opposite to the coast known as Anjidiv, Devgad, Kurmagad, Mograr and Samshigudda existed from ancient times. The spices and other commodities were transported by caravans from the hinterland to Karwar. Ancient Egyptians, Sumerians and Phoenicians brought their vessels near Karwar port. The existence of *ullandi* (a safety device for a boat) that existed in the Pacific Ocean was found around Karwar indicating the maritime contacts of Uttara Kannada. Evidences also say that Karwar mariners knew the whole of African continent. The name Bait-el-kol (Bay of Safety) said to have been given by the Arabs changed to Baithkol. The trade monopoly enjoyed by the Arabs continued till the 16th century A D when the Portuguese interrupted. By the 15th century, Karwar and the neighbouring islands were known both in Europe and Africa and was a great commercial port. In addition to Karwar, Honavar, and Bhatkal there were two other notable ports in ancient times. Many Arab and European travellers have written copiously about their importance. Bhatkal was a very important port under Vijayanagar. Karwar's importance increased when the British opened their factory at Kadwad.

Karwar Port : The Karwar Port is situated in the southern half of an extensive bay which is about ten km long and about 5 km broad. Karwar head, a rocky promontory projecting into the sea at the southern extremity of the bay affords protection to the port from the south-west. Several rocks and islands in the approaches to the harbour give further safety to vessels against north-west winds. The over-all width of the bay from Devgad island to Karwar beach is nearly 6.5 km. It has three deep water natural entrance channels perfectly safe in all weathers. It is said that no Indian port possesses this rare natural advantage. The harbour is said to remain unscathed even during the worst of cyclones. It has nearly six to seven km deep water area to minimum natural low water depth of which is 20 feet and the maximum 42 feet at the inner and outer anchorages respectively stretching far and wide and thus capable of giving shelter to nearly a hundred ocean-going ships at a time. One main wharf wall along the whole length of the Karwar head may accommodate, breadth-wise twelve longest vessels. Karwar possesses a unique combination of all main types of harbours namely, two

island ports Devgad and Anjidiv, a bay port with perfectly sheltered cove, a river port, Sadashivgad, a creek port Kadwad and swamp Savargad. Detailed sub-soil investigations carried out at the port revealed the existence of rock between 9.76 mtr & 17.7 mtr below chart datum with an overlay of silt and clay. The barring capacity of the silt was very poor and break waters had to be carried down to rock, necessitating very heavy sections. Due to lack of equipment, there was no dredging in the harbour till 1959. Different marine surveys that were conducted in the port revealed that Karwar Port had good potentialities for development to meet the needs of ocean traffic. In 1858, the then Surveyor General of India, A D Taylor, Commandant of Engineering Sir Arthur Cotton and Mines Expert George Latham had established that Karwar was a suitable place for a major Port. Dr Wogl, a German Engineer who constructed the Kandla Port opined that Karwar was the most ideal place for a major port. According to the report of the Bombay Economic and Industrial Survey Committee, Karwar has the natural harbour and it is the only safe harbour between Bombay and Cochin during all the seasons in the year. On account of the development of the Marmugao Harbour in preference to the Karwar Harbour in the year 1972, there was a decline of this tract, and Karwar continued to be treated as a minor port.

During some years previous to 1882, the annual value of Karwar sea-trade on average was 14,63,416 pounds sterling 1874-75, 17,67,124 pounds in 1875-76 and it decreased to 12,48,792 pounds in 1877-78. By 1878-79, there was increase to 18,42,331 pounds and in 1879-80, it was 14,05,874 pounds and in 1881-82 15,25,484 pounds. The chief exports were cotton, native-hand made cloth, and husked and unhusked rice and the imports were wheat, tobacco, and European cloth. Steamers from Bombay, Mangalore and other Malabar ports of 1,000 to 2,000 tonnes and Arab *baglas* and other vessels of 50 to 100 tonnes visited the ports anchoring about one km from the landing at Karwar. Journey to Bombay took about 10 days and to Madras 15 to 18 days.

The Provincial Committee was very anxious to develop the Karwar Port. In view of this, Manchester Cotton Co., and Nicoll and Co., had established their ginning factories at Karwar. A wharf wall was built by their efforts in 1863-64. But in 1886, the extension of the port and construction of railway was doomed and ever since Karwar has remained a minor port and attention was diverted to develop Bombay. In about 1955, one Ishwardas of Sealords had

contract with a French Company to supply 4,000 tonnes of Manganese ore. The portion of area in possession of the P W D along the wharf wall were taken on lease for five years on a rent of Rs 40 per month. Loading had to be made in mid-stream. This mid-stream loading gave an impetus for the development of the port and Central Government, State Government and State Trading Corporation planned to divert the iron ore from Hospet to Karwar. The first shipment of 10,993 tonnes was made on 15th February 1958 from Karwar and since then upto 1963 about 100 steamers anchored at this port to load 7,51,699 tonnes of iron ore for export. The traffic at the port has varied between 3,000 to 4,800 tonnes in the years 1950-57. The cargo consisted of salt, tiles, petrol, diesel, oil, kerosene, grain, pulses, fish, etc. But with the coming in of iron-ore traffic at the port, the total traffic rose to 32,748 in 1958-59 and 1,58,415 tonnes in 1959-60. In 1963-64, 2,88,240 tonnes of iron ore was exported from this port. In addition, the port handled 14,128.9 tonnes of other export cargo and 11,154.82 tonnes of import cargo. The passenger traffic during the years 1960-61, 1961-62, 1962-63 and 1963-64 were 13,845, 9,946, 3,375 and 3,715 embarkments and 20,047, 16,838, 3,628 and 3,776 disembarkments respectively.

The Karwar port is located in the southern end of Karwar Bay of Karwar Head, about 100 km south of Marmugao and 272 km north of Mangalore. Karwar Bay lies between Karwar Head and mouth of the Kali, roughly 4.5 km long and provides a fairly extensive anchorage with varying depths of water upto about 11 metres. The Baithkol cove, a shallow cove on the southern end of Karwar Bay is a well protected shelter for sailing vessels. The approach to the port from the north or the west is between Oyster Rock Light House and Kurmagad Island. Vessels approaching from the south may enter between Oyster Rock Light and Karwar head. Currents in the Bay are negligible. Ocean-going steamers are piloted into anchorage by the departmental port officer. The anchorage for shallow draft, steamers is with the port signal station bearing 120° distance one km to three km, depending on the draft. Deep draft vessels, anchorage with the signal station bearing 99° Oyster Rock light and bearing 335° from ship from the shore distance 4 to 5 km sailing vessels anchor in the protected Baithkol cove and handle cargo alongside the wharf during high tides. But in most of the sailing vessels traffic is handled at Sadashivgad, situated five km to the north at the mouth of the Kali. The bar at the entrance to river maintains a depth of 51.2 mtr level of water at ordinary spring tide. The tide rate is about 1.5 mtr during

spring tides and about four feet during neaps. Vessels cross the bar and work inside the Kalinadi creek. A quick navigational red light exhibited at an elevation of 22.5 mtr from a Red & White trestle called Koney light, two leading trestles on Samshigudda and Kurmagad islands are the navigational aids available in the port. A lighterage wharf 305×2.4 mtr LWOST with an area of 305×50.6 mtr is a big wharf in the port. Construction of steamer wharf (355 mtr) and other wharves are in progress. Fuel, water, power and crane facilities are available. A big cargo transit shed for storage of food grains and general cargo and some private lighters are also available.

Before the Fourth Plan, a sum of Rs 74.59 lakhs was spent on this port for lighterage wharves, transit sheds, floating crafts, water supply barge, navigation aids, etc. The shipping activities increased by 400 per cent. The ore trade rose from 1.28 lakh tonnes in 1958-59 to 5.17 lakh tonnes in 1964-65 and 5.38 lakh tonnes in 1969-70. During the Fourth Plan, the entire programme of development of Karwar port was treated as Centrally-sponsored scheme. The major scheme of development of Karwar Port consisted of 21 schemes of which, seven were spill-over schemes from previous Plans. The salient features were to develop this port at a cost of about Rs 540 lakhs capable of loading iron ore from 60,000 to one lakh tonnes. The estimated cost of development was Rs 539.26 lakhs. During the Fifth Plan, the total outlay was Rs 770 lakhs (including an outlay of Rs 494.57 lakhs for spill over). On economic considerations, it was found out that Karwar port was preferable to Madras and Goa for exporting ore from Bellary-Hospet belt as the cost details (in figures) per metric tonne were 71.26 in Karwar, 81.34 in Marmugao, and 88.51 in Madras. The Sixth Plan outlay for the developmens of Karwar port was Rs 779 lakhs. In view of the decision taken by the National Development Council that the responsibility of developing the minor ports rested with the concerned maritime states, the Karwar port has been taken up under State sector. The demand from the new industries coming up in the district and the hinterland viz. Ballarpur Industries Ltd., at Binaga gave an impetus for developing this port. The first stage of development envisages to make this port an all-weather one, catering to ships upto 9.14 metres draft in Karwar Bay area, by providing cargo berths, one for 7.5 metres draft and another for 9.14 metres draft along with other requisite facilities. The work on the first stage is programmed to be completed by 1985. The second stage is to provide an alongside berth facilities for 40,000 DWT ore carrier

with faster ore loading facilities for medium loading rate of 10,000 tonnes per day to ensure the installed medium annual traffic of two to three million tonnes of iron ore from Bellary-Hospet area. The third stage is to improve the berth facilities created in second stage development including mechanical loading arrangements to handle alongside 60,000 DWT ore carrier covering five to six million tonnes of iron ore per year with a railway track from Hubli to Karwar.

Administration of the port: The Mysore Port Department formed in 1957 was administering this port. Consequent on the formation of the Directorate of Ports and Inland Water Transport, the administration of this port came under the control of Port Officer under the control of the Director.

Indo-Norwegian Project at Karwar: In accordance with the Third Supplementary Agreement entered into between the United Nations, the Government of Norway and the Government of India, the Fisheries of the Indo-Norwegian Project were extended to Karnataka State and Norwegian delegation selected Karwar as suitable place for extending the Project activities. This Project has development of Karwar as a nerve centre of marine fishery activities as aim. (See Chapter IV).

Binaga: Binaga Port lies at a distance of five km south of Karwar. The coastline of this port covers two villages, Binaga and Arga. It is said that Arab *baglas* trading in the fair weather between Malabar coast and the Persian Gulf were calling at Binaga for supplies of wood and water. Binaga Bay is well sheltered from north to west wind by Binaga Hills and from south-west storms by the Anjidiv Islands. This port has no creek. The vessels anchor in the sea itself. The important imports and exports during 1955 were salt, fresh fish, tiles and fish manure, fish oil, firewood, etc.

Chendiye

Chendiye port is situated at a distance of about ten km to the south-east of Karwar. The port is on the shore itself. There are less facilities for proper landing and transport. Chendiye was one of the ports under Karwar group and the total trade in 1881-82 was of 1,94,586 pounds. The chief exports were cotton, native hand made cloth, husked and unhusked rice. The chief imports were wheat, tobacco and European cloth. In 1963-64, the total exports and imports were 877.58 and 675.54 tonnes. No development works are envisaged at this port.

Belekeri: The Belekeri port is situated near the Belekeri village in Ankola taluk. A jetty belonging to the minor port was used for loading and unloading goods. Vessels upto five tonnes could go upstream upto Hallikeri bridge. The bar at the creek mouth has a depth of 0.91 to 1.22 mtr at the level of water at ordinary spring tides. The rise of tide is about 1.67 mtr during spring tides and about 1.2 mtr during neaps. Shallow drafted sailing vessels work cargo within the Belekeri creek. The entrance to the creek is marked by two beacons. Deep drafted ships anchor close north or south of the transit between Kulera island and Aversa Hills in sufficient depth of water. There is no system of licensed pilotage. For the development of this port, the outlay earmarked was Rs 8.30 lakhs during the IV Plan, Rs 4.86 lakhs during V Plan, Rs 6.5 lakhs in the mid-term plan of 1978-83 and Rs 8.60 lakhs during VI Plan (1980-85).

Tadri: The port of Tadri is situated at the mouth of the river Aghanashini. There are hills running parallel to the coast on both the sides of the mouth, well projected into the sea. Thus the port is sheltering vessels anchoring in the creek. There is a channel of deep water running parallel to the bank of the creek for about three km inside the creek thus facilitating the comfortable navigation to the vessels entering the creek. The wharf can hold sufficient cargo. The hinterland of this port supplies jungle wood, betelnuts and onions for export. The port is connected by road to Gokarn, Ankola, Kumta, Sirsi, etc. The river Aghanashini is also navigable for about 30 km. Around 1951-52, there was steamer traffic. There is no bunkering facility. There is a metalled road connecting the port with Sanikatta from where there is a black topped road, connecting the West Coast National Highway. The port is now being developed as a "fishing harbour" under Indo-Danish Scheme.

Ankola: The port is situated at the south of Ankola creek, about 35 km south of Karwar port. This creek is very shallow, short and narrow. A small island like hillock is situated opposite but close to the bar in the sea. The limits of this port commence from the coast line, one-and-a-half km from Magarsalnala in Bhavikeri foreshore in the north, to Belambar in the south. There is a bar at the mouth of the creek, which maintains a depth of 16 mtr at LWOST. The rise of tide is about 1.67 mtr during springs and about 1.2 mtr during neaps. There is no system of licensed pilotage. This port has been bracketed with Belekeri for development.

Gangavali : The port of Gangavali is situated at the mouth of Gangavali river, which is 60 km north of Honavar. The river is inavigable for 21 km upto Gundabala. The bar at the entrance to the river maintains a depth of 1.83 mtr during LWOST. The rise of tide during spring tides being about 1.67 mtr and the rise at neaps 1.2 mtr. There is no system of licensed pilotage. The traffic at the port dwindled by 1962-63. This port is bracketed with Tadri for development since 1963.

Kumta : This port is situated in the below ghat area of the district in Kumta taluk. The river Aghanashini flows from east to west via Manki and Mirjan and joins the sea at Tadri port. The only creek flows past the Kumta wharf into the sea. The creek was navigable from the sea upto the wharf only. This was the biggest trade transaction place in the district as this was situated in the centre place, and connected with various up-ghat places. The up-ghat products like betelnuts, onions and forest produce were being exported largely from this port. The cotton exported from this port was known as "Kumta Cotton" in other countries, and during the Cotton Boom of 1860's, the port enjoyed great traffic. Gradually, the traffic dwindled and the imports in 1955-56 were 935 tonnes and export 2,562 tonnes. The passenger traffic for the same year was 760 disembarkments and 113 embarkments.

Honavar : Honavar called as "Onor" during ancient days by the trading Arabs is second in importance to Karwar. Situated at the mouth of the Sharavati it was a flourishing port in ancient times and the Portuguese founded a factory here during the 16th century. Haider had his ship-building unit at the place. The Sharavati is about 2 km wide on its last run. At the mouth of the river is a sand bar dangerous for navigation. The minimum depth at the bar is 1.8 mt at LWOST. Vessels with a minimum draft of 3.05 mtr can cross the bar. There is no system of licensed pilotage. Every sailing vessel was loaded and unloaded in mid-stream by using smaller vessels. The steamer traffic slowly dwindled and by 1950, there was no steamer traffic. The imports and exports at the port in 1959-60 were 5,835 and 12,885 tonnes respectively. The nearest rail head is Talguppa about 72 km from the port. A light is exhibited from a flag mast on an elevated hillock from a height of 32 mtr. The approach to the port is safe. Steamers anchor opposite the entrance to the river with light house bearing 97° distance 4 km to 5 km depending on their draft. The wharfs, one with 6,045 sq mtr area and another

with three lakh sq feet area have been constructed. There are four R C C loading jettis. The port has a transit shed on the northern bank with an area of 116.2 sq mtr. Presently the port officer with headquarters at Kundapur is looking after the port. This port is being developed as a fishing harbour on the southern side. A sum of Rs 106.76 lakhs was earmarked to improve the depth from 1.8 mtr to an average of 5 mtr, during the Fifth Plan. The traffic handled at the port from 1978-79 to 1982-83 is given in the following table.

Year	Import (metric tonnes)	Export	Total	Value of		Total loading fee on cargo
				Imports (in rupees)	Exports	
1978-79	2,523	23,128	25,651	6,79,224	70,22,566	19,424
1979-80	2,195	22,353	24,548	6,62,610	81,28,891	18,642
1980-81	2,645	18,712	21,357	8,14,171	125,29,638	17,146
1981-82	2,312	19,846	22,158	15,92,773	70,56,823	16,488
1982-83	1,813	20,356	22,169	23,28,437	65,36,801	15,888

Manki: This port is situated at about 10 km south of Honavar and is an open sea port. Only fishing vessels reach here. There are no wharves and jetties. Vessels anchor in open roadstead about two km off from the beach. During 1962-63, this port handled 13 tonnes of cargo. Since July, 1963, this has been bracketed with Honavar for development.

Murdeshwar: Murdeshwar is at about 24 km to the south of Honavar. The Muralli hill extends from the shore to about 600 metres into the sea. Due to this hill, vessels take shelter by the side of hill in rough weather. As this was not a commercially big place, a few coastal vessels were entering the port rarely. There is certain amount of protection from the sea provided due to the anchorage being in the bay. Murdeshwar rock, 30 mtr high, is very conspicuous from seaward and is situated close off-shore and is connected with the mainland by a drying reef. Sailing vessels anchor in the bay in about 3.64 mtr of water at a distance of about 1.5 km from the shore and loading is done from lighters. This belonged to the Honavar group of ports. By 1962-63, the traffic was steady (about 2,000 tonnes), but by 1963-64, there was a significant fall. No development work has been envisaged at this port.

Shirali : This port is situated at a distance of about 32 km to the south of Honavar. It is at the mouth of the Alvekodi river. This port has natural shelter provided by the offlying islands. There is a bar at the mouth of the river which maintains a depth of 5 mtr at LWOST. The rise of tide during the spring is about 1.67 mtr and about 1.22 mtr during neaps. There is no system of licensed pilotage. The imports and exports were carried out by small country crafts (between 5 to 15 tonnes). The main imported goods were paddy from Tadri, all sorts of merchandise from Bombay, salt from Iran and Karanja and the main exports were canes to Bombay, dry salted fish to Kundapur, and onions to Mangalore. This port has been bracketed with Bhatkal port for development.

Bhatkal : This is the last port from north to south in Uttara Kannada district. This is situated at the mouth of the Sharabi river, 38 km south of Honavar. The port is situated on the sea-shore at a distance of about 305 mtr only. This was the most important port, popular with the Arabs and the gateway of the Vijayanagar Empire towards the West. There is also an auxiliary light on the slope of the same hill with a range of 28 km. The approaches to the port are very rocky and dangerous. Anchorage for shallow draft vessels is found with main Light House bearing 014° distance 2½ cables in a depth of 7.28 mts. Deeper draft vessels can anchor with the light house bearing 058° distance 1.5 km in 10.0 mtr. The port officer, Honavar renders pilotage service. The bar at the entrance to the river maintains a depth of about 3 mtr at LWOST. The rise of tide during springs is 1.67 mtr and during neaps 1.22 mtr. There is a small wharf on the southern bank of the river. Of late, the traffic at the port has dwindled due to increased traffic at the West Coast Highway.

Light Houses

There were two light houses by about 1880, at Karwar. The Oyster Rock Light (1864) could be seen in clear weather from the deck of a ship 40 km off and lightens an area of about 384 sq km. It is a fixed white dioptric light of the first order on a white granite masonry tower which rises 22 mtr above the top of Oyster Rock or Devgad Isle in Karwar bay and is about 64 mtr above high water. Koney light (1864) has a red fixed ships' port side light, deployed at a place 18 mtr above the ground level. It could be seen from a ship's deck 8 km off and lightens on an arc of 35° seaward. The following are the light houses in Uttara Kannada District.

<i>Name of the light house</i>	<i>Height in Metre</i>	<i>Administered by</i>	<i>Year of constn</i>
Oyster rocks light	64	Govt of India	1864
Port Karwar (Koney light)	2.25	Govt of Karnataka	1864
Belekeri (Kukral Isles) light	62	„	1972
Tadri light	3.78	„	1942
Kumta point light	33	„	1891
Honavar light	32	„	1972
Honavar Beacon	11	Govt of India	1891
Bhatkal light	56	Govt of Karnataka	1972
Bhatkal grinding light	11.2	„	1972

Govt of India : Director, Light Houses & Light Ships, MOT, Bombay.

Govt of Karnataka : Director of Ports & Inland Water Transport, Karwar.

Water Transport

Transport by water, both by sea and the rivers, was very much in vogue in this district as there were 14 ports and many rivers. The traffic by sea was carried by sailing vessels. Steamers of 1,950 to 2,600 tons belonging to the British India Steam Navigation Company were calling weekly at Karwar throughout the year and at Kumta during the fair season (October–May) in modern times. They were delivering weekly mails and goods and were taking cotton. A trip from Karwar to Bombay took two days. The passenger traffic between Karwar and Bombay was thin. There were two classes of sailing vessels viz. foreign and local earlier. The foreign ships were Arab *dhans*, with a crew of a captain *sarang* or *tandel*, a *nakuda* or mate, a carpenter and 20 seamen. The owners were either Arabs or Indian Muslims. They were generally coming from Arabia or Karwar and Kumta between October and May bringing dates, pomegranates, almonds, raisins, sweets called *halwa* and pistachio nuts. The local sailing crafts were canoes, fishing boats, the *phatemaris* of 15 to 50 tons the *machwa* and *padava*, locally known as *galbats* and *mhangiris*. These were generally built at Kodibag, Belekeri, Ankola, Gangavali, Tadri, Kumta, Shirali and Bhatkal. The timber mostly used was *nana* or *nandi* (*Lagerstroemia microcarpa*) and *matti* (*Terminalia tomentosa*) for the outer planking, keel, stem and stern posts, and *undi* (*Calophyllum inophyllum*) for the timber. The crew of *phatemari* varied from eight to twelve and that of *machwa* from five to eight. Canoes or *hodis* (Konkani) and *donis* (Kannada) were built at all the coastal

villages with a tonnage of a quarter to five tonnes. The Kodibag and Sadashivgad canoes had the trunk of tree as their lower part. These canoes were oiled annually and sometimes more frequently and fitted with a balancing out-rigger called *ulandi* and were always steered by a rudder. The size of these canoes varied from one and a half to five tons. The fishing canoes varied from a quarter of a ton to four tons. Some canoes were taking passengers between Honavar and Gersoppa and carried fruit, dried palm leaves, grains, etc. These were manned by two men.

Coast and River Machwas : The average length of *machwas* was 10.6 to 12.2 mtr the breadth 3.6 mtr and the depth 1.2 mtr, mainly meant for trading. They were usually built with a very slight sheer from the stern to the after part of the main mast the sheer gradually increasing from the fore part of the main mast, to the stem post which was generally set at an angle of 60° to 70°. The river *machwas* ranging from four to nine tons were found in the Tadri and the Shara-vati rivers. *Padavas* were flatter bottomed than *machwas*. They had a perfectly straight keel from stem to stem and were mostly engaged in carrying cotton bales from wharf to the shipping in the roadstead. In fine weather and smooth water, they were carrying 100 bales in one trip. They were mostly owned by the *Kharvis*. The *phatemaris* were of fifty tons burden. A *phatemaris* of about 50 tons burden was 11 mtr long in keel, 5.6 mtr board, 0.5 mtr deep from the upper part of the timbers to the gunwale. For a *phatemari* of about 50 tons, a set of sails, including main sail mizzen and jib were necessary. The larger *phatemaris* took cotton from Karwar and Kumta to Bombay. The crew consisted of 8 to 12 men including captain. The passenger traffic along the coast continued and there were steamer services from Bombay to Karwar, Karwar to Goa, etc., till recently. Since the National Highway improved passenger traffic by sea dwindled.

Inland Water Transport

The inland water transport was popular in this district as there are more rivers and rivulets joining the sea. As the construction of bridges across those rivers took considerable time, the only transport available was inland water transport along the rivers, etc., by boats and launches. The Sharavati was the most popular among the waterways, and it could take people and goods till Gersoppa. The Inland Water Transport Committee set up by the Government of India in 1957 examined the role of Inland Water Transport in the

National Transport System. The State Government proposed a scheme of connecting backwaters from Kundapur to Mangalore to form a continuous waterway. It was suggested by this committee to extend the canal in the north to link with the river systems and their backwaters upto Karwar. The Uttara Kannada district where the land does not slope down gradually upto the coast line and at some places even more than 15-20 metres high above the sea level, the inland water transport is not as favourable as in Dakshina Kannada. But, the navigable portions of the rivers in this district near their estuaries and the connected backwaters have afforded the facilities for inland water transport. The coast is dotted with minor ports at the junctions of the rivers with the sea or at sheltered bays and the sea-route has traditionally provided the main medium of communication from end to end. The total navigable length of rivers in this district is about 98 km—in the Gangavali 21 km (till Gundbala), the Aghanashini 19 km, the Sharavati 29 km and the Kali 29 km (till Kadra). There are about 15 ferries across the rivers.

Except on the smaller rivers and creeks which during the fair season were portable at low water, public ferries were kept across the chief rivers and creeks. By 1880, there were 30 ferries maintained by local fund, two were working only during rainy season, the remaining throughout the year. The break-up of these ferries were, nine in the Kali (seven in Karwar and two in Supa), 13 in Kumta (six over the Tadri, four over the Gangavali and three over small creeks), four in Honavar (one each over the Sharavati, the Haldipur, the Venktapur and the Indalli), two in Sirsi, both across the Varada and the other two seasonal, one on the Mavinahalli creek and the other at Manki in Honavar. The ferry services were either managed by the Taluk Development Board or the Public Works Department. By 1956, there were in all seven public ferries run by the Public Works Department. They were leased out for three to five years by auction.

The Sadashivgad-Kodibag Ferry was of I class, Sharavati Ferry II class and other ferries III class. The number of passengers travelled in Kodibag Ferry was 4,33,959, in Divgi 1,23,395, Mirjan Ferry 1,38,943 and in Uluware Ferry 1,30,000 in 1955-56. There were Venktapur, Sharavati and Banavasi ferries too under the PWD. These ferries except Banavasi ferry were situated on main routes of concerned roads and there was heavy vehicular and passenger traffic on them throughout the year. In order to facilitate crossings of the rivers for vehicles, *jungals* consisting of two boats joined and

paved with a platform were provided at each ferry crossing. These were leased out annually for running ferry service in the case of *jungal* boat service, and once in three years or five years in case of launch service.

After the Reorganisation of States, a new department called Minor Ports Department subsequently renamed as State Ports Department was created in 1957 and Inland Water Transport also came under its purview. Ferries were managed by Public Works Department, Revenue Department, Taluk Development Boards, Village Panchayats and private agencies. In Bhatkal, Honavar, Ankola, Karwar and Supa taluks, there were 37 ferries managed by Taluk Development Boards. In respect of ferries managed through contractors, the practice followed was to auction the right of collecting toll to the highest bidder generally for a period of one year at a time. In the case of Sharavati ferry, the Government was paying the runner of the ferry service a subsidy of Rs 5,800 per annum to enable him to run the ferry service by maintaining the launches operating one *jungal* supplied by Public Works Department.

The traffic handled at the Kodibag-Sadashivgad ferry service, during 1981-82 was as follows: Number of passengers 20,49,265; cycles 3,35,192; scooters 42,084; rickshaws 3,687; cars 14,181; vans 8,332; trucks 10,383; buses 2,176 and carts 733. In addition 4,31,171 quintals of goods and 2,568 animals were also transported. The revenue collected was Rs 15,69,753 and the expenditure was Rs 6,59,526. The ferry has been discontinued now after the opening of the Kali bridge in November 1983. The expenditure on the inland water transport in the district under the State plan for some recent years was; 1980-81 Rs 14.65 lakhs; 1981-82 Rs 7.44 lakhs; 1982-83 Rs 9.22 lakhs. A sum of Rs 3.93 lakhs in 1980-81, Rs 0.415 lakhs in 1981-82 and Rs 1.60 lakhs in 1982-83 was spent under the Centrally-sponsored schemes.

The Directorate of Ports and Inland Water Transport headed by the Director of ports at Karwar has an office of the Deputy Director at Bangalore who looks after the inland water transport. As on 31-3-1982, the number of ferries in the district was 70 of which three were managed by auction-cum-lease. A proposal has been included in the VI plan to add three more departmentally managed ferries to the services. To promote water transport activities, a water transport co-operative society was formed with its registered office at Karwar.

POSTS AND TELEGRAPHS

The district of Uttara Kannada was brought under a single administration in modern times only in the days of Haider. Haider introduced the postal system for official purpose only. This was the system he had inherited in Mysore, introduced earlier by Chikkadevaraya. But, it was only the British who introduced a postal system catering to the needs of the public too, as elsewhere in India. The postage in British times had to be pre-paid till the introduction of stamps in October, 1854. On 18-9-1880, the hobli school masters were appointed as *anche mutsaddis* on a monthly allowance of Rs 3. In the list of post offices in Madras Presidency *vide Fort St. George Gazette* dated 19-3-1833, Honavar and Sadashivgad are mentioned. In 1833, the charges for a single letter from Honore (Honavar) to Madras was 13 annas (91 paise) and for a small parcel was Rs 3.75. In the list of post offices as on 1-10-1854 in Madras Presidency, Mangalore is shown as head post office with Honavar and Sirsi as subordinate offices. During 1830-40, Uttara Kannada District was a part of Dharwad Postal Division. Karwar had one chief receiving and disbursing office, seventeen sub-post offices and eleven village post offices in the district. The 17 sub-offices at Ankola, Baleguli, Bankikodla, Banavasi, Bhatkal, Gokarn, Haliyal, Honavar, Kumta, Manki, Mundgod, Murdeshwar, Sadashivgad, Siddapur, Sirsi, Supa, Yellapur were in charge of sub-post masters. The 11 village post offices were at Aversa, Haldipur, Islur, Karki, Kasarkod, Majali, Malgi, Mudgeri, Pala, Sambrani and Shirali and were in charge of village school masters. Letters were delivered at Karwar by three postmen and at Kumta by two. At the village post offices, letters were delivered by postal runners. There were 101 postal runners in the district. Mails from and to Bombay were carried once in a week by steamers for Karwar throughout the year.

On reorganisation of post offices, Kumta and Katgal post offices were opened in 1855 and were shown as Receiving House (i.e. No Delivery Post Office). On introduction of postage stamps on 1-10-1854, no name was shown in the post office obliteration for cancelling the stamp but serial numbers were allotted to the post offices. On formation of separate North Canara District, Karwar got importance and it was constituted as a disbursing office. There was a weekly steamer service from Bombay to Malabar touching Karwar and Kumta bringing mail from Bombay and from there letters

towards Dharwad were sent by runners. In 1880, separate postal divisions were formed under Superintendents of Post Offices, and Dharwad formed a part of North Canara Division and in 1884, the Headquarters of the Superintendent was changed to Dharwad and the new Dharwad Postal Division included Karwar. With the introduction of bus service during the First World War, mail service improved and became faster.

As in 1950, the number of Head Post Offices, Sub Post Offices with telegraph facilities, sub post-offices without telegraph facilities, and the Branch Post Offices were 1, 15, 3 and 98 respectively in the district.

As in 1982-83, there were two postal divisions in this district viz., Karwar and Sirsi each headed by a Superintendent of Post Offices. In 1980, two postal divisions were formed separating Sirsi from Karwar division. Karwar division comprises of Ankola, Karwar, Kumta, Honavar and Bhatkal taluks, whereas, the Sirsi division comprises of rest of the taluks. There are two Head Post Offices, 50 departmental sub-offices, 35 extra-departmental sub-offices and 143 extra-departmental branch post office in Karwar division.

There are 3 sub divisions viz., Karwar with 68 offices, Kumta with 75 offices and Honavar with 88 offices. The population per post office in the division is 2,386.52 and average area per post office being 24.30 sq km. As on 1-8-1983, the number of letter boxes in the division was 619 with 109 in urban area and 510 in rural area. There are 248 post offices in the Sirsi Division with one Head Office, 37 Departmental Sub Offices, 21 Extra Departmental Branch offices. The average population per post office and the average area in sq km per post office of the Division is 2,018.52 and 58.85 respectively. There are 90 mobile branch offices in the Division, 11 combined offices on Morse System, 41 on Phonocom System and 95 villages are provided with counter service facilities and there are 660 letter boxes in the division.

Radio and Television: There is no Radio Station or television station in this district. Medium wave transmissions from Mangalore, Sangli, Dharwad, Bhadravati and Goa could be received in the district. Mangalore TV relay station to some extent caters to the needs of the TV viewers. The total number of radio licences issued in the district except Supa petha between 1950 and 1955 were, year-wise 174, 269, 424, 501, 659 and 708. The number of radios and TV licences

issued were 5,563 in 1979-80, 8,365 in 1980-81, 7,180 in 1981-82 and to 7,413 in 1982-83. The system of obtaining licences for Radio and TV has been abolished from 1985; (separate figures for radio and TV could not be obtained).

Tele-communications: Attempts were made to draw telephone lines around 1900 in the district. The Karwar, Kumta and Honavar telephone exchanges are said to be the oldest in the district. In 1977-79 there were 29 telephone exchanges with 4 in Karwar, and a total of 2,153 (461 in Karwar) telephones in use. The number of telephones increased to 2,254 in 1978-79. As on 31-3-1985, there are 51 exchanges (MAX II-21, MAX III-42, CBM-2, CBNM 5) with 7,353 working connections. Subscriber trunk dialing facility was introduced in June 1983 and Karwar is connected to national network. There is no telex facility in this district. The number of telephones per 100 sq mtr area and per 10,000 population was 23.80 and 28.85 respectively as in March 1985.

Telegraphs: Karwar and Kumta telegraph offices are said to be the oldest and Karwar was joined to Dharwad by a telegraph line on the Karwar-Dharwad road *via* Arebail pass, and Kumta to Karwar by a branch line. The messages sent from Karwar were 5,155 in 1881 and 5,555 in 1882. The number of telegraph offices increased and the population served by each telegraph office in this district during 1971-72 was 19,355, in comparison with the State figures of 24,855. The corresponding figures for the years from 1972-73 to 1980-81 were 15,397 (23,315), 15,759 (23,912), 17,000 (24,499), 12,592 (19,850), 11,253 (18,632), 11,044 (17,131), 10,099 (15,250), 10,297 (15,585) and 7,497 (14,305) the figures in the brackets correspond to State. This district stood second in respect of these figures in 1980-81. There was an increase of 41.6 per cent in respect of the number of Telegraph offices in 1980-81 over the previous year.

Presently there is a Department Telegraph Office at Karwar (as on 1-9-1985) controlled by General Manager, Telecommunications' Bangalore. Besides, there are Post offices, in which telegraph facilities are offered. They are, telegraphic offices working on Morse 19 (1983), working on Phonocom 60 (1985) and there are 128 combined offices and one D T O. The taluk-wise break-up of these offices are Ankola-10, Bhatkal-15, Haliyal-4, Honavar-22, Karwar-16 (D T O-1), Kumta-22, Mundgod-4, Siddapur-3, Sirsi-16, Supa-4 and Yellapur-13.

Air Transport: Presently there is no air port in this District. The nearest air port is Belgaum.

Statistics in respect of Communication in Uttara Kannada District (1980-81) are as follows: 1) Road length per sq km of geographical area 0.50 km (1981-82), 2) Total road length per 100 sq km 47 km, 3) Total road length per lakh population 506, 4) Registered motor vehicles: a) per 100 sq km 50, b) per lakh population 594, c) per 100 km road length 120. 5) Private vehicles per 100 km road length 76. 6) Vehicles used for Agriculture per 100 km road length 7. 7) Goods vehicles for 100 km road length 21. 8) Stage carriages for 100 km road length 6. 9) Other vehicles (Autorickshaws-cabs) per 100 km road length 10. 10) Population served by post offices 2,294 (1981-82). 11) Population served by Telegraph office 7,497 (1981-82). 12) Number of telephones in use: a) per 100 sq km 23.80, b) per 10,000 population 28.85. 13) Number of Radios: a) per 100 sq km 245.06, b) per 10,000 population 296.57. 14) Insured parcels booked 3,215 (1981-82). 15) V P letters booked 5,807 (1981-82). 16) Registered letters booked 3,50,071 (1981-82). 17) Recorded delivery booked 39,768 (1981-82).