

CHAPTER VII

TRANSPORT AND COMMUNICATIONS

*I***ntroduction:** Locally available natural and human resources play an important role in the social and economic development of a region. With proper utilization of these resources considerable development can be achieved in the fields of agriculture, industry, trade, commerce, banking and so on. Transport and communications play a vital role in bringing co-ordination between these different activities. Good roads, railway network and efficient transport and communication facilities are the basic needs for development. Good transport and communication facilities provide boost to the social activities of people, such as; movement of people, transportation of goods and commodities, livestock etc., from place to place. It is with the help of these facilities that various social, economic and cultural activities can be properly planned and executed. Similarly, inventions of the modern means of communications such as; post and telegraphs, courier, telephones, mobiles and the mass communication media such as; radio, tele-vision, computer; the means of information technology such as; internet, website, telepost, internet telephone, SMS etc., are playing a very crucial role and have been successful in bringing together and transforming the social and economic life of mankind. In recent years, thanks to globalization and liberalization, private sector is providing healthy competition to public sector; particularly due to tremendous progress achieved in the field of information technology, the distance of thousands of kilometres is no more a hurdle and the concept of global village is gradually becoming a reality.

As an administrative measure of the state government, the erstwhile Dakshina Kannada district was bifurcated and Udupi district

came into existence in August 1997. In this context, while an effort has been made here, to document a brief account of transport and communication facilities that existed in Udupi district from early times to 19th century under different administrative control, a detailed account is given pertaining to the development during post-independence period. While giving the statistical details pertaining to the period prior to bifurcation of the district in 1997, it is confined to the taluks of Udupi, Karkala and Kundapura, which are now part of the district. In view of transfer of Mudabidre hobli from Karkala to Mangalore taluk in 1998, care has been taken to provide the statistics for the subsequent period.

The coastal region that spread from north to south, on the western side of Karnataka served as the gateway for the state in foreign trade from ancient times. Located on the central part of the west coast, Udupi district has the western ghats on the east, Arabian sea on the west, Uttara Kannada district on the north and Dakshina Kannada on the south, as its boundaries. Due to its varied physical features, the district was open to sea trade with the neighbouring port cities along the seacoast and other parts of the world, through the ports at Malpe, Hangarakatte, Byndoor, and Kundapura-Gangolli, from times immemorial. As a result of this, trade contacts were established with Arab and other European countries. The rivers like Gangolli, Haladi, Swarna, Varahi, Sauparnika, Chakra, Seetha, Shambhavi and Yennehole, taking birth in the western ghats and flowing towards west before joining Arabian sea, have served as inland water routes. The vast backwater lake created by river Haladi near Gangolli, the backwaters at the confluence of Seetha and Suvarnavathi river; in the course of joining the Arabian sea, also served as inland water routes for transport. It is found from local historical evidences and also from the accounts of foreign travellers during historic period, that inland towns of Barakur and Basarur had water transport facilities since olden days. But, in the region connecting western ghats and the mainland beyond the ghats, the connecting land routes were scanty. Packed oxen were the main means for transporting merchandise in the steep ghats. Thus, till the beginning of 19th century, the district was connected with outside places through inland, and contributed to the history and culture of the country, only through pathways and packed oxen as means of transport.

Though the coastal region is a narrow stretch between the Western ghats and the Arabian sea, the density of population in the region is considerably high. The incessant rain fall in the western ghats, overflowing rivers, and stormy sea, have their own contribution in shaping the lifestyle of the people in the district. There are number of relics found along the coastal belt including Udupi district, to show that there were human settlements in this region even from pre-historic times. Accordingly, there are few sites of stone age culture discovered in the district. A stone weapon belonging to Old Stone Age has been discovered in Kolakal village of Kundapura taluk in 2004. The human settlements pertaining to Microlithic age (BC.4000-3000) have been discovered in Barakur, Nancharu, Haladi and Hiriyadka of Udupi Taluk; Andarachari, Kadatala(Shettibottu village),Kukkundooru, Chara, Jarkala, Bellanje, Moodukonaje, Sanoor, and Karkala of Karkala taluk; and Byndoor of Kundapura taluk. Settlements pertaining to New Stone Age have been discovered at Kukcade(Haladi village), Kotatattu and Nadoor of Udupi taluk. The region boasts of having blessed by Lord Parashurama. The remains of Megalithic culture have been discovered at Udyavar, Udupi (two sites), Kukkuje, Keeradi, Kelakunjalu, Kalyanapura, Parkala, Perdur, Peramballi, Baggerkar and Subhashnagar (Shirva village) Barakur, Barali, Barlapadi, Byloor, Bommarabetta, Bolmade, Bandimatha, Brahmavar, Mudanimboor, Brahmagiri, Myrakomme (Mandarathi), Vaddarse, Avarse and Santhoor of Udupi taluk; Borkatte of Karkala taluk; Amasebail, Kadase, Gavali, Gantehole, Basarur, Belur-Chountadi, Nidladi, Malur, Halladi-Harkadi of Kundapura taluk. The practice of erecting arch shaped cave tombs with laterite stone, till recently prevalent in Kerala region, has also been discovered near Kundapura, Udupi (Muda nimboor) and in Karkala taluks. The remains of pre-historic settlements have been discovered at Udyavar, Udupi and Hattiyangadi (Kundapura taluk). The fact that only few settlements of pre-historic culture have been discovered in the district, indirectly indicates that the region was isolated from the rest of the country for a long time. However, the similarities of the remains of Stone Age Culture found in the district with that of the neighbouring districts of Dakshina Kannada, Uttara

Kannada and Shimoga, indicates that there must have been primitive pathways connecting these regions and the possibility of exchange of culture between the people living in these regions, in the Stone Age period itself.

During the Historic Period the region was ruled by the Alupas, the Hoysalas, the Vijayanagara rulers, rulers of Keladi, Portuguese and the British. It was also under the control of Byrarasas of Karkala and Mudabidri, Choutas of Puttige, Savanthas of Mulki, Tolhara rulers of Sooralu, Honnakambali rulers of Hosangadi, Ballalas of Kanthavara, Heggades of Nandalike, Mudda Heggade of Kapu, Ballalas of Ambalapadi, Kunda Heggade and such other local Jaina rulers. As an indication to the development of transport and communication during this period, we come across the usage of words like 'Dari', 'Heddari', 'Batte', 'Marga', 'Kaludari' etc., rarely mentioned in the inscriptions and literary works pertaining to this period. There is a mention of the word 'Heddari' in an inscription of Barakur dated 1356, and of 'Hiriya Heddari' in another inscription dated 1406. Similarly there is the mention of 'Rajabeedi' in another inscription of Basarur dated 1436. In another inscription dated 1455, there is a mention of 'Heddari' with a width of 12 'Kolu' and 35 'Kolu' (unit of measurement). There is also a mention of planting Mango trees by the side of the roads.

Several inscriptions do speak about the existence of transportation across the western ghats. In an inscription of Kapu dated 1466, there is a mention about the bullocks trekking down eight ghats. There is also valuable information about trade contacts across the ghats, mentioned in an inscription of Barakur dated 1431. There is a mention of the word 'Haadi' in an inscription dated 1525. There is also a mention of the metal road in an inscription dated 1406. In an inscription of Barakur dated 1581 there is a mention of 'Dari'. The Yanagadde inscription dated 1474, mentions about the 'cart roads' and the existence of toll gate of Bhuta Pandya. In an inscription of Hiriyaangadi dated 1545 there is a mention about the 'sin of killing cattle which treks down seven ghats'. In an inscription of neighbouring Panambur dated 1542, there is a mention of 18000 'Kavile' (Brown coloured Cow) climbing down 18 ghats. All these references throw light

on the existence of land transport in the ghat region to places like Barakur, Basarur and Udupi. Subsequently the region was subjected to rule of Hyder Ali and Tipu Sultan for a brief period. During that period roads were laid for the specific purpose of movement of military and war weapons. Soon after the wars these roads got neglected and left to natural deterioration. After the fall of Tipu Sultan in 1799, the district came under the control of Britishers and became a part of the Madras Presidency. From then onwards, for about one and a half century (1800-1947), the district was under the British administration, during which period lot of progress was made in several fields. The district continued to be under British controlled Madras Presidency till it was merged with Mysore state in 1956. The writings of Francis Buchanan who travelled to Mysore, Malabar and Canara regions in 1800-01, gives details of his tour. Accordingly he entered the present Udupi district through Hiriyaadka via Malabar and Dakshina Kannada. From there he passed through Udupi, Brahmavara, Kundapura and Kirimanjeshwara, on his way to Bhatkal. From this account it is evident that there was a road connecting Malabar to Konkan, in those days. The travellers were to cross the rivers and rivulets enroute, with the help of ferry or raft. This travel account also helps us to know about the social, economic and cultural life of the people of this region in those days. During this period the traders in the district were mainly depending on the pathways and cart roads. Those ghat roads that existed from long time provided contacts with the outside region.

Ghat Roads: The western ghats comprising of Sahyadri mountains range, bifurcates the mainland from the coastal region. There are seven ghat roads across the Sahyadri ranges connecting the erstwhile Dakshina Kannada district with other parts of the State. Out of which, four (Sampaje, Shiradi, Bisle and Charmadi) ghat roads are in the present Dakshina Kannada district and the remaining three (Agumbe, Kolluru and Hulikal) are in Udupi district. The road from Shimoga to Udupi, via Agumbe is known as Agumbe Ghat road. The Kundapura – Kolluru Ghat road, and the road that passes through Hosangadi and Hulikal are the three prominent Ghat roads of the district. The Agumbe ghat road is very tough and steep having number of sharp

hairpin curves. Starting from the sunset view point at Agumbe, down to Someshwara, there is a slope of around 2000 feet. Till recently the normal practice was that travellers proceeding from coastal towns to Shimoga have to reach Someshwara by bus and from there onwards change to mini buses to reach Agumbe. Similarly Kandalur-Hulikal road had number of weak bridges which made it very difficult to travel. The 216 Km long Byndoor to Kowai (Kerala) road is another important road passing through the district. Prior to 19th century they were all very narrow and mud roads. During the rainy season it was a common plight that the roads getting damaged due to soil erosion and landslides. During summer it was a common sight that the roads were with full of dust. Till the first half of the last century there was no proper road from Shimoga to reach pilgrim places like Kollur and Udupi. Many other roads in the district were very narrow with less than 20 feet wide and without proper culverts and bridges. These were mainly meant for the movement of bullock carts. The road from Karkala-Mudabidri-Mangalore, Karkala-Mulki etc., had full of hair pin curves. During first half of 19th century these roads were upgraded, improved and made suitable for public transport.

Mr. F.N Matbee, who was the Deputy Commissioner of Dakshina Kannada district in 1850, wrote that when he joined the service, there was not even a single good road in the district. He further says that the people outside the town limits of Mangalore were not even familiar with bullock carts. He went on to say that in the year 1854, six very good ghat roads were opened for traffic and by the end of that year there were 509 miles of good roads available for transport in Dakshina Kannada district, which included also the present Udupi district. The National Highway No.17 connecting Calicut and Mumbai passes through the district. Before bridges were constructed across the rivers at places like Udyavar, Pavanje and Mulki, people were to depend on ferries or rafts to cross the rivers. Upto 1846 the responsibility of construction and maintenance of roads vested with the Revenue Department. Later on it was entrusted to the Superintendent of Roads of Madras Province. As this arrangement could not function well for long, within few years the responsibility

was first given to the Deputy Commissioner and then to the Local Bodies. In spite of this, people travelling from Mangalore to Udupi, having a distance of 62 Km, had to travel a distance of 100 Km via Karkala. Because of the geographical reasons, the road transport in this region had many problems. It is learnt that it required half a day to travel the distance of 69 Km from Kundapura to Kumta.

Around 1872, the road length in the erstwhile Dakshina Kannada district was 772.5 miles. But by 1882 this went up to 877.5 miles and by 1892 it was further went up to 1059.5 miles. In the year 1893 there were 13 roads with a total length of 144 miles and there were 858 bullock carts in Kundapura taluk. At the same time there were 11 roads with a length of 177 miles and 1587 bullock carts in Udupi taluk. Apart from this there were three water routes (Hangara-Kokkarne, Hangarakatte-Bajpe, and Malpe-Udupi) with a length of 32 miles and suitable for the movement of ships with a carrying capacity of six tons of goods. During this time Karkala taluk was a part of these two and also Mangalore taluk. As mentioned in the earlier published Dakshina Kannada District Gazetteer, the length of roads in the district was increased to 1,101 miles by 1912. Around 1926, the total road length was 1413 miles in the district. Out of which 67 miles of Highways and 664 miles of other roads were under the control of District Board. Two miles of Highways and 48 miles of other roads were maintained by the Town Municipality. There were 918 miles of unsurfaced roads. By 1936 this was increased to 1467 miles (106 miles under District Board, 775 miles of other roads and the remaining 586.5 miles was under the control of Taluk Boards), of which 588 miles was surfaced and 885 miles was unsurfaced. In those days the Highways of superior grade were called as Grand Trunk Roads (106 miles) and were maintained by District Boards and Municipalities. Similarly, even though the roads considered as grade II (587 miles) and grade III (788 miles) were maintained by the District Board, there was discrimination in the allocation of grants for this two different category of roads. The roads falling under the last category are the rural roads, and the maintenance of such roads was vested with Panchayats and apparently they were in very bad condition.

Agumbe ghat road, Hyder ghat road, Gurupur-Mudabidri-Karkala-Ajekaru road, Someshwara road, Brahmavara-Jannadi road, North Coastal road, Karawar-Mangalore, Haladi-Shankaranarayana-Vaddarse road, Santhekatte-Kokkarne, Hiriyaadka-Hebri, Karkala-Padubidri road, Belmannu road, Katpadi-Belmannu road; Malpe-Udupi-Karkala road, Mudabidri-Bantwal road, Mudabidri-Guruvayanakere road; Mudabidri-Naravi road, Mudabidri-Mulki road; Someswara-Koteshwara road; Souda-Jannadi road, Seethanadi-Brahmavara road; Vandse-Halkal road etc., were the prominent roads of those days which are now in Udupi district. Around 1936, Agumbe ghat road (42 miles from Mijar to Someshwara); Karkala -Udupi road (24 miles), Karkala- Padubidri road (12 miles), Karkala-Guruvayanakere road (27 miles), Mudabidri-Ikala road (11miles), and Hosangadi-Sangabettu road (5 miles) were the prominent roads in Karkala taluk. There were 930 bullock carts and 41 boats in the taluk. Similarly in Udupi taluk, North coastal road from Padubidri-Yannur (30miles), and in between there was Ferry service at Udyavar, Kalyanapur and Mabukal, Malpe-Perdur-Someshwara road (20 miles), Brahmavara-Hebri and Brahmavar-Perdur road (25 miles), Kota-Goliyangadi (15 miles), Barakur-Shankaranarayana road (8miles), and Yanugudde-Belmannu road(16 miles) were the prominent roads. In all there were 150 miles of roads maintained by District Board. There were 1199 bullock carts and 2526 boats in the taluk. In Kundapura taluk all the big villages were connected by roads. The coastal road was maintained in good condition and ferry service was available wherever necessary. There were 1439 bullock carts and 1929 boats in the taluk, as described in the previous district gazetteer. As there were no bridges constructed across the rivers in these roads, use of ferry and boats to cross the rivers was the common practice.

In 1943, the Government of India formulated a National Policy for construction and maintenance of roads which was popularly known as "Nagpur plan". Accordingly, the roads were classified as; (1) National Highways, (2)State Highways, (3)Major District Roads, (4) Other District Roads, and (5) Village Roads. This policy was implemented at the national level in a phased manner.

However, as Dakshina Kannada district was then in Madras presidency, all the roads continued to be under the control of District Board till 1946. Consequently with the establishment of the department to look after highways by the State Government in 1946, the district roads came under this department. As a result of the state reorganization in 1956, there were 2109 miles of roads of different categories in Dakshina Kannada district including the present Udupi district. Out of which 1956 Km were PWD roads and 153 Km were forest roads.

Development of Roads (1956 onwards): By the year 1973, there were 1539 Km of PWD roads in the erstwhile Dakshina Kannada district. Out of which 1016 Km were surfaced and asphalted roads and the remaining 523 Km were unsurfaced *kachha* roads. By 1980 the length of surfaced roads went up to 1120 Km and that of unsurfaced roads went up to 762 Km.(total 1882 Km). By the year 1986 it further went up to 1433 Km and 668 Km respectively(total 2101Km). By the year 1992, it reached to 1625 Km and 542 Km respectively(total 2167Km). By the end of March 1996 the district was having roads of 2251 Km. Out of which 1759 Km were surfaced and 492 Km was unsurfaced roads.

The new district of Udupi came into existence during August 1997. Subsequently in 1998, Mudabidri hobli of Karkala taluk was transferred to Mangalore taluk. Consequent of which the road length of district got dipped to 2187 Km in 1999. However by 2001 again it went up to 2334 Km. By the end of March 2005 the district had 2868 Km of roads, out of which 1456 Km was in Udupi taluk, 925 Km in Karkala and 852 Km or roads in Kundapura taluk. The average road length per 100 sq Km was 144 Km in 2005. Out of which 53 Km was surfaced and 92 Km was unsurfaced roads. At the same time the state average of surfaced and unsurfaced roads was 83.52 and 31 Km respectively for an area of 100 sq Km. For further details see tables 7.1- 7.3. By March 2008, there was a total length of 8841 Km roads in the district. The sudden increase in the total road length of the district is due to an increase in Taluk Development Board and Village Roads.

Table 7.1: Different Categories of Roads in the District

Year	National Highways	State Highways	Major District Roads	Other Dist Roads	Village Roads	Surfaced Roads	Un-surfaced Roads	Taluk Board Roads	Forest Roads	Irrigation Roads	Total
1956	-	-	-	-	-	-	-	-	-	-	1216
1960	-	402	244	229	346	804	412	256	95	-	1221
1965#	-	413	260	261	210	846	357	353	107	-	1144
1973@	104	413	170	344	713	899	245	424	81	-	1539
1980	104	242	220	262	482	1016	523	161	96	-	1882
1986	104	282	271	213	848	1120	762	262	106	116	2101
1998	107	282	340	74	872	1433	668	198	150	05	2167
1996	107	347	688	08	674	1625	542	268	152	05	2251
1999	142	283	631	08	700	1759	462	197	150	05	2187
2001	142	283	623	08	927	1759	431	206	150	05	2334
2005	142	353	735	08	1162	-	-	-	150	05	2761 ^{\$}
2006	139	353	739	08	4441	-	-	1374	-	-	7883 ^{**}
2008	139	353	795	08	6657	-	-	-	-	-	8841 ^{ss}

- Upto 1965 the figures pertaining to the undivided Dakshina Kannada district include the present Udupi district. The figures are indicated in 'Miles'

@ - From 1973 onwards the figures pertaining to Udupi district are given in terms of Kilometres.

\$ - Includes 86 Km Municipal roads.

** - Includes 83 Km Municipal roads

ss - Includes 88.9 Km Municipal roads

Table7.2: Details of Taluk wise Roads (in Km)

Taluk	Prior to bifurcation		After bifurcation						
	1989	1992	1998	2000	2002	2004	2005	2006	2008
Udupi	653	546	789	898	814	1002	1056	3201	3447
Karkala	754	739	613	701	621	559	625	1925	1895
Kundapura	718	776	754	855	741	815	862	2357	3479

Table7.3: Category wise, Taluk wise Details of Roads in the District (in Km) (as on 31-03-2006)

Taluk	National Highways	State Highways	Major District Roads	Other District Roads	Village Roads	TDB Roads	Municipal Roads	Total
Udupi	54	68	269	6	1488	582	707	3201
Karkala	32	153	161	2	1053	447	78	1925
Kundapura	53	132	282	-	1900	345	45	2757
Total	139	353	739	18	4441	1374	830	7883

National Highways (NH): National Highways provide connectivity to different parts of the country by joining together different State Highways and therefore assumes national importance. Hence, lot of importance has been attached for the maintenance of these roads. The central government bears all the expenditure in this regard. In 1972 the State Government has created a separate wing under the Public Works Department for the maintenance of National Highways located within the state jurisdiction. But upto 1972, none of the roads in the district were categorized as National Highways. In 1972 the road connecting Kanyakumari and Mumbai was declared as National Highway No.17. With that the district also got a stretch of National Highways. Passing through Kundapura taluk in the north, this road touches Udupi and Udyavar and enters Dakshina Kannada district near Mulki. It further connects to the National Highway No.48 (Bangalore-Mangalore) at Mangalore. Before 1996 there was 52 Km. of NH in Udupi taluk and 55 Km in Kundapura taluk making the total length of National Highways to 107 Km. The status of National Highways in the district limits remained same upto 1999. But, the National Highway connecting Chitradurga-Sollapur (NH 13) was extended from Chitradurga to Mangalore in the year 1999. Thus the district got the third National Highway. This road passes through the district via Karkala and ends at Mangalore in Dakshina Kannada district. Total length of this road in Udupi district is 35 Km. As a result of this the total length of National Highways in the district at the end of March 2005, was 142 Km. From then onwards there was no addition to the length of National Highways in this district. Due to straightening of curves at some places by the end of 2008 the length of the National Highways in the district got reduced to 139 Km. This road is now 7.5 metres in width and is a double lane road.

State Highways (SH): State Highways are the roads connecting various district headquarters and other important towns in the state. The Public Works Department looks after the maintenance of these roads financed out of the state exchequer. The total length of the State Highways passing through the district was 186 Km in 1973. It went up to 282 Km by 1984 and further to 358 Km by 1996. But it came down to 308 Km by 1998. It reached to 353 Km in 2008. Accordingly, at present the district has the following State Highways: (1) State Highway No.1 (Padubidri-Chikkalagudda road-76.20 Km), (2) State Highway No. 26 (17.20 Km Halageri-Hulikal road), (3) State Highway No.27(47.80 Km), (4) State Highway No. 37-Virajpet-Byndoor road

88.70Km), (5) State Highway No.52 (Udupi-Subramanya road) 42 Km, Thirthahalli-Kundapura road. (6)State Highway No. 65 (43.40Km) (Malpe-Molakalmur road and (7) State Highway No. 67 (Mangalore Athradi road) 37.20 Km. These surfaced roads are in good condition.

Major District Roads (MDR): These roads connect different places in the district and also provide connectivity to the State Highways. They are maintained by the Public Works Department. The district had 170 Km of such roads in 1973. By 1984 it went up to 291 Km and by 1996 March it went up to 588 Km. In 1998 they increased to 625 Km and by 2005 it went up to 735 Km. Out of which 714 Km were surfaced and tarred roads and the remaining 21 Km were unsurfaced kachcha roads but suitable for vehicle movement. Out of the total length of roads, 235 Km were single roads with a width of 3.75 metre. 117 Km were medium size roads with a width of 5.5Mts. and one Km of double lane (7.5 metre wide) road. By the end of March 2008 the total road length was 795 Km in the district.

Other District Roads (ODR): These are the roads which connects the rural roads with that of MDRs. In 1973 the length of these roads in the undivided Dakshina Kannada district was 346 Km. By 1984 they got reduced to 218 and further to eight Km. (Five Km of such road was in Kundapura taluk and three Km was in Udupi taluk) by 2008. Up to 1985 these roads were under the control of Public Works Department. From then onwards they were given to the control of Zilla Parishat. At present this category of roads and that of village roads are considered as rural roads and are maintained by the Zilla Panchayats.

Village Roads (VR): These are the roads that connect different villages with the Hobli headquarters and other towns. These roads play a very important role in the development of rural areas. In 1973 there were rural roads to the length of 713 Km. By 1984 it went up to 1131 Km and by 1996 the length went down to 1091 Km. By 2001, its length in the district was 927 and by 2005 it further increased to 1162 Km. By March 2008 the total length was increased to 6657 Km. The department has no convincing explanation for this sudden increase in the length of roads. These roads are maintained from 1985 onwards by Gram Parishats and subsequently by Zilla Panchayats. Presently the Other District Roads and Village Roads have been clubbed together and are under the control of Zilla Panchayat with the common nomenclature viz., **Rural Roads**.

Rural Communication Programme: With an objective of connecting all the villages with some kind of roads, the government has taken up the Rural Communication Plan under the Public Works Department from 1959-60 and has achieved considerable progress in this regard. Out of the 287 villages of the present Udupi district, 210 villages have All-season roads, 72 villages have Seasonal roads and the remaining five villages have roads within a distance of five Km from the village. According to the survey of rural road facilities conducted in 1978, out of the 287 villages in the district, 143 villages had All-season roads, 46 villages had Seasonal roads, 94 villages had no motorable roads and remaining four villages did not have any roads at all.

In this context, an estimate for the construction of new roads and bridges was made in the undivided Dakshina Kannada district. Accordingly, the required budget was projected at ₹ 505.74 Lakhs for Udupi taluk, ₹1,151.24 Lakhs for Kundapura taluk and ₹611.30 Lakhs for Karkala taluk. As a result of development in the subsequent years, by 1985, out of the total 279 villages in the district 167 villages had All-season roads, 51 villages had Seasonal roads, 52 villages had no motorable roads and the remaining nine villages were without roads. By 1996 out of the 270 villages in the present Udupi district, 221 villages had All-season roads, 33 villages had Seasonal roads and 16 villages were having no motorable roads. After the creation of independent Udupidistrict which came into existence in 1997, majority of the villages have been provided with All-season roads and remaining villages with Seasonal roads. All efforts are being made to provide All-season roads to almost all the villages by the end of 2008.

Taluk Development Board Roads (TDB): These roads existed since many years, mostly in rural areas. There were 271 Km of TDB roads in three taluks of present day Udupi district during 1991. By 1996 it came down to 266 Km. and by 1998 further decreased to 240 Km. By 2001 it was 197 Km and by 2005 it was 206 Km. Whereas by the end of March 2006, it is shown as 1374 Km. The department has to explain the reason behind such a sudden increase. The transfer of these rural roads from the control of Taluk Boards to the Public Works Department prior to 1985 and again to Zilla Pachayats etc., might be the reason for variations in numbers.

Forest Department Roads: These were the roads constructed and maintained by the Forest Department for purpose of conservation of forests. There were roads to the length of 150 Km in three taluks of Udupi district by 1991. The situation remains unchanged even in 2008 also.

Municipal Roads: These are the roads falling under the jurisdiction of local urban bodies such as Corporations, Municipalities, Town Panchayats etc., These roads are maintained by the concerned urban bodies out of their own funds. There were 187 Km of such roads in the jurisdiction of various Municipalities in the district. By 1998 it came down to 170 Km. By the end of March 2006, there were 83 Km of Municipal roads in the district and by the end of March 2008 it was increased to 88.9 Km.

Bridges

The district is situated towards the western side of western ghats. The region receives incessant rain fall and many rivers and rivulets takes birth on the western ghats and flow towards west before joining the Arabian sea. Prominent among them are Haladi, Gangolli, Swarna, Souparnika, Seetha, Varahi, Udyavar, Chakra, Kubja, Byndoor, Shankadgundi, Goli etc., Because of this, the road transport was difficult in the district from the beginning . The Inland Water Transport consisting of ferries, boats, etc., were the main means for movement of people and goods. In the plains between the rivers, Donkeys, Cattle, Packed Oxen and Bullock Carts were the means of transport. In later days though motor vehicles were in use they were to be transported across the rivers with the help of ferries, rafts, and barges. By 1936 there were 1199 bullock carts and 2526 boats in Udupi taluk. In Karkala taluk there were 930 bullock carts, 41 boats and in Kundapura taluk, 1439 bullock carts and 2526 boats, as per the details given in the gazetteer of 1938. However, there were bridges in the ghat roads of Agumbe, Hulikal and Kollur, by 1950. The construction of bridges across rivers flowing towards west, was began after 1936. Across the four rivers between Mangalore and Udupi the services of Jatkas and ferries and rafts were used for transporting goods in between. This system was known as Subbarayashetty system of disposal.

Major Bridges: By 1956, there were 19 major bridges with a length of 30-304 metre in the undivided Dakshina Kannada district. This was increased to 35 by 1961 and further to 61 by 1966 and by

the end of March 1971 there were 76 major bridges. This was increased to 106 by 1982 and increased to 111 by 1996. By 2004 Udupi district, has one bridge along the Highway with a length of 60-90 Metre, three bridges with a length of 90-152 metre, four bridges of 252-304 metre, two bridges having more than 304 metre length. Apart from this, there were 9 bridges along the state Highways and other roads. Two bridges of 60-90 metre, three of 90-152 metre, two of 252-304 metre and two of more than 304 metre. The following major bridges were there in Udupi district before 1972: (1) Yeennehole-(Hirgan-Ajarkaru) (1916), (2) Seethanadi (Nadgal) 1925, (3) Brahmavara (1938), (4) Shivapura (Hiriyadka-Hebri) 1940, (5). Mathibettu bridge (Varanga) 1942, (6) Bachappa bridge (Hebri) 1953, (7) Swarna bridge (Puttige) 1954, (8) Kalpada bridge (Kadavur), (9) Halkalu bridge 1956, (10) Hosamal bridge (Karkala-Belthangadi) 1957, (11) Udyavara (varanga) 1958, Sankadagundi (Shirur) 1960, (12) Hosangadi 1961, (13) Haladi 1963, (14). Seetha bridge (Sannakatte) 1965, (15) Chara-Varahi bridge 1966, Souparnika Bridge (Vandse) 1969-70, (16) Kollur bridge (Idkal) 1966, (17) Uchichila bridge 1966, (18) Rajadi halla bridge 1967, (19) Gangolli right bridge 1967, (20) Gangolli bridge 1968, (21) Seetha Sethuve (Brahmavara- Jannari road) 1969, (22) Bennadi bridge 1970, (23) Kandlesh bridge 1970, (24) Haladi bridge (Hosakatte-halla) 1970. The 77 Metre long bridge built across Yennehole river at Ajarkaru in 1917, at a cost of Rupees seven lakhs, happens to be the oldest bridge of Udupi district. There is a 45 Metre long bridge across Seetha river at Nadgal built in 1925. By 2004 there were main +bridges at Puttige of Udupi taluk, (1955), Kokkarne (1964) Barakur (1950), Attanji and Bellimanipura (Udyavara river) Vandse of Kundapura taluk (Sowparnika) 1970, Jaladi (1966), Kandlur, Varahi) and Marne, Kerevase of Karkala taluk 1981, Shivapura (1954), Suvarna Chara (Seethanadi) Kadatala (Tirtotlu) of present day Udupi district.

Minor Bridges: The bridges of the length of six Metre, 6-12 Metre, 12-18 Metre, 18-24 Metre, and 24-30 Metre are considered as Minor Bridges. There were 75 such minor bridges prior to 1971, in the Udupi, Karkala and Kundapura taluks of present day Udupi district. By 1982 the number rose to 175 and 2740 bridges of less than six metre. By 1996, there were 2812 bridges of less than six Metre long and 278 bridges of 6-60 metre long. There were also 21 bridges of 60-304 metre long. There were 11 Major bridges along the three National Highways. There were 375 bridges of less than six metre 18 bridges of 6-60 metre along along the state highways. There were 16 Major bridges,

2268 culverts of less than six metre long, 64 bridges of 6-12 metre long, 21 of 12-18 metre long, eight bridges of 18-24 metre, 11 of 24-30 metre 24 bridges of 30-60 metre long, along the PWD roads in the district. In addition to this there were bridges of different sizes on the roads maintained by other sources.

Traffic Census and Motor Vehicle Survey

With a view to make improvements in road transport, the PWD department in 1956 decided to conduct a seven day long (day and night) survey of vehicles once in five years, to document the density of vehicles on different kinds of roads. The first such survey was held in 1961-62. Thereafter it began to conduct yearly sample survey from 1963-64, on selected roads, to know the annual growth in traffic. As planned by the department the survey was conducted in 1961-62, 1965-66, 1970-71, 1975-76, 1981-82, 1985-86, 1992-93, 1997-98 and 2002-03. (For details see Dakshina Kannada district gazetteer (2006).) During the survey in 2002-03, 41 census count posts, at the rate of one per 28 Km. were set up in the district of Dakshina Kannada. Out of which 12 count posts were set up in two National Highways (142 Km.) and State Highways. Likewise 24 count posts were set up on Major District Roads. According to the survey data the traffic density along the National Highway No.17 (107 Km) and National Highway no.13 (35Km) (total 142 Km), is considerably high. On the National Highway no.17, average movement of vehicles per day as recorded at different counter posts, was 7142 PCU (Passenger Car Units) to 24149 PCU. On the National Highway No.13, average vehicle density was 1977 PCU per day. On State Highways it was 6000 to 15000 PCU per day. On the Major District Roads it was less 2000 to 6000 PCU per day. According to 2002-03 survey findings, on National Highway No. 13 there was an average movement 3649 HTV, 1643 LMV and 77 slow moving vehicles amounting to 12736 PCU per day . In the same way, in National Highway No.17, there was movement of 7258 HTV, 5153 LMV, two Slow moving vehicles amounting to a total of 23436 PCU per day was recorded. For the sake of assessing the traffic density in the survey different PCU value were given to different vehicles. Details can be seen in the 2003 Traffic Census Survey Report of the PWD.

Regional Transport Office

Before 1989, the department was performing functions like registration of motor vehicles, control and collection of taxes, grant of state and interstate permits, issue of drivers and conductors'

licenses, prevention of environmental pollution etc., and it was known as Motor Vehicles Department. This department was responsible for the implementation of acts and rules made by state as well as central governments. From 1957 onwards, the administration of the department was being run through the Regional Transport Offices and Assistant Regional Transport Offices at the district level. Prior to 1957, the District Boards and Municipalities were looking after this responsibilities with the help of Police Department. The Regional Transport Offices at Mangalore and Udupi were functioning under the control of Divisional Transport Commissioner of Shimoga. The Udupi, Kundapura and Karkala taluks were under the jurisdiction of Regional Transport Office of Udupi. In the year 1961, there were 5276 vehicles registered in the area of present day Udupi district. There were 13697 vehicles in 1986, in 1991 it was 23706, in 1996 it was 39104, and in 1998 there were 51104 vehicles. By the end of March 2005, the number of vehicles registered in the district were 1,03,462. On an average there were 8408 vehicles for one lakh population in the district, as against the state average of 9226 vehicles. By the end of March 2006 there were 1,14,303 vehicles registered in the district.

Table 7.4: Various Types of Motor Vehicles Registered in the District

Type of Vehicle	1965	1973	1987**	1991	1997	2001	2005	2006
Motor Cycle/ Scooter	2028	5476	5766	15216	30044	45267	71264	79024
Motor Car	819	4748	1634	2450	4813	8395	12670	13772
Jeep	137	402	258	310	553	659	991	1027
Maxicab	189	638	437	406	694*	4778	-	2149
AutoRiksha	130	864	1365	2006	2784	919	7089	7728
Omni bus	15	54	100	99	519	-	946	986
Wagon	-	-	11	08	06	-	-	-
Stage Carriage	-	-	-	-	-	-	-	-
KSRTC Buses	-	-	-	-	-	-	-	-
Private buses	211	397	262	347	626	839	1088	1070
Goods vehicle	695	2522	1970	2704	3801	4885	5783	6393
Tractor	38	46	30	33	72	-	232	248
Trailer	44	127	36	44	-	-	-	-
Dumper	-	-	-	-	-	-	-	-
Buldozer	-	-	-	-	-	-	-	-
Road Roller	7	-	-	-	-	-	-	-
Tippar	-	-	12	-	-	-	-	-

cont'd..

Type of Vehicle	1965	1973	1987**	1991	1997	2001	2005	2006
Racker	-	-	42	-	-	-	-	-
Fire Engine	-	-	-	-	-	-	-	-
Power Tiller	-	-	3	2	-	-	-	-
Delivery Van	-	-	-	1	26	-	-	-
Ambulance	-	-	7	15	-	208	725	1009
Fire fighter	-	-	-	25	-	-	-	-
Tanker	-	-	-	2	-	-	-	-
Maxi Cab	-	-	-	3	232	-	-	-
Others	31	195	30	5	261	-	1926	897
Tourist Car	17	56	-	-	39	1903	748	-
Total	5276*	15521*	13964**	**23706	44499	67819	103462	114303

* Figures pertaining to DK district inclusive of Udupi dist.

** Pertaining to the Udupi district when the DK district was not divided.

Table 7.5: Taluk wise Details of Various Types of Vehicles Registered in Udupi District, as on 31 March 2006

Type of vehicle	Udupi	Karkala	Kundapur	Total
Motor Cycle/Scooter	43375	12669	22980	79024
Motor Car	6912	2177	4683	13772
Hired Cars	1131	455	563	2149
Jeeps	505	175	347	1027
Auto Riksha	4535	1323	1870	7728
Omni bus	509	167	310	869
Ambulance and Delivery Vans	564	170	275	1009
Buses (Govt.& private)	546	185	339	1070
Goods Transport Vehicle	2926	1287	2180	6393
Tractors & Trailers	109	62	81	248
Others	480	137	280	867
Total	58376	19354	36573	114303

Table 7.6: Taluk wise Details of Registered vehicles in Udupi District

Taluk	Prior to bifurcation		After bifurcation			
	1984	1992	1998	2001	2005	2006
Udupi	5673	14990	26617	34420	55985	58376
Karkala	1711	4181	8981	12081	16704	19354
Kundapur	1563	7506	15506	21318	30773	36573
Total	8947	26680	51104	67819	103462	114303

The functions of the department include; registration of motor vehicles; issue of state and inter-state permits; issue of license to drivers and conductors; issue of plastic license cards; granting permission to motor driving training schools, conducting test to the candidates appearing through these schools and issuing license to the successful candidates; documentation and maintaining statistics pertaining to road accidents; conducting emission tests to control the pollution caused by motor vehicles and granting permission to emission testing centres etc., Further details regarding these functions are given in the tables below.

Table 7.7: Details of Licenses issued to Drivers and Conductors

Particulars	1987	1991	2005
Drivers	9007	21338	114897
Conductors	198	347	3526

Table 7.8: Details of Road Accidents in the District

Particulars	Prior to bifurcation of the district			After the bifurcation	
	1972	1977	1982	1997	2005
Number of accidents	380	551	624	2059	1084
Number of deaths	86	86	153	420	165
Number of injuries	420	685	649	3447	1556

Table 7.9: Details of Motor Driving Training Schools in the District

Particulars	1987	1991	2006
Number of schools	01	09	15
Number of candidates Appeared	443	1742	4854
Passed Number	321	1389	4602
Failed Number	122	358	252

Public Transport

With regard to public transport, it was completely private owned till the end of 19th century. Common people used to travel from place to place on foot, though bullock carts were also in use. Elephants, Horses, Chariot, Paliquin, Dolly etc., were the means of transport for the people of royal families and administrators. Commodities were transported by means of head loads and in Kavadi (Bamboo pole provided with strings at each end) apart from using Buffalo, Donkey, Horse and Bullocks. Later on people started to use Jataka, Tonga, Bicycles etc., Even then, bullock carts were the means of transport

in rural areas. There was Belle Subbayyashetty jataka service between Sullya-Mangalore and Udupi. There were no bridges constructed across the rivers on the way to Udupi from Mangalore at Kulur, Pavanje, Mulki, Udyavar etc., The use of rafts and barges was common in those places. On plain lands in between the rivers Subbarayashetty's Jataka service was the important means seen in transporting goods and people. It was popularly known as Subbarayashetty's disposal.

During the post independence period, Public Transport Corporations were established in different parts of the country including Mysore State (1948). The district of Udupi which was a part of the then Dakshina Kannada district was under the administrative control of Madras Presidency upto 1956, and the private bus services played an important role in the public transport sector from the beginning of 20th century itself. Around 1914, Nellikai Venkatarama and Bolara Vithal Rao established 'Canara Public Conveyance Kudwa Company' and started operating bus services. Around the same time Pangala Upendra Nayak of Udupi, started 'Hanuman Transport'. Arur Lakshminarayana Rao's Shankar Vithala Company and Kateel Durga Parameshwari Motor Service also started functioning. In those days the distance between Mangalore and Udupi was 90 Km. The buses from Mangalore to Udupi were going via Gurupur and Karkala. The Journey time of five hours on the *kachha* road made the journey hazardous. Later on all these companies united together and opened 'Combined Booking Agency' in 1933. The Jois Booking Company was a later addition. As a result of it, passengers were benefited by regular bus service with fixed timings and uniform fares. During 1933-47 there was no significant development in the transport sector, as there were no bridges constructed across several rivers. In the meanwhile Mr. Gopal Shetty established Manjunath Motor Company and started bus services from Udupi. After the re-organisation of State, the State Road Transport Corporation in 1957, started operating direct bus services between Bangalore and Mangalore, resulted in bringing the district also under the purview of state policy of nationalization of road transport. Permits were also given to private agencies for operating bus services in this route. In the same year bus depots were also established in Mangalore and Puttur to work under the administrative control of the Divisional Office at Hassan. Later on workshops were

also attached to these depots. By 1972 the entire transport service in Dakshina Kannada was under the control of private sector. It can be seen from the district gazetteer of Dakshina Kannada district, different companies like; Canara Public, Shankar Vittal, Manjunath, Hanuman, Bharath, SCS, United Trading, PVM, Ballal, Verma, BNS etc., were operating in 208 routes, providing transport services to the extent of 26,225 Km. per day. Later on the State Road Transport Divisional office was also established in Mangalore. The depots at Mangalore, Puttur and Dharmastala were brought under the control of this division. Subsequently a bus depot was also established at Kundapura. As a result of all these developments, by 1994, though the depot at Kundapura provided bus service to rural areas to some extent, the domination of private buses still continued. However, the State Transport Corporation has been trying to provide bus services to various parts of the district including Udupi-Mangalore, Udupi-Kundapura, Udupi-Karkala, Udupi-Karwar and such other routes, amidst healthy competition from private buses. There was a proposal to establish a bus depot in Udupi during 2007-08.

City Bus Service: The private agencies are providing the city transport service effectively, with fixed fares, on selected route of Udupi town and moufficial areas. The State Road Transport Corporation is not operating any city service schedules in Udupi.

Railways

Untill the commissioning of the Konkan Railway route in 1990, Udupi had no railway transport facility. People of Udupi district were depending on the nearest railway link of Mangalore located at a distance of 60 Km for passenger and goods transport service through railways. Though there was broad gauge railway line between Madras and Mangalore, built as early as in 1907, there was no railway line towards places like Udupi, Kundapura and Karwar etc., north of Mangalore, due to unconducive geographical features. In 1972, the railway line was extended by 11 Km from Mangalore to Panambur. The Mangalore-Hassan metre gauge railway line was built in 1972. As a result of this Udupi district also got connected to places like Bangalore, Mysore etc., by rail, via Mangalore. However, Udupi got direct railway link only after Konkan Railway Line was commissioned.

Roha/Apta-Mangalore (Konkan) Railway: A proposal was made for laying broad gauge railway line of 738.44 Km along the west coast, between Apta/Roha near Kalyan of Mumbai and Thokur near Mangalore. Survey was conducted and estimates and formalities were finalized in 1970-71. For the purpose of execution of this project, an autonomous organization called Konkan Railway Corporation was established by Government of India. Mr. George Fernandez, the then Railway minister was instrumental in this mega project. The Konkan Railway Corporation, a subsidiary organization of Govt. of India headed by Chief Engineer of Railways Udupi Division, undertook the construction of 60 Km of Railway line between Udupi and Mangalore and completed it by 1993. On completion of the entire project it was thrown open for public in 1997. On the Konkan railway line there were stations at Kankanadi, Tokur, Suratkal and Mulki of Dakshina Kannada district. The Kankanadi has been developed as a major junction . This route along the west coast has been playing a major role in connecting Mumbai with Madras(Chennai). This railway line which passes 45 Km in Udupi taluk and 51.86 Km in Kundapura taluk, traverses altogether 100.86 Km in Udupi district. Enroute there are three stations (Padubidri, Udupi and Barakur) in Udupi taluk and five stations (Kundapura, Senapur, Bijoor, Byndoor and Shiroor) in Kundapura taluk. With the commissioning of this route, Udupi district is now directly connected to Mumbai by rail and there has been considerable reduction in distance, travel time and fare. Further, the district is now having direct train facilities to Mumbai in the north and places like Cochin, Madras (present Chennai) and Bangalore in the south via Mangalore. Meanwhile the conversion of metre gauge line to broad gauge between Mangalore and Hassan was taken up. In the first phase the conversion work between Mangalore- Kukke Subrahmanya and Hassan-Sakaleshpur was completed, goods and passenger trains were started operating in this route. On completion of conversion work between Sakaleshpur-Kukke Subrhamanya in 2005, goods train services was started in this route. Finally when public demand mounted high, passenger train services were introduced (between Yeshwantpur and Mangalore via Bangalore, Mysore and Hassan) in 2008. There was also public demand for another train service between Yeshwantpur and Mangalore (via Tumkur, Arsikere, Hassan) during night and also for a train service between Yeshwantpur-Mangalore during day time.

Air Transport

The Bajpe Airport near Mangalore has been the nearest airport for Udupi, even before the formation of new district. The Bajpe (Mangalore) airport is located at a distance of 60 Km to the east of Udupi. Indian Airlines, Jet Airways, Kingfisher and Air Deccan companies operates daily four schedules to Mumbai and three schedules to Bangalore. The process for upgrading it as International Airport is underway by construction of one more runway. Once it has been completed, International Flights are being operated from here.

Water Transport

Being on the shore of Arabian Sea, Udupi district has a long sea coast of 80 Km. From times immemorial, the inland towns of Basarur and Barakur were known for inland trade with neighbouring coastal towns. Also there were trade contacts across the seas through the harbours of Old Mangalore, Bhatkal and Karwar. By 1956, there were small ports at Malpe, Kundapura, Hangarakatte and Byndoor famous for trade in the coastal region and also known for fishing. Prior to state reorganization these harbours were under the control of the Department of Ports of Madras Presidency. In 1957, the State Government created the Department of Ports with its headquarters at Karwar. In 1998, the jurisdiction was fixed for the port at Padubidri and a small port status was accorded to it. As a result of this by 2006, there are four small ports in Udupi district. Out of which the Byndoor port is not functioning. The New Mangalore port at Panamburu is being extensively used for international trade. During 2004-05 the Department received an income of ₹5,09,699 from Malpe port, against the expenditure of ₹4,04,432 incurred towards maintenance of the port. ₹3,49,005 was the income from Kundapura port against an expenditure of ₹7,66,644. The income from Hangarakatte port was ₹20,220 against expenditure of ₹93,156. It clearly shows that the ports at Hangarakatte and Kundapura were running under loss. Consequently the Hangarakatte and Kundapura ports have not functioned during 2004-07. A private company has started ship building unit at Malpe port. During 2006-07 the Malpe port has handled imports and exports of goods valued at ₹91,47,890. For further details see table 7.10.

Table 7.10: Imports and Exports of Ports in the District

Name of the Port	Year	Imports (in metric tons)	Exports (in metric tons)	Total (in metric tons)	Transaction Fees Collected
Malpe	1956-56	10882	10161	21084	NA
	1979-80	1858	6913	7767	6982
	1989-90	3657	24141	27798	77805
	1997-98	2151	27374	29525	196696
	2004-05	1698	11874	12874	76269
	2006-07	520	13502	14023	134105
Hangarakatte	1956-56	2507	2367	4870	-
	1979-80	834	3955	4786	2589
	1989-90	-	1060	1060	1607
	1997-98	-	-	-	-
	2004-05	-	-	-	-
	2006-07	-	-	-	-
Kundapura	1956-56	1,1309	25,415	36724	-
	1979-80	4,311	37,343	41654	48036
	1989-90	-	12276	13510	25465
	1997-98	-	469	466	1146
	2004-05	-	-	-	-
	2006-07	-	-	-	-
Byndoor*	1956-56	-	-	-	-
	1979-80	19,895	-	126844	146749
	1989-90	-	-	-	-
	1997-98	-	-	-	-
	2004-05	-	-	-	-
	2006-07	-	-	-	-

*Remains closed since 1984

Inland Water Transport: It has been clear from the accounts of foreign travellers that since long the rivers in the district have been conducive for transportation of passengers as well as goods. There are historical evidences to say that traders from other countries travelling in ships visited Barkur and Basarur ports of the district for trading. It has already been mentioned that before the construction of bridges and culverts across the rivers and rivulets, the transportation between Mangalore and Udupi was relying upon Subbarayyashetty's exchange system. The remains of Packed Oxen pathways used in those days can be seen even now in some places between Mangalore and Udupi. By 1958, there were 34 Ferries under the control of the

District Board. In 1972-73, the maintenance of these ferries was handed over to the Taluk Boards. There were 27 such ferries in the present Udupi district region and there was an annual income of Rs.3,187 from these ferries. Out of these 14 were in Kundapura taluk, 10 were in Udupi taluk and the remaining three were in Karkala taluk. The ferries at Kalyanapur-Bhadragiri, Kundapura-Gangolli and Yennehole (Karkala taluk) were under the direct control of the department. In 1972 a separate division was created, under the Department of Ports, to control the state inland water transport. As a result of its efforts were made under various five year plans for improvement of ferries under the Mangalore Circle. However by 2005, the number of ferries in the district have been declined to only 12. Out of which the ferry between Hangarakatte-Bengre, on Seethanadi was under the management of the department and the ferry between Malpe-Padukere was given to private management through public auction. There was an income of Rs.30,500 to the department from this ferry. The ferry between Hangarakatte-Bengre was used by 47,637 passengers during 2004-05 and there was an income of Rs.47,637 to the department. For details see table 7-11.

Table 7.11: Number of Ferries in the District

Year	Total No.of Ferries	Managed by the department	Managed by Private
1973	27	03	01
1980*	66	02	06
1984*	66	03	06
1990*	55	02	06
1997*	40	03	06
1998**	12	01	01
2002**	12	01	01
2005**	12	01	01

* Figures pertaining to undivided Dakshina Kannada district ** Figures pertaining to bifurcated Udupi district.

Postal Service

In spite of tremendous progress achieved in the field of communications in recent years, the postal service has still retained its importance. The postal service is instrumental in binding harmoniously the emotional and commercial contacts between individuals and institutions living at a distance of thousands of kilometre, at a very nominal cost. The postal department has its own

history and heritage. During post independence period, the postal department which was then part of Post and Telegraph Department, had three Sub-divisional post offices in Dakshina Kannada district, out of which one was in Udupi. By 1972, there were eight Sub divisional post offices in the district and out of which, three (one each) were in Udupi, Karkala and Kundapura. There were Head Post Offices at Udupi and Kundapura, 73 Sub-post offices and 264 Extra Departmental Post Offices in their jurisdiction. By 1972, there were 140 post offices in Udupi taluk, 88 in Karkala taluk, and 111 in Kundapura taluk. In all there were 339 post offices functioning in the region of present day Udupi district. By 1992 there was a Divisional Post Office at Udupi and Head Post Offices functioning at Karkala and Kundapura. By the end of March 2006, there were 331 post offices in the district, at the rate of one per 4,119 population, as against one per 5334 population at the state level. Details can be seen in Table 7.12.

Table 7.12: Details of Taluk-wise Post Offices in the district

Post Offices						
Taluk	1984	1989	1994	2001	2004	2006
Udupi	152	135	154	157	158	158
Karkala	95	99	70	62	62	62
Kundapura	111	123	110	111	111	111
Total	358	356	334	330	331	331

Telegraph Service

Mangalore city became a part of the Telegraph net work in 1865, as a result of becoming part of Cannonore branch telegraphic line, when the region was under Madras Presidency. By 1893, out of the four post and telegraph offices functioning in Dakshina Kannada district, one was at Udupi. By 1970, telegraph facilities were available in majority of the post offices of present day Udupi district also. By 1984, there were 105 combined post and telegraph offices in Udupi taluk, 52 in Karkala and 47 in Kundapura taluks. Subsequently as a result of the increase in the telephone facilities and STD services, the demand for Telegraph service came down drastically. By 1992, there were 96 combined Post and Telegraph Offices in Udupi taluk, 63 in Karkala and 46 in Kundapura taluk. After bifurcation in 1998, there were 123, 60 and 76 post and telegraph offices in Udupi, Karkala and Kundapura taluks respectively. In addition to this there were four

independent Telegraph offices (Two in Udupi, one each in Karkala and Kundapura) in the district. By 2001 there were 127, 47 and 80 Post and Telegraph Offices respectively. By 2005, it was 129,12 and 81 respectively. The number of independent telegraph offices remained same (4). By the end of March 2006, there were 58,7 and 57 combined Post and Telegraph offices respectively in Udupi, Karkala and Kundapura taluks. There were 11 independent telegraph offices (Five in Udupi, three each in Karkala and Kundapura taluks) in the district.

Telephone Service

As a result of the revolutionary progress in the field of technology, there has been tremendous progress in the field of communications, particularly in the field of telephone services. The telephones have reduced the distance of thousands of Kilometre and made easier the contact with any corner of the world within a matter of seconds. The telephone service was first started in the city of Madras during 1884. In the Mysore state, the first telephone line of 58 Km was commissioned in 1889,between Hunsur and Kakanakote, in view of the Khedda operations. The city of Mangalore got telephone facility around 1940. Initially when telephone services began in 1960, there was a common administrative circle for Post and Telecom Services in the State. Later on due to increased popularity, by 1971, there were 7130 Telephone connections functioning in Dakshina Kannada district, through 33 exchanges. Out of which 4200 phones were in Mangalore city alone. There were 139 Public Booths and 42 Trunk Call Centres. The department was bifurcated in 1974 and separate circles for Post and Telecom came into existence. This has resulted in bringing considerable changes throughout the state. By 1992, there were 75 Telephone Exchanges and 13,727 Telephones in the present Udupi district. By end of March 2004, there were Telephones at the rate of one per 15000 population and 7734 telephones per one lakh population. By 2005 the number of telephone exchanges went up to 103 and there were 1,11,037 telephone connections. By march 2006, they further went up to 106 (Telephone Exchanges) and 1,16,234 Telephone connections were functioning in the district.

Due to introduction of STD and ISD services in 1980s now common people are finding it easy to make national and international telephone calls at affordable rates. As a result of the advancement of technology now the telephone facility is available throughout the district at local

call rates and telephone facilities are available in rural areas too. Now the department is more focusing towards providing facilities in rural areas and has extended special concessions to rural customers in terms of deposits, phone rental charges, pre and post paid call charges, etc.

The transmission of information has been made easy by providing the Telex-Fax-Email services in the district. With the advancement in Computer and Information Technology through Internet and Websites mass communication facilities have increased and are very useful in these days. The Deputy Commissioner's Office has been computerized and directly linked to Chief Minister's Office through internet. The computerization of taluk level offices is also under progress. The Computer Training Centres have come up in taluk as well as hobli levels. There is stiff and healthy competition to the public sector Department of Telephones by Private Sector Telecom Companies such as; BPL,Airtel, Spice, Hutch, Reliance, Vodafone etc.,which have actively involved in providing telephone services.

Bharath Sanchar Nigam Ltd., (BSNL): There has been lot of changes taking place in the telecom sector of the country since 1992, due to liberalization and privatization policies of the Government. The private companies such as; Airtel, Hutch, Samsung, Nokia, TATA Indicom, Reliance,Benque, etc., are providing variety of services. The Department of Telecommunications in India was earlier known as Videsh Sanchar Nigam Ltd., 1995 (VSNL), later on changed its name as Bharatiya Sanchar Nigam Ltd., (BSNL) and trying to provide good services to the consumers. Due to the entering of various private companies into the field, the national and international telephone services have become plenty and are available at cheaper rates. In this direction, the role of National Telecom Policy (NTP) of 1994 and 1999 is worth mentioning. Now there are facilities like Cell Phone (Mobile) and Internet available to the consumers. Instead of cable connected telephones wireless phones and phones working on radio signals have made the telephone service more simple and efficient. Laying of Optical Fiber Cables along Highways, Gas Pipelines and Railway lines etc., the connectivity between different cities has become easy. Particularly with the use of ultra deep wave multi flexing

technology transmission, costs have been considerably reduced. This will be further reduced in the next five years. According to the provisions of National Telecom Policy 1999, the Electric and Gas companies are permitted to create optical fibre cable network and give it on lease or sell to the telecom companies. The Gas Authority of India has been active in this direction and has become a competitor to the BSNL. The demand for land line has been gradually coming down and the demand for mobile phones is increasing. The introduction of mobile phones by BSNL has been successful in curtailing the exorbitant rates charged by private companies and also their demand in the market to a considerable extent. As a result of this, now Nokia, Reliance, TATA Indicom and other mobile telephones are available to the consumers at cheaper rates. These companies are trying hard to attract the rural customers also.

Mobile phones are not only colourful, but also have variety of services like Videogames, Camera, Audio, Television, SMS, FM Radio service etc., The mobile phone has been converted into computer in other countries and the days are not too far in our country too to get these changes happened. The BSNL has been successful in providing countrywide telephone services not only to cities connected by national highways and railways, but also to the surrounding rural parts in an effective manner. The BSNL Excel phones particularly the pre-paid and post-paid services are in great demand in the market.

The monopoly enjoyed by BSNL in providing internet services in the country since 1995, has been cancelled in 1998. As a consequence, now the private companies are also providing this service to the consumers. However, BSNL is striving to provide internet services to consumers at cheaper rates, amidst competition from private companies. The telecom department has created a separate corporation called Mahanagar Telephone Nigam Ltd., (MTNL) for maintenance of telephone services in cities like Mumbai and Delhi. The telephone services in other parts of the country continue to be under the control of BSNL. The BSNL is proposing to give SMS messaging facility to land telephones and the customers can receive the calls as well as SMS on land lines also.

Table-7.13: Taluk wise Details of Telephone Exchanges and Telephones in the District.

Year	Udupi		Karkala		Kundapura		Total	
	Telephone Exchanges	Telephone Connections	Telephone Exchanges	Telephone Connections	Telephone Exchanges	Telephone Connections	Telephone Exchanges	Telephone Connections
1984	19	2833	15	997	17	936	51	4766
1989	24	5652	27	2145	22	1829	73	9626
1997	26	7888	26	2614	23	3025	75	13627
1998	37	28569	16	4992	27	4947	80	42508
2001	42	46725	26	18402	30	17849	98	85980
2005	42	63062	27	23259	34	24716	103	111037
2006	47	66563	25	23139	34	26502	106	116234

Radio

The Radio came to be used in the fourth decade of 20th Century (1935), continued to play very important role in the daily life of common people throughout the century. With the advent of Television, which is Audio-visual media in 1980, Radio has been sidelined to some extent. However, by introducing variety of programmes in addition to FMs service it is again gaining importance. Before the commencement of Radio Station in Mangalore on 14 November, 1976, the district was receiving the programmes broadcast from Radio stations of Dharwad and Bangalore. In 1976 the studio was established at Mangalore and broadcasting station at Brahmavar (Udupi taluk). By 1967 there were 17,832 radio sets in the district. By 1972 there were 74,417 licensed radio sets in the district. The number continuously went on increasing and by 1978 it was increased to 62,104, by 1980, it was further increased to 1,10,667. However by 1982, the number was reduced to 55,922, and by 1983 it was further reduced to 63,495. From then onwards statistics in this regard is not available. The policy of the central government in not insisting on the renewal of licenses, might be the reason for non availability of information. However, the small transistor radio handsets have become popular in providing FM radio services to the consumers. The private FM station started at Mangalore is also serving the needs of Udupi district.

Television

Though television, a very popular media was introduced in India as early as 1959, it was introduced in Karnataka for the first time during 1977, through Gulbarga. Later on Doordarshan Kendra was started at Bangalore in 1981, and with that the era of Television was also started in Dakshina Kannada district. To begin with in 1982, there were only nine TV sets. By 1983 the number went up to 26. Meanwhile, in 1984, a relay transmitter of 100 Watt capacity were established in 10 cities of Karnataka, including Mangalore(21-7-1984). A similar transmitter was established in Udupi on 14-3-1987. In 1988, Bangalore became a full-fledged TV station equipped with production and transmission facilities. A relay station with 100 Watt transmitter capacity was also established at Bantwal on 29-10-1989. As per the Government of India scheme and also due to local demand, all Doordarshan sub stations were linked with the Bangalore Doordarshan Kendra in 1990. Thereby the programmes telecast from Bangalore Doordarshan Kendra could be simultaneously viewed throughout the state. Programmes of Bangalore Doordarshan used to be telecast from 5-30 to 8-30 pm and rest of the time programmes in Tamil, Telugu, Marathi , Malayalam, Urdu, Kodava, Konkani and other Indian languages were telecasted. Later on Bangalore Doordarshan started a second channel in October 1993. With this Doordarshan gained much popularity. By 1993 the Doordarshan programmes were reaching 3.8 lakh people in the urban areas of undivided Dakshina Kannada District. Similarly by reaching to 6.3 lakh people in the rural areas, the Doordarshan became very powerful medium in reaching people through its programmes. The DTH (Direct To Home) service recently introduced by Prasar Bharathi, enables the viewers to see programmes from more than 40 national and international channels, and listen to radio programmes also, by affixing a 'set top box' and a small 'dish antenna' to their television sets. There is a proposal to upgrade the capacity of the Mangalore Doordarshan station to 10 KV. In this connection, permission has been sought from aviation department to erect a tower of 150 metres tall. The capacity of the relay station at Bantwal has been raised from 100 Watt to 500 Watt. As a result of which, according to an estimate, now the services of Doordarshan have been reaching 92% of population.

Tourism

From tourism point of view, Karnataka ranks second in the country next only to Kashmir. The state has been described as tourists' heaven. The role of the coastal region is very prominent in this respect. Within the coastal belt of the district there are beautiful beaches at Malpe, Maravanthe and Othinene. The evergreen forests in the ranges of western ghats, with full of trekking spots; the water falls and the lakes created by the perennial rivers; natural sanctuaries; places of historical importance such as: Karkala, Brahmavara, Barakur, Basarur, Udyavara, Kalyanapura, Varanga, Someshwara, Shankaranarayana; Udupi, Kollur, Koteshwara and such other pilgrim centres; educational centres like Manipal; ports like Malpe, Kundapura, Padubidri and Hangarakatte etc., attract tourists to the district. The information guides describing various tourist places of the district, route map, good transport, good hotels with boarding and lodging and such other facilities are available in the district for the benefit of tourists. However, there is much scope for further development of tourism in the district.

Guest Houses

The guest houses were also called as 'Dak Bungalows' as they were used for postal services too. Earlier they were under the maintenance of District Boards and subsequently transferred to Taluk Boards. There were also guest houses maintained by the Forest Department and Village Panchayats, here and there. By 1893 there were five Travellers' Bungalows in Udupi taluk; at Udupi, Haladi, Brahmavar, Hiriyadka and Kapu. Out of which two were maintained by the District Board and three were maintained by Taluk Boards. In Kundapura taluk, the two guest houses at Kirimanjeshwara and Byndoor were maintained by the Taluk Boards. The guest houses at Karkala and Mudradi were maintained by Taluk Boards. The rent per day was eight 'anna' for single person and 12 'anna' for a couple. In some places it was four 'anna' and six 'anna' respectively. There were choultries under the management of Local Boards to private persons at Mudabidri, Ajekaru, Kapu, Arur, Bommarabettu, Cherkadi, Gundmi, Handettu, Kavila, Perdur and Shivalli of Udupi taluk; Hosangadi, Kirimanjeshwara, Nagavadi, Byndoor, Jadkal and Kollur of Kundapura taluk; Mudradi, Shiriyaru, Someshwara, Karkala, Hebri, Karkada of Karkala taluk. Out of these some were exclusively meant for Brahmins, some for Hindus and some were meant for all categories of people. There was one choultry known as 'Hydersab Chatra' at

Karkala meant for Muslims. Later on by 1926 there were 18 guest houses in Udupi taluk. Out of which 11 (Kota, Padubidri, Perdur, Shirle, Haladi Hiriyaadka (2), Karje, Kapu, Kokkarne, and Udupi belonged to grade III (Nine were maintained by District Board and two maintained by Taluk Boards); Three Bungalows (two at Udupi (old and new) and one at Bramhavar) belonged to grade II (two under District Board and one under Taluk Board); four Bungalows at Malpe and Brahmavar (2) under District Board and Shiriyaru under Taluk Board) were Charitable Bungalows. Five bungalows (Padubidri, Haladi, Hiriyaadka (2) and Perdur) were of thatched roof and the remaining 11 had tiled roofs. Seven had one room and the remaining had two room accommodations. Five had Horse Stable. Six Bungalows had a Well in their premises. The rent per day was six 'anna' for one room shed and it was four 'anna' each in case of two rooms. For the Inspection Shed at Udupi the rent per day was eight 'anna' and six 'Kasu' per shed. For the Travellers Bungalow at Udupi, the rent per day was 10 'anna' and six 'Kasu'. These Bungalows had facilities like Bathroom, Kitchen, Horse Stable and a Well in their premises. In the same period there were 15 Guest Houses in Karkala taluk. Out of which 10 (Someshwara, Venur, Paddegudde, Nellikaru (Aliyur), Mudradi, Mudabidri, Hebri, Belmannu, Byloor and Ajekaru) belonged to grade III. Four Guest Houses (Mudradi (2), Naravi and Karkala) belonged to grade II. Remaining one (Karkala chatra) was under Gram Panchayat control. Out of these four had thatched roofs and the remaining were of tiled roofs. There were Horse Stables in eight Bungalows. Some of them had Garage and Motor Sheds. The Guest House at Venur had three rooms and there was separate Servant's room in the Guest House at Naravi. 10 Guest Houses were under the management of District Board. Two each were maintained by Taluk Board and Gram Panchayats respectively. The remaining one was maintained by Forest Department.

There were 18 Rest Houses in Kundapura taluk. Out of which nine belonged to grade III (Ajire, Albadi, Amparu, Golihole, Hannur, Nagodi, Shankaranarayana, Hosangadi and Vandse under district board and two were under taluk boards); eight belonged to grade II (Alur, Byndoor, Kundapura, Jadkal, Kirimanjeshwara, Kolur, Karike and Vandse- five under District Board) and five were under Forest Department; remaining one choultry at Alpadi was under Taluk Board. Among them four had thatched roof, and the remaining 14 had tiled roofs. Likewise, five were having single room, seven were having two

rooms, three Guest Houses were having three rooms and another three with four rooms each. The rent charged per day was eight 'anna' for single person and 12 'anna' for couples. But, children of less than 12 years were exempted. There were facilities like Bathroom, Kitchen, Hall, Servant's room, Horse Stable, Garage, Motor Shed and a Well in the premises. It is clear from the above description that there were 18 Guest Houses each in Udupi and Kundapura taluks, whereas only 10 in Karkala taluk. Apart from these there were free Guest Houses (choultry) run by temples and private people at places like Udupi and Kollur.

Later on by 1936, there were 14 Travellers' Bungalows in Udupi taluk maintained by District Board, and out of which, the six Bungalows at Brahmavar, Hiriyadka, Kapu, Haladi, and Udupi (old and new), had accommodation for two persons each with Bed room, Kitchen, Horse Stable/Motor Shed and a Well. The Pattada Chatra at Udupi had free accommodations for two persons. Malpe and Shiriyara Guest Houses had accommodation for single person where the rent charged per day was four 'anna' per person. The Travellers' Sheds at Kokkarne, Kota, Padubidri and Shirva had limited accommodations, where the rent charged was four 'anna' per head. There were 11 Guest Houses in Karkala taluk, out of which five Sheds at Someshwara, Mudabidri, Hebri, Belmannu and Byloor; two Choultris at Karkala and Mudradi; three Rest Houses at Mudabidri, Naravi and Keravase. There was another Guest House at Karkala having two bed rooms. Out of these, seven were under District Board, two were under Taluk Board, and two were under Forest Department. There were 17 Guest Houses in Kundapura taluk. 12 were under District Board and the remaining five were under Forest Department. The Guest Houses at Albadi, Alur, Amparu, Byndoor, Kundapura, Hannur, Hosangadi, Jadkal (2), Kirimanjeshwara, Kollur (2), Kadike, Nagodi, Shankaranarayana and Vandse (2), eight 'anna' rent per day was charged per head. For married couples it was 12 'anna' per day. Later on after independence, the maintenance of Travellers' Bungalows, Rest Houses, Inspection Bungalows and Circuit Houses was handed over to the control of Public Works Department. The department took up systematic measures for the construction and maintenance of them. As a result of which by 1972, there were two Circuit Houses, one 'A' grade and two 'B' grade Inspection Bungalows, nine grade II Inspection Bungalows, five Travellers' Bungalows were in the erstwhile Dakshina Kannada district. Out of which few grade II Travellers' Bungalows and

Inspection bungalows were there in some parts of the present Udupi district. By 1982, there was a Circuit House having three suits in Udupi, one Inspection Bungalow and one Travellers' Bungalow with one suit, five Inspection Bungalows with five suits each, were there at Kundapura (2), Karkala, Mudabidri and Kollur. At present there are Travellers' Bungalows at Taluk Headquarters and important tourist places. By March 2006, there were Inspection Bungalows at Kundapura, Kollur, Byndoor and Karkala; Travellers' Bungalows at Karkala, Hebri, and Udupi (Bannanje). Apart from this there were Guest Houses, Choultries and free Boarding Homes started and maintained by the temple managements at pilgrim centres like Udupi and Kollur, catering to the needs of tourists. The Star Hotels, Lodges, Restaurants, Darshinis etc., run by private managements are also serving the needs of tourists who visit the district. However, there is still much scope for the development of tourism and hotel industry in the district.
