CHAPTER 7

TRANSPORT AND COMMUNICATION

The progress in the field of agriculture, industries, commerce, marketing, banking etc., can be achieved with the proper utilization of locally available natural resources and manpower. At this juncture, the role of transport and communication is important in co-ordinating the various economic activities. Systematic commercial activity is possible with good roads and transport system which enable easy transport of men, cattle and goods from one place to another. Post and Telegraph, Telephones and mobiles; mass media like Akashavani and Doordarshan;, electronic media like computer, information systems like internet, website, e-mail, internet telephone service, sms and such other services have played a major role in successfully transforming the public life of the society. Due to globalization, liberalization and privatization, private sector enterprises are competing with public sectoral enterprises and as a result a healthy development is seen in this field. Especially due to tremendous progress in information technology, reaching a distance of thousands of kilometer, is no more a hurdle and the 'Global village concept' is becoming much stronger. With this background, various attempts made by the different administrative machineries at different times in providing transport and communication facilities since ancient times, in general and the progress achieved during post independence period in Dakshina Kannada district in particular is recorded here. While

giving the statistics of the district, up to 1997-98, figures of the undivided district is given which include even the present Udupi district. However, for the later period after 1998 excluding the newly formed Udupi district (comprising of Udupi, Karkala and Kundapur taluks) details of Mangalore (Moodabidri hobli of Karkala taluk has been transferred to Mangalore taluk in 1998), Puttur, Bantwal, Beltangady and Sulya taluks of Dakshina Kannada district has been furnished.

Land Transport

The coastal regions of Karnataka located on the western parts, spreading from south to north, provide access to the sea and serves as a Gateway. Dakshina Kannada district has western ghats comprising Sahyadri hill ranges towards its east and the Arabian sea on its west as natural boundaries. Due to its varied geographical features, the district including neighbouring port towns, had outside contacts and was thrown open to other places through other ports (including the old Mangalore Port). As such it had communication with Arab and European countries. western ghats with rivers and rivulets flowing in plain land has been helpful for inland transport. But communication outside the ghats was very limited. While the sea back-waters of Nethravathi and Gurupura rivulets made way for inland transport, the steep pathways served as connecting ghat roads. As such the district had outside contact through the packed oxe roads for a long time. However, the district has played a vital role in the cultural history of the State. Geographically the district is controlled by mountain ranges and limited plain lands, is popular as the densely populated district. Moreover, incessant rains due to the western ghats, rivulets and the effects of sea have played a major role in shaping the life of the district. Since pre-historic period the place has been inhabited by man as reflected in several ancient sites of the district. Among them, while Naravi (Belthangadi taluk), the only site belonging to Middle stone age (B.C.40,000 - B.C.10,000), and Late stone age (B.C.10,000 - B.C. 2,500) sites are found at Uppinangadi (Puttur taluk) and Mani (Bantwal taluk). The Microlithic (B.C. 2,500 - B.C.1,000) sites are found at Uppinangadi (Puttur taluk), Badaga kajekaru and Macchina (Bantwal taluk), and the Megalithic sites (B.C.1,000 -B.C. 250), have been reported from Puttur, Kannadka, Beeramalai (Puttur taluk), Badaga kajekaru, Hogenadu (Bantwal taluk) and Ivaranadu (Sullya taluk). Existence of such a small number of sites clearly indicates its distinct geographical identity from other areas. The remains of various stone age cultures found in the border districts of Udupi, Chikkamagalur, Hassan,

Kodagu and the neighbouring Kasargod (Kerala State) district resembles those found in this district. This indicates the relationship and contacts between the different places in those days and also inspire us to think of ancient roads which might have existed in dense forest areas. There are evidences to show that the coastal area had trade and commercial contact with Middle East Asia and European countries before the advent of Christian era. During the historic period, this portion was under the rule of the Alupa, Hoysala, Vijayanagara and Keladi rulers and later was under the Portuguese rule. Later it was under the rule of Choutas of Moodabidri, Savanthas of Mulki, rulers of Vitla, Bangas of Nandavara, Moolas of Bailangadi, Ajalas of Aladangadi and other local jain rulers. But there is no records to trace the development of transport and communication system of this period in the district. The place also saw the rule of Haider and Tipu. But after the fall of Srirangapatna (1799), the district came under the Madras Presidency which was under the control of the British administration. The district which was under the British administration for more than one and half centuries (1800-1947) witnessed progress in different fields.

Travel accounts of Francis Buchanan who travelled in South India during 1800-1801 gives information about his travel from Malabar to Dakshina Kannada and Udupi districts via., Manjeshwar, Mangalore, Pharangipet, Bantwal, Belthangadi and Moodabidre in South Canara; and Karkala, Hiriyadka, Udupi, Brahmavara, Kundapura and Kirumanjeswara in Udupi district. And from there on his onward journey into Uttara Kannada district is well documented in his travelogue. This indicates the existence of connecting roads to Konkan. At this time, the district had good roads, but most of them being cart roads. Most of the city roads being narrow almost like the cart roads. The ghat roads which were in existence since a long time, were used to transport war weapons and gun carriages; but were damaged due to heavy monsoon rains. Inspite of all these, the trees planted on either side of the roads reflects the care taken for road safety. Along with the Inland transport in promoting trade and commercial activities, land transport progressed with the construction of culverts, small and big bridges across the rivers and rivulets. There are evidences that, including Mangalore, the district headquarters, other important places like Moodabidri, Venuru, Dharmasthala, Kukkesubrhamanya, Puttur and Uppinangadi had *katcha* roads since long time.

The beginning of 19th century, witnessed remarkable changes in transport and communication system. The ghat roads which were used

during wars for the transport of war weapons, were neglected by the rulers, when once the war ended. More over the incessant rains also contributed for its deterioration. But noting the importance of these roads, the Presidency Government came forward to appoint an expert team for formation of roads and the opening of Nilgiri and Western ghat roads. Especially, during this period, remaking, the complicated ghat roads like Bisle, Higgela and Periyambady ghats which were used locally for traveling towards Manjarabad, Sampaje and Periambady, were remarkable. Basically, these were *katcha* roads, emanating dust during summer and becoming clumsy during the rainy season.

Ghat Roads

The ghat roads play an important role in establishing connection with other places in the State, as the Western ghats comprised the Sahyadri mountain ranges. As a result improvement of main roads and opening of new roads and such other activities started. Due to this, out of the seven ghat roads used for entering the district, four roads joined near Mangalore town. The prevalence of 'Amara - Sulya insurrection' (1837) in Canara region against the British administration was the main reason for the formation of ghat roads which traversed to Mangalore via., Puttur – Sulya, starting from the Western borders of Mysore province through Kodagu province. Experiencing this, the Presidency Government undertook to repair and develop this route, in order to control the insurrection by transporting the military contingents effectively. This programme was executed in two phases and its execution was a difficult task, as the labour class had to fight with epidemics like Malaria. Amidst all these problems, the Sampaje route connecting Mangalore was successfully completed with an expenditure more than its estimate. The Sampaje ghat road, a contribution of Lieutenant Fast, was the first road to be opened for public on western ghat roads. But during the course of its formation, technical expert Capt. Fast, expired due to Malaria attack. In his memory, the road was known as Fast ghat road. In between the ghat, this road traversed about 29.6 Kms, had a slope of 2900 ft. and this ghat road ended at Sampaje in Dakshina Kannada district, but most of its part traversed in Kodagu district. The Sampaje ghat road which connects Madras (Chennai)-Banglore-Madikeri routes traverses via., Sulya-Puttur-Bantwal-Mangalore taluks and at Mani (near Bantwal), joins National Highway No. 48, passing through Shiradi ghat from Hassan side.

The Mangalore – Hassan National Highway No.48, traversing through Shiradi-Sakleshpura route is the nearest route linking Bangalore and Mangalore; road widening work by simplifying the curves has made easy, the traffic movement. Another ghat road coming from Mudigere-Kottigehara of Chikamagalur district via., Charmadi ghat, passes through Belthangadi-Bantwal-Mangalore taluks and reaches Mangalore city. This ghat road has hairpin bends passing through the valley between Kudremukha and Kumaradhara mountain ranges is a dangerous road The Bisley-ghat road is an important ghat road formed after some time linking Sakleshpura-Subrhamanya. These ghat roads were originally *katcha* roads, which were later tarred and bridges were constructed across rivers and rivulets. Before this, vehicles boarded on small boats, basket boats etc., to cross the rivers. This is a significant feature of coastal area and although small bridges were constructed across small rivulets, the traffic disrupted during the rainy season. Apart from these, roads (216 Kms) linking Baindur-Kavaya (Kerala), and Panemangalore-Calicut roads traversing through Kasargod (Kerala) taluk via., Vittla are the prominent roads of the district. These arterial roads connecting the district with the taluk centres and other principal roads were *jelly* roads subjected to frequent repairs. Traditional path roads to reach the hillocks were in bad condition and if repaired and widened with jellies they could serve as good arterial roads. The prominent roads of the district with severe bends were subjected to frequent repairs due to wind and rain. The road passing to Karkala via., Mangalore and Moodabidre with several bends, was a best example of such roads.

Development of Roads

Before Reorganisation: The district had 1236 Kms of jelly roads by 1872 and by 1882, it rose to 1404 Kms. By 1893, out of the 1897 Kms. of roads, 77,075 trees were planted by the side of 688 Kms of roads. Among these roads coastal road in between Baindur-Kava (Kerala), Calicut-Pane Mangalore, Sampaje ghat road, Agumbe ghat road and Charmadi ghat roads were the prominent ghat roads. The quantum of district road by 1902, rose to 1634 and by the end of March 1912, it increased to 1762 Kms. The district had by 1926, 107 Kms of main roads under the control of District Board, 1062 Kms of other roads, 705 Kms of T.D.B.roads (under the control of Taluk Boards), 32 Kms. of municipal roads under the control of Mangalore Municipality and 77 Kms. of other roads with a total of 2114 Kms. of roads in existence. Out of these, 648 Kms. were jelly roads and the remaining 1467 Kms. mud

roads. By 1934, this rose to 2,365 Kms. including 82 Kms. of roads under the control of Mangalore City Municipality.

By 1936, the district had 2372 Kms. of different classes of roads, at an average road length of 1.6 kms. (i.e., a mile) for each 64 sq. km. of road. Out of 1390 kms. of road in the district suitable for traffic, 1116 Kms, were jelly roads and the worst condition prevailed in the remaining roads, with heavy dust in the summer clumsy and slurry in rainy season, not suitable for travel. Besides, there was no good road, connecting Malabar in the south and Canara region in the north. As a result, it became inevitable to possess a good road connecting Calicut with Mumbai directly. The natural restraints such as the sea and the mountain ranges has separated this from other parts of the State, and the district with limited land area has to witness problems in vehicular traffic and goods transport due to landslides and heavy rains. The district had limited roads for vehicular traffic and out of these, in more than 100 roads goods transport was prohibited and only on 25 roads goods transport was permitted, during favourable seasons. Only on five roads, goods transport was permitted for transporting a maximum of 5½ Tons of goods during all seasons.

After Re-organisation: Due to geographical restraints, coastal area including the Dakshina Kannada district posed problems to easy flow of traffic; even small rivulets during the rainy season overflow, due to floods and assumed the form of rivers. Moreover, the construction of bridges appear to be expensive and due to landslides, there were frequent problems in the road transport between Dakshina Kannada and Uttara Kannada districts. Due to the flow of Nehtravathi river in the district, there was no direct main road from Mangalore to the Southern tip of Kerala State via., Kasargod taluk. The buses and lorries travelling from Mangalore has to take a turn at Kalladka and pass through Kasargod. But the construction of a bridge across the Nethravathi river near Pane Mangalore, has solved this problem and now there is direct road communication. Likewise, construction of bridges across the rivers flowing near the northern coastal road from Mangalore near Pavanje, Mulki and Udyavara (Udupi district) had made easy flow of traffic. Before this, all types of vehicles were forced to crossed the river through ferry boats. Sometimes, buses and lorries reached Udupi via., Karkala traversing 100 Kms. in round about routes. But it is notable that the distance between the two places is only 61 Kms.

Prior to the starting of Highways Department in 1946, the roads of the district were under the control of the District Boards. There was a separate Engineering Division for its maintenance. Realizing the bad condition of roads and the limited budget of the District Boards, the Presidency Government started the Highways Department in 1946 for the maintenance of prominent roads. Later steps were taken for reforms depending upon the importance of roads and concentration of traffic. The formation of Maramath Department in Mysore Province as early as 1834, for the maintenance of roads, was a notable aspect.

During the time of re-organization in 1956 when the Dakshina Kannada district (excluding Kasargod) united with the Mysore State, there were 2109 Kms. of different classes of roads in the district. Out of this, there were 1956 Kms. of Public Works Department roads and 153 Kms. Forest Roads. By 1960, the district had 19 State Highways, 19 Major District Roads, 18 Other District Roads and 86 Village Roads. By 1961 March, out of a total 2140 Kms. roads, 1965 Kms. of roads were under the control of Public Works Department and the remaining 175 Kms. of roads were under the control of the Forest Department. By 1966, the district had 1923 Kms. of Public Works Department Roads, 90 Kms. of Taluk Board Roads and 175 Kms. of Forest Roads, altogether totaling 2518 Kms. and out of this, 1648 Kms. was surfaced and the remaining 641 Kms. was unsurfaced. At the same time, there was an average 30 Kms. length of roads for every 100 Sq. Kms. in the district. At this time, the district had four State Highways, 20 Major District Roads, 27 Other District Roads and 20 Village Roads. Likewise by the end of March 1971 in the district out of a length of 3595 Kms. of roads, 2353 Kms. was under Public Works Department, 1070 Kms. was under Taluk Boards and 172 Kms. length of roads were under the maintenance of Forest Department respectively. Out of this, while 1070 Kms. of road was tarred, the remaining 1772 Kms. were undambered. During the year 1971, Rs.22,922/- lakhs was spent for the repair of roads, bridges and formation of new roads by the Public Works Department in the district. Out of 1120 Kms. of roads belonging to the Taluk Board, 63 Kms. were tarred and the remaining 1057 Kms. untarred; Among it if 930 Kms. of road was suitable for vehicle movement, remaining 127 Kms. was unsuitable for vehicle movement. Out of 127 Kms. of roads belonging to the Forest Department, while only six Km. was in good condition, remaining 80 Kms, of road was suitable for seasonal movement. By that time (1971), the district had 16 State Highways, 27 Major District

Roads, 32 Other District Roads, 29 Village Road and 31 Fish transporting roads.

By the end of March 1973, this rose to 3617 Kms. including, 2400 Kms. of Public Works Department roads, 1045 Kms. of Taluk Development Board roads, and 127 Kms. Forest Roads. Out of this 2048 Kms. was damberred and the remaining 1569 Kms. were unsurfaced roads. Besides this, there were 93 Kms. of Municipal roads. By 1980, the total road leangth rose to 4311 Kms. including 3061 Kms. of Public Works Department roads, 1063 Kms. of Taluk Board roads and 187 Kms. of Forest Department roads. Out of this, 2344 Kms. were tarred Roads and the remaining 1963 Kms. were untarred roads. The district had an average of 51 Kms. of roads for every 100 Sq. Km. At the end of the year, the district had 240 Kms. of municipal roads. By 1986, the quantum of roads rose to 4830 Kms. including 3841 Kms. of Public Works Department Roads, 785 Kms. of Taluk Board Roads, 5 Kms. of Irrigation Roads, and 199 Kms. of Forest Department Roads. Out of this, 3025 Kms. were tarred roads and the remaining 1805 Kms. were untarred roads. Moreover, the average road length in the district for every 100 Sq. Kms was 58 Kms. By the end of March 1996, the district had 5,248 Kms. of roads including 4287 Kms. of Public Works Department roads, 635 Kms. of Taluk Board Roads, five Kms. of Irrigation Roads, and 243 Kms. of Forest Roads. At this time the length of good conditioned roads rose to 4057 Kms. In 1997 Udupi district was newly created by bifurcating the Dakshina Kannada District. As a result by the end of March 1999, out of the 3049 Kms. of roads in the Dakshina Kannada District there were 2633 Kms. of Public Works Department roads, 368 Kms. of Taluk Board Roads and 93 Kms. of forest roads. Out of this 2430 Kms. were *tarred* roads and the remaining 664 Kms. were untarred roads. By the end of March 2001, the district had 3399 Kms. of road, and by the end of 2005 it rose to 3863 Kms. (See Table 7.1 and 7.2 for details). It seems that the people of the district are unhappy about the poor condition of roads including the ghat roads due to heavy traffic movement.

Classification of Roads

As per the Nagpur plan framed by the Government of India in 1943, the roads in the country were classified as: 1. National Highways, 2. State Highways, 3. Major District Roads, 4. Other District Roads, and 5. Village Roads. Accordingly, this classification was adopted in the country. (See Table 7.1 and 7.2 for details).

National Highways: The National Highways are those roads having national importance in connecting different regions and State Highways and there was no National Highway in the district till 1971. Later, National Highway number 17 and 48, connecting different parts of the country have been declared as the National Highways. These roads which were earlier State Highways, have been declared as National Highways in 1971-72. As a result, 244 Km. of National Highway was available for traffic in the district. National Highway No.17, one of the important Highways enters the district through north side and reaches Mangalore via., Mulki and traverse from Ullala and reaches Cape Camorin via., Kasargod-Calicut route. This Highway which connects Bombay and Cape Camorin has been developed at a cost of Rs.3.14 crores under various five year plans and it traverses 145 Kms. in the district. During the reconstruction of this new National Highway, culverts and bridges were constructed on existing old *katcha* roads. With the construction of bridges near Mulki, Pavanje, Kulur and Ullal, this road was opened to traffic. Till now, the existing highway from Mumbai to Cape Camorin, a long route via., Pune - Kolhapura - Belgaum - Dharwar - Harihara - Tumkur - Bangalore - Hosur - Salem - Namakal - Trichy - Dindigal - Madurai - Tirunelvelli, and with the formation of this new coastal road, it has effectively decreased the distance between Mumbai and Cape Camorin. Likewise, National Highway No.48, which connects the district headquarters, Mangalore to the State capital Bangalore, passing via., Bantwal - Belthangadi and Puttur taluks to reach Bangalore, traverses a distance of 99 Kms. Sholapur - Mangalore National Highway No.13, extended from Chitradurga to Mangalore in 1999, enters the district before Moodabidre, and *via.,* Mullur route traverses 42 Kms. in the district and reaches Mangalore. Meanwhile, as a result of the division of the district in 1997, by the end of March 2005, the district had three National Highways (13, 17 and 48) and their total length (42,93, and 42 Kms. respectively) was 177 Kms. In the beginning these Highways were maintained by the Public Works Department. In 1971, a separate division was started in the State for the maintenance of Highways and their maintenance cost was borne by the Government of India. Hence, they are being maintained by the National Highways division of the Public Works Department in the State.

State Highways: The State Highways which connects the National Highways with the district headquarters of the State and important towns, serve as prominent connecting link at State level. The maintenance of these roads is vested with the Public Works Department

and its annual expenditure is borne out of the State funds. Out of the total six State Highways connecting the district with other places in the State, the State Highway No.64 is a ghat road which connects National Highway No.48 passes through Chickmagalur district via. Charmadi ghat. The State Highway No.88, is another important road in the district, which links National Highway No.48, before joining Mangalore City by passing through Mysore, Madikeri – Sampaje Ghat and Bantwal Cross. Moreover, Mulki – Moodabidre – Belthangadi Road (State Highway No.64A), Mangalore – Bajpe – Udupi Road (State Highway No.66A), Nallur – Belthangadi – Madikeri road (State Highway No.37) and (State Highway No. 88C) joining National Highway No.48, passing through Kasargod via., Hosadurga route are the other State Highways of the district. By the end of March 1957, the length of the State Highways which was 638 Kms. rose to 661 Kms. in 1966 and to 688 Kms. in 1969 respectively. By the end of March 1971, the existing 663 Kms. of State Highways had been tarred. In 1972, two State Highways were declared as National Highways and as a result, the State Highways declined to 423 Kms. In 1976, this rose to 468 Kms, to 507 Kms. in 1981, to 695 Kms. in 1991 and was 696 Kms. at the end of 1998. Consequent on the division of the district in 1997, the length of the State Highways reduced to 338 Kms. and again increased to 523 Kms. at the end of 2005, as a result of increase in the number of state highways that were passing through this district.

Major District Roads: These roads connects different parts of the district with the State Highways, and is under the control of Public Works Department. By the end of 1956, its total length in the district was 300 Kms. It rose to 461 Kms. in 1961, but reduced to 427 Kms. in 1971, and since then there is a regular increase. It rose to 517 Kms. in 1976, to 555 Kms. in 1981, to 646 Kms. in 1986, to 747 Kms. in 1991 and to 1480 Kms. in 1998. But, due to the division of the district in 1997, it was reduced to 849 Kms. in 1999 and to 696 Kms. at the end of 2005, as a result of its upgradation to that State Highways.

Other District Roads: These roads connects the rural roads of the district with the Major District Roads, and the State Highways. Mulki – Moodabidre, Moodabidre – Belthangadi, Moodabidre – Bantwal, Mangalore – Bajpe – Mulki roads, etc., belonged to this class of roads which were earlier under the control of Taluk Boards. By the end of 1956, the district had 573 Kms. of this class of roads, which was reduced to 494 Kms. in 1996. By the end of March 1971, the district had 510 Kms. length of this class of roads, including 400 Kms. of surfaced and 110 Kms. of unsurfaced roads. By 1981, the district which

had 433 Kms. length of this class of roads reduced to 322 Kms. in 1986, and to 76 Kms. in 1991 and with bifurcation of the district in 1997, there were only eight Kms. Later since 2001, there were only two Kms. of this class of road in Puttur taluk, and there were no such class of roads in the district by the end of March 2005. Since 1998 the maintenance of these roads was entrusted to the Zillla Parishads.

Village Roads: These roads connecting the rural areas with towns, hoblis and taluk centres is essential for the development of rural people. By the end of 1956, the village roads which was 445 Kms. in the district. It reduced to 430 Kms. in 1961 and to 324 Kms. in 1966. By 1971, a total of 708 Kms. comprised of 111 village roads were in the district. There were 32 roads supportive to fishing industry. Out of these, there were 102 Kms. of tarred roads, 127 Kms. of Jelly roads and the remaining were *katcha* roads with 317 Kms. suitable for vehicular movement and the remaining 162 Kms. unsuitable for vehicular movement. In the district, the village roads rose to 1035 Kms. in 1976, to 2122 Kms. in 1986, and to 2230 Kms. in 1991, respectively. But it declined to 1756 Kms. in 1996 and rose to 1938 Kms. in 1998. After the bifurcation of the district, in 1997, subsequently it declined to 1660 Kms. by March 2001. As on March 2005, the district had 1721 Kms. of village roads.

Rural Communication Plan: During 1959-60, the Rural Communication Programme was started in the State to provide good road net work in rural areas. Under this programme: 1. Formation of rural roads, 2. Connecting the existing rural roads, and 3. construction of small bridges across small rivulets of 20 ft. width on non-Public Works Department roads were taken. These mud or jelly roads raised for movement of bullock-carts, provided communication in rural areas withl neighbouring main roads, important towns and railway stations. Under this programme, upto 1971, out of the 1311 Kms. of roads taken up for repair, 1295 Kms. of repair work was completed. By 1970, out of the 669 villages in the district, 476 villages had connection with main road at a distance of five Kms., 146 villages had communication with the main road at a distance of 5-10 Kms., two villages at a distance of 10-20 Kms., and 45 villages at a distance of 20 Kms. By 1973 in the district, 453 villages had jelly roads, 175 villages with mud roads; out of this, 478 villages had all season roads, 117 villages had favorable season roads and 33 villages with roads unsuitable for traffic and 34 villages were denied of road communications. By 1997, all the villages

in the district had road communication. Later with the bifurcation of the district in 1997, rural communication and improvement works in the district is in progress continuously. (See Table 7.4).

Taluk Development Board Roads: This class of roads under the control of Taluk Development Board, is seen in the district since early times. There are discrepancies in statistics as these roads (which were found in large numbers in the beginning) were transferred to Public Works Department from time to time. As regards this class of roads, 491 Kms. of road was the first recorded reference in 1966, and this rose to 595 Kms. in 1969, to 1030 Kms. in 1971, and to 1045 Kms. in 1973as indicated in the records of the respective years. By 1980, this rose to 1063 Kms., but decreased to 1058 Kms., in 1984 and further declined to 628 Kms in 1991.Meanwhile due to bifurcation of the district in 1997 it reduced to 368 Kms. by 1999 and to 374 Kms. in 2001. This further decreased to 351 Kms. by March 2005.

Irrigation Roads: These roads were formed by the Engineering Division of the Minor Irrigation Department, complementary to the formation, repairs and maintenance of Canals. But, till 1980 there were no irrigation roads in the district. Later there was only five Kms. of this class of road and it continued till 1998. The district had 16 Kms. of Irrigation roads by March 2005.

Forest Department Roads: These roads under the control of the Forest Department were formed for the maintenance of Forest roads and in 1956, there were 153 Kms. of forest roads in the district, which rose to175 Kms. in 1961, and it continued the same till 1966. In 1969, this was reduced to 172 Kms. It continued to remain same till 1978. This rose to 187 Kms. in 1980, to 197 Kms. in 1984, to 199 Kms. in 1986, to 243 Kms. in 1991, and continued same till 1998. After 1999, this declined to 93 Kms. and to 49 Kms. by the end of 2005.

Municipal Roads: This class of roads in respective cities/towns under the control of City Municipality and Town Municipalities are maintained by the local administrative bodies. As such by 1973, these roads which were 92 Kms. rose to 240 Kms. in the various municipal areas of the district by March 1980. This rose to 281 Kms. at the end of March 1982, to 309 Kms. in 1984,to 726 Kms. in 1991, and to 752 Kms. in 1996. As a result of the bifurcation of the district (1997) it decreased to 224 Kms. at the end of March 2005.

Fish Transport Roads: This class of roads seen in the Coastal areas of the State to support the fishing industry were used for

transporting fish from the coastal areas to nearby towns. Fishing has a special place among the important industries of the district. By the end of March 1971, there were 32 fish transport roads and it rose to 50 by the end of March 1976, in the district. But, it declined to 45 at the end of 1979. In the beginning it appears Fisheries Department also supported in the maintenance of these roads. Later they were treated as village roads.

K.E.B.Roads: These roads were under the control of Electricity Department during 1984-1991, and was only 2.45 Kms. and after that it did not exist.

Bridges

With the advent of British and especially during the 19th century, construction of minor and major bridges across the river Nethravathi and Gurupura and other rivulets in order to ease the road traffic in the district started on a large scale. As a result impetus was given for bridge construction.

Ancient bridges: The bridge constructed across Nethravathi river on Mangalore – Madikeri road near Pane Mangalore in 1914, was the oldest bridge in the district. This bridge with a length of 356.58 metres was constructed at a cost of Rs.3.84 lakhs in 1914 across Nethravathi river on Mangalore – Madikeri road, is 4.88 metres in breadth. In 1925 it was provided with a Cement Concrete Deck. The 77.73 metres long bridge was constructed at a cost of Rs. Seven lakhs with a breadth of 4.27 metres road built between Hidagkaon and Ajakar villages in 1916. Likewise in 1918, a bridge with a length of 160 metres was constructed across Gurupura (Phalguni) river on Mangalore – Agumbe road at a cost of Rs.5.32 lakhs whose breadth was 488 metres. Among the 19 big bridges in the district by the end of March 1956 one bridge with a length of more than 304.80 metres, seven with more than 152.40 metres , four with more than 91.44 metres and seven with more than 30.48 metres length were in existence. This number rose to 35 in 1961. By the end of March 1971, among the 76 major bridges, there were 5,14,411 and 43 bridges, respectively belonging to the four categories as noted above. The total length of all these bridges was 8862.21 metres and the district occupied first place in the State. Along with this, there were 157 minor bridges of different capacities and construction of 476 culverts was also completed. By 1984, there were 57 major bridges in the district. In 1992, this number rose to 63. By 1996 there were 8748 bridges of all

Table 7.1 – Details of Different Classes of Roads in Dakshina Kannada (1956-2005)

Age Group	National Highways	State Highways	Major District Roads	Other District Roads	Village Roads	Total (1-5)	Irrigation Department Roads	Taluk Development Board Roads	Forest Department Roads	Total 6-9)	Surfaced Roads	Unsurfaced Roads	Average road length for every 100 sq. kms.
	1	2	3	4	5	6	7	8	9	10	11	12	13
1956	-	638	300	573	445	1956	-	-	153	2109	1414	695	25
1961	-	638	421	470	436	1965	-	-	175	2140	1337	803	25
1966	-	661	444	464	324	1923	-	491	175	2589	1648	941	30
1969	-	688	452	510	553	2205	-	595	172	2972	1660	1312	35
1971	-	663	472	512	704	2353	-	1070	172	3595	1836	1759	43
1973	244	423	472	516	745	5400	-	1045	172	3617	2048	1569	43
1976	244	468	517	472	1035	2736	-	1077	172	3985	2372	1613	47
1981	244	507	535	433	1495	3109	5	1055	187	4351	2427	1924	52
1986	244	507	646	322	2122	3841	5	785	199	4830	3025	1805	57
1991	242	695	747	76	2230	3990	5	628	243	4866	3416	1450	57
1996	242	696	1480	08	1756	4182	5	635	243	5170	4031	1139	-
1998*	138	388	855	02	1240	2623	5	395	72	3465**	-	-	-
1999	138	431	856	02	1340	2767	5	368	72	3580**	-	-	-
2003	138	342	844	00	1716	3076	5	351	72	3799**	-	-	-
2005	136-50	523	696	00	1721	3076	16	351	49	3863**	-	-	-

* The statistics given here upto 1997 denotes the pre-bifurcation status of the district, as the Dakshina Kannada District was divided in 1997.

** This includes 374 Kms. of Municipal Roads.

Table 7.2: Taluk-wise Details (1973-1996) of Roads under the control of Public Works Department (in Kms)

Taluk	Year	National High-ways	State High-ways	Major District Roads	Other Distrcit Roads	Village Roads	Total
1	2	3	4	5	6	7	8
Mangalore	1973	66	45	65	14	282	472
	1984	66	39	91	09	327	532
	1996	56	71	229	—	258	614
Bantwal	1973	36	45	33	29	305	448
	1984	36	44	42	35	399	556
	1996	33	44	170	-	-	-
Puttur	1973	38	45	108	41	232	468
	1984	38	34	124	27	322	545
	1996	46	62	166	-	401	675
Sulya	1973	-	37	72	13	230	352
	1984	-	37	74	11	291	413
	1996	-	42	128	-	287	457
Belthangadi	1973	-	45	24	73	200	342
	1984	-	71	44	27	370	512
	1996	-	120	99	-	299	518
Udupi*	1973	58	20	29	178	194	479
	1984	58	37	69	168	266	598
	1996	52	55	299	06	297	709
Karkala*	1973	-	102	78	91	235	506
	1984	-	172	104	32	435	743
	1996	-	207	89	02	349	747
Kundapura*	1973	46	84	63	77	284	554
	1984	46	73	98	18	430	665
	1996	55	95	200	-	445	795

* The district was divided in 1997 and Udupi became an independent district.

Table 7.3: Taluk-wise Details of Roads under the control of Public Works Department in the District (1998-2005) in Kms.

Taluk	Year	National High-ways	State High-ways	Major District Roads	Other Distrcit Roads	Village Roads	Total
1	2	3	4	5	6	7	8
Mangalore	1998	56	120	292	-	242	710
	1999	98	71	284	-	317	770
	2001	98	71	282	-	429	880
	2003	92	71	282	-	443	888
	2005	6450	78	217	-	*	-
Bantwal	1998	34	44	170	-	215	467
	1999	33	44	170	-	327	574
	2001	38	44	167	-	294	543
	2003	38	44	168	-	310	-
	2005	28	112.50	122.92	-	*	-
Puttur	1998	42	62	176	02	298	580
	1999	46	62	173	-	429	710
	2001	42	62	173	02	246	625
	2003	42	62	165	-	368	-
	2005	42	100	141	-	*	-
Sullia	1998	-	42	118	-	238	398
	1999	-	41	122	-	331	494
	2001	-	41	122	-	270	434
	2003	—	41	130	—	232	-
	2005	-	111.5	90	-	*	-
Belthangadi	1998	02	120	99	-	247	468
	1999	-	120	100	-	326	546
	2001	2	120	100	-	321	543
	2003	2	120	100	-	323	-
	2005	2	120	126	-	*	-

· Information not available.

Table 7.4: Rural Communications to Villages of the District (1971-1996)

Year	Villages with all season roads	Villages with proper season roads	Villages with katcha Roads	No road communi-cation	Total
1971	462	166	-	40	668
1973	478	117	33	34	662
1978	474	139	18	31	662
1979	300	141	206	15	662
1985	368	124	135	08	635
1993	467	124	43	-	635
1996	457	120	38	-	

categories. This includes 63 major bridges, 8,117 culverts (below 6 metres), 412 (6-12 metres), 96 (12-18 metres), 50 (18-24 metres), 49 (24-30 metres) and 61 minor bridges (30-60 metres). At the end of March 2000, there were 42 major bridges, 4676 minor bridges and culverts in the district. There were 59 major bridges in the district by the end of March 2005. See Tables 7.5 and 7.6 for more details.

Table 7.5: Details of Culverts and Minor Bridges of Different Categories in the District

Year	Upto 6 metres	6-12 metres	12-18 metres	18-24 metres	24-30 metres	36-60 metres	Total
1971	—	94	34	12	17	—	157
1976	—	105	40	13	20	—	178
1978	2,863	120	49	19	25	—	3,076
1981	6,064	204	58	38	35	—	6,399
1986	6,865	257	70	44	41	51	7,328
1992	7,620	273	82	46	45	57	8,121
1996	8,117	312	96	50	49	61	8,685
2000*	3,407	1,102	97	18	22	30	4,676

*Details of bridges under the control of Public Works Department are given here.

Table 7.6: Details of Major Bridges of Different Categories in the District (1956-2005)

Year	30-90* metres	90-152 metres	152-304 metres	More than 304 metres	Total
1956	25	4	6	1	36
1961	27	6	7	1	41
1966	41	11	12	1	65
1971	43	14	14	5	76
1976	52	16	16	5	89
1978	60	18	17	5	100
1982	64	19	18	5	106

Year	60-90 metres	90-152 metres	153-304 metres	More than 304 metres	Total
1986	16	19	18	05	58
1992	20	20	18	5	63
1996	20	20	18	5	63
2000	12	14	11	5	38
2003	-	-	-	-	42
2005	-	-	-	-	59

* Before 1984, 30-90 metres length bridges were classified as major bridges. After 1984 it was transferred to minor bridges group. Statistics given in this column relate to 60-90 metres length bridge.

Five Year Plans

In order to achieve the financial progress in the country on a planned manner, Five Year Plans were started and it was decided to implement developmental programmes in the State at the district level. Accordingly during the first five year plan (1951-56) period, Dakshina Kannada district which was in Madras Presidency achieved some what little progress in different fields. After the second five year plan (1956-61) and with the unification of the State in 1956, the district could achieve remarkable progress.

During this period, Rs.223.41 lakhs was spent towards road works and maintenance. During the third five year plan (1961-66), Rs.208.36 lakhs was spent towards formation of 93 Kms. of road, 565 Kms. of road improvement, 1,259 Kms. of rural road improvement, 201 Kms. of road

asphalting, 290 culverts and 16 bridge works was completed. During the three annual plans (1966-69), Rs.72.29 lakhs was spent towards formation of 33 Kms. of road, 101 Km. of road improvement, 24 Kms. of rural road improvement works was completed. Under the fourth five year plan (1969-74) Rs.16,787.00 lakhs was spent for the formation of eight Kms. of road, 283 Kms. of road improvement, asphalting for 346 Kms. of road, 85 Kms. of rural road improvement, 394 culverts and 10 major bridges construction works were completed. During the fifth five year plan (1974-78), sum of Rs.150.33 lakhs was spent. Different categories of 388 Kms. of road improvement coming under the Public Works Department; construction of 22 minor and major bridges, formation of 48 Kms. road in 11 villages under common minimum programme and 415 Kms. of repair work of rural roads were completed. After this, during the period of two annual plans (1978-80), importance was given to road development in the district. Later during the sixth (1980-85), and seventh (1985-90) five year plans, two annual plans (1990-92), eight (1992-97), nineth (1997-2002), and tenth (2002-2007) five year plans, special importance was given to road development. See Table 7.1 and 7.2 for progress achieved during this period.

Zilla Panchayat Technical Division: As a result of decentralization of power at the district level, and with the establishment of Zilla Panchayaths in 1987, it has undertaken maintenance of Other District Roads, repair of Village roads, construction of culverts less than 30 metres in length, construction of minor and major bridges. Formation of village roads, construction of minor bridges and developmental works have been implemented under plan, non-plan and additional programmes, by utilising funds of both State and Central Governments. Likewise by March 2002, there were only 1,721 Kms. of village roads and no roads of other district road's category were existing in the district.

Traffic Census and Vehicle Survey

In order to bring improvement in land transport and to improve road net work, the Public Works Department in 1959 proposed to collect statistics relating to movement of men and materials, domestic animals, vehicular movement etc., and their impact on roads and their disadvantages, it planned to undertake traffic census and survey of motor vehicles of varied categories on the roads of the State. For this purpose, traffic census and vehicular survey on roads belonging to the Public Works Department has been undertaken for one week (day and

night), once in five years and a sample survey of one day (24 hours) will be conducted every year on selected roads.

From these surveys, the traffic movement, nature of goods transport, and pressure of traffic movement during yearly and five yearly period will be gauged. With this background the Public Works Department started traffic census and vehicle survey for the first time on all classes of roads in 1961-62 during the first five year plan and on selected roads for the first time the sample survey in 1963-64. Accordingly, traffic census and vehicular survey has been undertaken periodically in the district. Statistics of selected year's survey is given here (7.7 to 7.10).

Table 7.7: Details of Temporary Census Count Posts Established during various five year Traffic Census and Vehicular Survey in the District

Year	National High-ways	Stage High-ways	Major District Roads	Other District Roads	Village Roads	Total	Average distance between census count posts (in kms.)
1976	10	26	44	25	4	109	36
1982	11	22	27	26	27	113	28
1992-93	13	34	60	01	26	124	30
1997-98	13	33	60	01	27	134	34
2002-03	141	34	61	01	27	137	34

Table No.7.8: Daily Average Pressure of Goods Transport on Public Works Department Roads

(in Metric tons)

Year	State Highways	Major District Roads	Other District Roads	Village Roads	Average on state fund roads
1970-71	2,225	1,102	586	982	1,311
1975-76	2,124	1,151	765	1,028	1,346
1981-82	3,359	1,847	774	774	1,411
1987-88	3,569	1,876	1,810	842	1,703
1992-93	4,956	2,426	5,211	3,.142	2,973
1997-98	6,885	3,450	7,293	1,450	3,318

Table 7.9: Daily Pressure of Traffic and Vehicular Movement on National Highways in the District.

Year	Daily average traffic pressure (in Metric tons)	Passenger Carriage	Average daily movement of vehicles recorded in Census count posts in Nos.			
			Heavy Vehicles	Light Vehicles	Slow moving Vehicles	Total
National Highway17*						
1975-76	58,188	22,996	5,265	4,491	384	10,140
1981-82	1,08,369	43,500	9,942	10,634	127	20,703
1992-93	2,79,684	1,06,029	26,486	29,808	83	46,185
1997-98	1,65,358	77,714	16,143	20,042	0	56,381
2002-03	Information not available					
National Highway 48						
1975-76	19,977	6,844	1,860	1,568	13	3,431
1981-82	24,014	6,754	2,168	2,187	07	4,362
1992-93	1,22,120	47,343	9,791	15,943	01	25,735
1997-98	3,78,262	1,34,796	33,716	26,346	0	60,062
National Highway 13#	Information not available					

*There were no National Highways in the district before 1972.
#This was extended even to the district in 1999 only.

Table No.7.10: Daily Average Pressure of Vehicles on Roads of Public Works Department in the District.

Year	Heavy vehicles	Light vehicles	Slow moving vehicles	Total	Passenger car unit
1970-71	115	213	14	342	630
1975-76	117	220	8	345	594
1981-82	114	329	5	448	723
1987-88	135	490	3	628	887
1992-93	229	863	2	1,094	1,600
1997-98	252	1,054	-	1,307	1,820

Regional Transport Office

It is one of the few departments bringing revenue to the State Treasury. It was popularly known as 'Motor Vehicles Department', before

it was named as 'Transport Department' in 1989. This department is involved in important activities like the registration of motor vehicles, tax collection, issue of license to drivers and conductors, control of environmental pollution due to vehicles, etc., and also implementation of new transport regulations as and when issued by Central and State governments. This department works through its Regional and Assistant Regional Transport Offices in the district.

Prior to the begining of Regional Transport Offices in 1957 at the district level, District Board and Town Municipalities were doing the works related to the movement and control of transport with the support of the Police Department. Regional Transport Offices working under the control of Shimoga Divisional Transport Commissioner were located at Udupi and Mangalore, and from 7-4-1982 the Assistant Regional Transport Office was working at Puttur under the control of Regional Transport Office located at Mangalore, and by 1990 a check post was started at Talapady. Mangalore and Bantwal Taluks were under the jurisdiction of Mangalore Regional Transport Office; Puttur, Belthangadi and Sulya taluks were under the jurisdiction of Assistant Regional Transport Office located at Puttur.

At the end of March 1957, out of 2,335 registered vehicles, there were 174 motor cycles, 267 buses, 544 goods transport vehicles, 89 hired vehicles, 1,221 private vehicles and 40 other vehicles. Besides there were also 3,629 bullock carts. Out of a total 4,564 vehicles registered at the end of March 1964, there were 556 motor cycles, 237 buses, 1,335 goods transport vehicles, 1,932 motor cars, 112 jeeps, 100 autorikshaws, 155 taxies, 14 omni buses, and 103 other vehicles. There were 2,188 bullock carts in the district. This rose to 6,580 in 1966 and to 8,481 in 1968 and by that time 22,000 bicycles were in the district. The number of motor vehicles rose to 13,350 in 1971 and to 15,521 in 1973. But the number of bullock carts declined to 1,680 in 1973. Meanwhile, for every one lakh population there was an average 411 vehicles in 1966 and this rose to 800 in 1973. By 1980, there were 28,420 registered motor vehicles in the district, and this rose to 57,322 in 1987. This continuously rose to 1,02,645 in 1992 and to 1,60,286 in 1997. After the bifurcation of the district in 1997, Mangalore Regional Transport Office, and Puttur Assistant Regional Transport Offices continued to work and the vehicles registered here had registration code numbers KA-19 and KA-21 respectively. As a result, by 2001, 1,63,629 motor vehicles have been registered in the district. By the end of March 2004, the numbers rose to 2,13,006. Meanwhile Puttur Assitant Regional Transport

Office has been upgraded into Regional Transport Office from 1st April 2005. As a result, at the end of March 2005, the number of registered motor vehicles rose to 2,34,295. See Tables 7.11 and 7.12. for details. This department is involved in conducting variety of duties like registration of motor vehicles, issue of National Permits to vehicles, issue of license to drivers and conductors, distribution of plastic license cards of various classes to drivers, permission to Motor Drivers Training Schools, maintaining official documents of accidents, ban on air pollution and other activities. At the district level, Regional Transport Authority undertakes activities complementary to the departmental activities. At the end of March 2005, Mangalore had the largest number of Motor Vehicles Driving Schools viz., Bantwal-4, Puttur-7, Ujre, Belthangadi and Sulya had two schools each. (See Tables 7.11 to 7.17).

Table 7.11: Registered Motor Vehicles in the District

Year	Motor vehicles registered	Year	Motor vehicles registered
1957	2,335	1992	1,02,645
1961	3,447	1996	1,44,225
1966	6,580	1998*	1,27,790
1971	13,350	1999	1,38,363
1975	19,403	2001	1,63,629
1981	31,199	2003	1,95,445
1984	43,976	2004	2,13,006
1986	57,315	2005	2,34,295

* The district was divided in 1997.

Table 7.12: Details of Licenses issued to Drivers and Conductors

Year	Drivers	Conductors
1986	1,22,738	4,832
1990	1,49,046	7,755
1997	2,48,449	11,311
2001	2,74,129	12,138
2003	3,18,979	13,385
2004	3,63,950	13,692
2005	3,40,834	13,965

Table 7.13 – Details of Different Types of Motor Vehicles Registered at Regional Transport Office in the District

Different classes of vehicles	1961	1965	1973	1980	1982	1992	1996*	2001	2002	2004	2005
Motor Cycle Scooters	405	819	5476	12044	15481	61132	87862	97968	107217	131857	145792
Motor car	1472	2084	4748	6676	7387	16407	20971	25553	27448	34101	38131
Jeep	-	137	402	741	920	2893	4502	5087	5423	4441	6254
Auto-rikshaws	65	130	864	2666	3595	3651	11202	13325	14397	16523	17676
Maxicab	196	89	634	962	1276	-	-	-	-	-	4664
Ominibus	02	15	54	123	131	272	973	2331	2431	2629	2452
Private bus	331	270	397	539	574	1346	2199	1897	2106	-	2193
KSRTC	-	-	-	—	74	-	-	-	-	-	107
Private vehicle	-	139	325	493	486	1024	1101	-	-	-	1107
Public goods vehicle	1038	1378	2197	3680	4414	9256	10328	10087	10579	12580	13054
Tractors	-	29	46	67	73	-	-	—	-	553	231
Trailors	-	27	127	288	188	-	-	-	-	-	326
Other vehicles	37	17	251	138	218	664	5027	7381	7482	10222	-
Total	**3447**	**3686**	**15521**	**28420**	**34825**	**102645**	**144165**	**163629**	**177083**	**213006**	**234295**

* The district was divided in 1997

Table 7.14: Taluk-wise Details of Vehicles Registered in the Regional Transport Offices of the District as on March 2005

Vehicles	Regional Transport Office, Puttur				Regional Transport Office Mangalore		
	Puttur	Belthan-gadi	Sulya	Total	Manga-lore	Bantwal	Total
Motor cycles	9566	8830	8202	26598	101453	17741	119194
Invalid carriages	02	-	-	-2	07	0	07
Motor cars	1880	1678	1532	5090	27675	5366	33041
Jeeps	869	820	801	2409	2988	857	3845
Maxi cabs	64	46	151	261	156	394	520
Omni buses	165	166	131	462	1810	180	1990
Private bus	70	45	24	139	91	16	107
Goods vehicles	1137	687	660	2484	8457	1713	10170
Tractors	31	28	27	86	86	59	145
Trailors	45	35	32	112	109	105	214
Buldozers	02	01	01	04	-	-	-
Tippers	11	14	08	33	86	59	145
Power tillers	2	2	1	05	9	12	21
Delivery Vans	14	14	9	37	982	171	1033
Ambulance	15	07	07	29	80	15	95
Tankers	478	44	56	578	50	11	61
L.T.Vs.	323	262	215	800	-	-	-
Tourist taxis	622	527	841	1630	2760	274	3034
J.C.B.	05	03	03	11	-	-	-
Autorikshaws	1808	1562	1272	4642	10844	2190	13034
Stage carriers	622	527	841	1630	2034	159	2193
Others	-	-	-	-	158	60	218
Total	**17,109**	**14,771**	**13,513**	**45,393**	**1,59,995**	**28,907**	**1,88,902**

Table 7.15: Motor Driving Schools

Year	Total Schools	Exam candidates	Passed	Failed
1987	09	5543	4071	1472
1989	14	7915	6940	955
1990	17	6291	5186	1105
1992	33	-	-	-
2001	34	-	1620	49
2004	34	-	1264	34

* Denotes results of March

Table 7.16: Details of Plastic Card Licences Distributed to Drivers

Year	Blue Card (2 Wheelers)	Green Card (L.M.V.)	Red Card	Khaki Card	Total
1990	803	200	365	-	1,448
2001	375	222	1,062	11	1,670
2003	2,424	1,091	4,741	72	8,328
2005	1,410	449	2,963	45	4,867

* Denotes results of March

Table 7.17: Details of Accidents occurred in the District

Year	No. of accidents	No. of injured	No. of deaths
1972	380	420	86
1975	443	496	88
1978	744	782	120
1982	624	649	153
1988	1,068	1,477	195
1991	1,365	2,027	241
1994	1,483	2,477	313
2001*	1,007	123	884
2003*	1,142	103	1,039
2004*	1,239	104	1,135
2005*	1,196	76	1,120

*Denotes information pertaining to Mangalore Regional Transport Office only.

Public Transport

Till Nineteenth century, the public transport system was completely under the control of private sector. Generally people used to walk the distance and bullock carts were also used. Elephants, horses, *meyne, pallaki* and *rathas* were used for the transport of the royal families and officers. Bullocks, bisons, ox, donkey, horse, kavadi and carts were used for goods transport. Though jatka, tonga and bicycles entered public life, bullock carts were the medium of transport in rural areas. Mangalore – Udupi road had jatka service of Belle Subbaiah Shetty. Rivulets flowing through Kuloor, Pavanje, Mulki and Udyavara on Mangalore-Udupi road were crossed by boat. In those days Subbaiah Shetty of Mangalore had jatka service carrying travelers in even crossing these rivulets.

After Independence, Road Transport Department was started in Mysore State on 12th September 1948, like the Road Transport Corporations started in other States. Prior to 1956, privately owned buses were plying in public service at the beginning of 20th century in Dakshina Kannada which belonged to Madras Presidency. In 1914, Nellikai Venkat Rao and Bolar Vittala Rao started bus services through their Canara Public Conveyance Company. At the same time, Hanuman Transport, Shankar Vittal Motor Company and Durga Parameshwari Motor Services were also started. Motors plying between Mangalore-Udupi had to travel 90 Kms. on Gurupura bridge via Karkala to reach Udupi, taking five hours on dusty roads. In 1933 all these motor services unitedly started combined booking agency. Later Jois Booking Agency was also started. As a result competitive bus services became available at fixed time and fixed rate. However, transport field was in backward condition during 1933-47. Roads were in worst condition and bridges were not in sufficient numbers. But due to the efforts of Srinivas Malya, the Member of Parliament, construction of bridges and tarring of roads took place considerably in coastal region. Though from January 1st, 1955, the Mangalore-Mysore-Bangalore route was nationalized, private buses were plying in other places of the district. There were bus garages in Mangalore, Puttur, working under the Mysore Unit of Mysore Transport division. From 18th April 1957, the Road Transport Corporation started direct bus service from Bangalore-Mangalore and this was an important milestone in the field of public transport. Permits were also issued to private bus services in this route. According to the nationalization policy of Road Transport Department of the State Government, nationalization of roads in Mangalore area was carried out in 1968. This part which was

under the jurisdiction of Hassan division started transport Depots and Workshops at Mangalore and Puttur. By 1971 these two units provided bus conveyance to 48,926 persons daily with the help of 76 buses, on 58 routes, covering a daily average distance of 4,917 Kms. But the transport system of the district was specially to the control of private circles viz., Canara Public, Shankara Vittala, Manjunatha, Hanuman, Bharath, S.C.S., United Trading, P.V.M., Ballal, Varma, B.N.S., Misquith, Durga Parameswari, West Coast, Industrial and Commercial Syndicate and other private Motor Service Companies which known to have provided an average daily service of 26,225 Kms. on 208 routes in the district, in 1971-72. Later as a result of the State Road Transport Corporation achieving considerable progress by 1994, the five transport depots of Mangalore, Udupi, Kundapura, Puttur and Dharmasthala in the district, provided daily service of 49,308 Kms. through 467 buses. After the bifurcation (1997), Mangalore Depot 1 and 2 and Puttur and Dharmasthala had Depots, and by the end of 2002, there was an average daily transport service of 58,019 Kms. through 560 buses. However, the private bus services in the district, is noticed on a higher scale. For details see Table 7.18.

Table 7.18: Activities of the State Road Transport Corporation in the District

Particulars	1994	1995	1998*	2000	2002	2005
Depots	5	5	6	6	6	6
Schedules	414	428	439	483	505	NA
Routes	378	384	428	445	424	NA
Daily route Km.	49,308	50,745	54,874	55,280	58,019	NA
Daily average route distance	130.4	132.1	128.2	124.2	136.8	NA
Buses	467	470	485	468	560	NA

*Includes statistics of Udupi and Kundapura Depots upto 1998.

City Transport: Private bus owners are providing city bus services in Mangalore and neighbouring Udupi cities on fixed bus rates; in Mangalore city, from Hampanakatta and State Bank to other places they are providing city and rural transport services.

Railway Tranport

Prior to Independence, the district which was under the control of Madras Presidency, till 1947 and under the Madras State till 1956, had

a different picture of railway transport system when compared to the remaining British Provinces. This was the only district in the jurisdiction of Madras Presidency which had no railway route till 1892-93. But it was planned to form a Coastal railway route long back by linking Madras-Mangalore via., Calicut-Mane-Telicherry. Along with this, it was also planned to link Southern Maharashtra Railway line with Southern Madras route either through Tiptur or via Mysore-Mangalore. There was also a plan to link Erode via., Mysore-Nanjangud route. Among them the second plan was approved by the Government of India, it was not implemented.

Madras – Mangalore Broad Guage Route: In the early days, the only broad guage railway route in the district started from Madras and ended at Mangalore. In 1906-07, Calicut-Alikal Division which extended upto Kangnad, was later extended upto Kasargod, Kumble and Mangalore and opened for traffic in 1907. But due to its natural barriers it was not possible to further extend the railway route towards Mulki, Udupi, Kundapura (situated north of Mangalore) until the formation of Konkan Railway. But the Palghat valley which connects Nilgiris and Western ghats has been able to provide communication to the Malabar and Dakshina Kannada people and this route passes through the Palghat valley. A bridge of 150 ft. length with 16 arches has been built over Nethravathi river, spread across this route, near Mangalore. At the time of unification (1956) as a result of transfer of Kasargod to Kerala State, the distance of railway route in the district declined from 467 Kms. to 12.87 Kms. In this route Ullala of Mangalore taluk and Mangalore had railway stations and the Mangalore Railway station is situated towards the east of Wenlock Hospital. As the coastal area located to the south of Mangalore, having river and rivulets not suitable for road transport, this rail route played an important role in those days in connecting Dakshina Kannada district with the neighboring states of Kerala and Tamil Nadu. This route constructed by South Indian Railway Company was later taken over by the Government of India. Later, when railway circles was started, this came under the control of Southern Railway. This route traversing through Cantonment fort and Jeppu wards, passes on roads and bunds in Jeppu area and reaches Mangalore town. In this route, a deviation route has been formed towards west and this route reaching the port, *via.*, Mangala Devi temple and Rosario Church streets, has been useful for transportation of goods. About 11 Kms. Mangalore-Panambur railway route was formed between Mangalore railway station

and Nava Mangalore Port in Panambur at a cost of Rs.2.6 crores which was opened for goods traffic in 1972.

Mangalore – Hassan Metre Gauge Railway Route

Since 1870, there was a continuous demand in public circles, for construction of a railway line connecting Mangalore port with inlands of Mysore province. In this regard, the citizens of Dakshina Kannada district gave several representations to Government of India. Based on these representations, the Government of India had ordered the Madras Government in 1882, to undertake a preliminary survey in four routes – 1. Mangalore-Shiradi ghat-Hassan-Arasikere, 2. Mangalore-Kodagu-Mysore city, 3. Telichery-Kodagu-Mysore and 4. Cannanore-Kodagu-Mysore. Finally, it was recommended to conduct a survey to study the merits and demerits of Mangalore-Hassan-Arasikere or Telicherry-Kodagu-Mysore routes. Accordingly a survey was conducted under the direction of a British Officer, namely Groves, in 1893-94. Examining this survey report the Government of India ordered to review in detail the route of 240.5 Km. at an estimated cost of Rs.1,69,62,253. The Mangalore-Hassan-Arasikere route, and in this regard, a detailed survey and route surveys (1895-99) were conducted under the leadership of another British Officer, namely Gilchrist. This survey recommended for the formation of 231.7 kms distance metre guage at an estimated cost of Rs.1,86,88,646. However, as per another order of the Government of India, in 1899, a re-survey was conducted to study the pros and cons under the leadership of Groves. Inspite of all these developments, the plan to link the railway from West Coast with the inlands of Mysore Province, was neglected till 1914. At this time, the Government of India entrusted a fresh survey work of this railway construction route to Richards in 1914, who putforth the recommendations of earlier officers. But the Madras Government did not take any decision for a long time.

However after independence, the democratic Government, again thought of building the Mangalore-Hassan railway route, ordered for a technical survey and vehicular traffic survey in August 1953. Accordingly a survey was conducted in 1954-55. The Railway Board after examining this survey report, on 2nd November 1964, responded to the wishes of people of that region and accorded approval for the construction of Mangalore-Hassan new railway route. The completion of this railway route of 189.21 Kms. distance at an estimated cost of Rs.23.70 crores was fixed to complete its construction before 1971. It was proposed to construct 118 major bridges including the construction of a huge bridge

across Nethravathi river alongwith 573 small bridges on this new route. Out of the 43 tunnels formed in Ghat sections, a 1850 ft. tunnel is the longest tunnel and on this route a total of 186 level crossings, 17 over bridge and nine under bridges. The formation of this new route was commenced in 1965. This route was divided into Hassan-Sakleshpur (45.9 Kms), Sakleshpur-Subrhamanya (49.6 Kms.) and Mangalore-Puttur-Subramanya (94.5 kms.) sections and the construction work was started simultaneously. Hassan-Alur route was completed by April 1970 and goods trains were made to run on this route. The Sakleshpur-Subrhamanya section passed through the ghat sections and the landscape decreasing from 3000 to 370 ft. at an average decrease of 100 ft. per each mile. In order to overcome this problem, construction of 40 tunnels, a lengthy bund, and arched bridges, was planned. In this way it was planned to balance the natural imbalances in this route. In order to construct this problematic railway route, sophisticated technical equipments, services of specially trained railway personnel and contractors were used. It was estimated to spend a sum of 1 ½ crores for explosion of boulders which came in their way. While forming this route a lengthy tunnel (1850 ft.) was completed by spending R.21 lakhs.

The construction of Mangalore-Puttur section was easily carried out since this route had plain land and a bridge of 1314 ft. length was constructed across the Nethravathi river. By 1970, the estimated cost was revised to Rs.28,34,73,700. Again this was re-estimated to Rs.35,86,76,310. By 1972, about 67% of construction work was completed by spending Rs.23 crores. About 189 Kms. length of 112.53 Kms of this metre guage route, in the jurisdiction of Dakshina Kannada district was completed in 1979. As a result, a total length of 202 Kms. came into existence in the district. This new railway metre guage route was formed with far sightedness that it could easily be converted into broad-gauge as and when required. The thirteen railway stations located on this route, are Mangalore, Kankanadi, Pharangipete, Bantwal, Kalladka, Neralekatte, Kabaka, Puttur, Narimoguru, Kaniyuru, Yedamangala, Bajakere and Subrhamanya Road respectively situated within the boundaries of this district.

Mangalore – Hassan Broad-Gauge Conversion: As per the nation-wide programme of the Railway Department, for broad-gauge (uni-guage) conversion, the work of converting this route into broad-guage with an estimated cost of Rs.180 crores was started in 1993. Accordingly the Mangalore-Puttur- Sakleshpur-Hassan sections conversion work was

completed long back and there was movement of railway traffic. To complete the Mangalore-Hassan route broad-guage conversion work Hassan-Mangalore Railway Development Company was started with the equity partnership of active shareholders, State Government and Central Railway Secretariat. In March 2004, the Railway Secretariat signed the agreement. For this programme, out of the proposed Rs.45 crores of the State Government, Rs.28 crores had already been provided. At this time, the Company was able to raise a loan of Rs.40 crores from Banks and Rs.20 crores from active shareholders. As a result the guage conversion work on Puttur-Kukke Subramanya route, was completed and railway traffic began in August 2005. The work between Kukke Subrhamanya-Sakleshpur which was going on at quick pace, and from December 2005, goods traffic started running on this route on trial basis. As soon as this route was declared as safe, and the Railway Department formed a scheme to provide separate express railway service from December 2006, daily from Yashavanthpur railway station to Mangalore *via.*, Mysore, and Tumkur. But the railway passenger service was postponed indefinitely due to inevitable reasons. But, there is a public pressure to open this route for public as early as possible. Subsequently both these routes are being thrown open for public utility.

Roha/Apta-Mangalore (Konkan) Railway Route: As a result of the proposal submitted for the construction of this broad-guage railway which passes through Western ghats between Apta/Roha near Kalyan in Mumbai and Mangalore, the route survey started in June 1970 and completed in June 1971. The cost and details being worked out, this new route was named as Konkan broad-guage railway route. For the construction of this route, which was problematic, machines brought from Sweden were used. Especially in the Karwar section of this route, construction of 10 tunnels, 13 important bridges, 310 small bridges were problematic, which necessitated the construction of lengthy bridges across Sharavathi and Kali rivers. The Konkan Railway Corporation, an organization of Government of India, started for the construction of Apta-Mangalore broadguage railway and formation of this route commenced from Mumbai side. Later for the formation of railway route in Karwar and Udupi circles, a factory to manufacture three lakhs seasoned cement sleepers was started at Kaikini in Uttara Kannada district. About 60,949 sleepers manufactured here was supplied for the formation of Udupi section. As a result under the supervision of the Chief Engineer of Udupi Division, Udupi-Mangalore sectiones construction work was completed and opened for traffic in 1993. On this route, there are railway stations

at Suratkal and Mulki with the completion of this route, it has become possible to provide railway link between Mangalore-Mumbai. This has provided a meaningful railway communication on Western ghats by lessening the money and journey time of passengers. This Railway route passess through Mangalore, Bantwal and Puttur taluks of the district and Kankanadi railway station has formed as an important railway junction. At present the district has 155 Kms of broad-guage routes and 19 railway stations.

Airways

Prior to reorganization, when Mangalore belonged to Madras Presidency, the Government of India under the Civil Aviation Department, constructed an airport on Mangalore-Karkala road about 26 Kms. from the State Highway at Bajpe village limits in 1951. The airport situated in an area of 140 acres, near the hills surrounded by deep valleys and natural wealth. In the beginning, it was restricted to Dakota planes and though there were weekly Dakota passenger air transport services, it was not regular. When Dakshina Kannada district was unified with new Mysore State, there was an utter need to systematically connect the State Capital Bangalore with Mangalore. To cater to this need many public organizations including Canara Commercial Union, put pressure on Government of India. As a result, a weekly air transport service was started on 29th December 1957 between Mangalore and Mumbai *via.*, Bangalore. Later this service was made available twice in a week. When it was found not satisfactory, the people of Mangalore felt the need for daily air service. In 1960, Mangalore air port was extended and provided facilities advantageous to Avos aeroplanes. As a result of the action taken by the Government of India to meet the public demand, daily air service was provided in 1972 from Mangalore to Bangalore, Belgaum and Mumbai. Daily air service between Mumbai and Madras was passing through Mangalore-Bangalore. As a result, 14 aeroplanes were plying over Mangalore in a week in 1972. These were scheduled air services, and air transport service was provided to the public through H.S.748 aero planes of Indian Airlines. Also, the Mangalore air port provided 7,500 Kgs. of goods transport and 4,500 Kgs. of postal services every month. In 1991-92, Mangalore airport received 99 metric tons of goods from other places and despatched 57 metric tons of goods to other places. The Mangalore airport which has improved on a considerable scale, provided two trips to Bangalore and three trips to Mumbai. The extension work of airport taking place in a brisk pace, and the Government of India has taken up

construction of two runways at Mangalore and a new terminal building. At this stage, Mangalore airport has been considered as a international airport by September 2006, and it received the first direct international aeroplanes in the last week of September 2006.

Water Transport

Prior to its bifurcation, the district had 141 Kms. of coastal line, and after the division it has only 61 Kms. of coastal line. Since the district is situated on the Arabian Sea, it was popular for sea borne trade and also famous for inland transport because of Nethravathi and Gurupura rivers flowing towards West and joining the sea. Mangalore, the district headquarters was very popular for sea trade and Mulki port, a prominent port town was restricted to *pattamaru* local boats.

The Mumbai Steam Navigation Company started in 1845, fixed Rs.100 for first class, Rs.50 for second class and Rs.8 for third class passengers, when it started passenger service between Mumbai and Mangalore. Based on the model of European Manchester Canal and keeping the natural features along the coastal route into consideration, construction of a sea canal from Mangalore-Bhatkal was planned long back, to carry 1000-2000 tons goods capacity ships required for coastal transport, about one mile away from the beach. The blue print of this inland water transport prepared by the British Officer Sir Arthur Cotton in 1860, was applicable to the whole of India, wherein gave special priority to coastal routes. Likewise, there was also a plan to construct Sea Canal, between Mangalore and Malpe. This sea route was intended to help fishing, inland transport and flood control. But this remained only as a scheme.

Sea Transport

Prior to Independence, the ports of Dakshina Kannada district were working under the control of Madras State Ports Department, and the Port Trust Committee was in existence for the maintenance of Mangalore old port and a Port Officer of the grade of Collector was appointed to look after it. In 1956, at the time of state reorganization this district was unified with Karnataka State and the Government of India formed a Port Trust Committee for its maintenance. The Mangalore Old Port worked under its control till 1.1.1980. Later it came under the State Department of Ports. While Mulki as a small port was helpful for the inland water transport, Mangalore as a major port, was contributing highly to the Nation's economic growth. In 1956-57, Mangalore Port had 71,672 metric

tons of goods export, and the Mulki port exported 878 tons of goods and 388 tons were imported. Likewise, Malpe, Hangarkatte and Baindoor were the other ports seen in the district upto 1997. (See Table 7.19). Fishing in the coastal backwaters through country boats existed continuously. But from 1958, the use of mechanized boats increased and by 1976, there were 929 mechanised boats and 399 country boats involved in fissiculture.

Ports of the District

Mulki: This port located north of Mangalore where mulki streamed joined the sea. It was closed in 1961.

Kundapura: This is an important port situated about 96 Kms. north of Mangalore at the confluence of sea and the Gangolli river. This port has carried out export-import business on a remarkable scale before the development of Karwar Port Trust. At present it is in Udupi district.

Hangarkatte: This is a port town at the mouth of Seetha river located about 22 Kms. south of Kundapura. This is facing regression due to the development of Kundapura Port. During 2003-04, Rs.2 lakhs was spent for its' development. At present it is in Udupi district. Likewise Baindur, another port is also now in Udupi district.

Mangalore Old Port: The Mangalore port town, situated about 302 Kms. south of Marma Goa and 322 Kms. north of Cochin on the West Coast, has achieved sufficient progress in trade, industry, education and such other fields. It has good communication link with different ports of India. Specially among the other ports located between Marma Goa-Cochin, it has more trade links with inland. It is one of the few important natural ports of India. The back waters of Nethravathi and Gurupura rivers is used for inland transport, both unites near Mangalore, forming a whirlpool of back waters of 5-6 Kms. of length and spreading over 2000 ft. area. This backwaters is separated from the sea due to the 300-1000 ft. in between broad sand cracks. As a result by digging this backwater whirlpool, as per requirement it can be used for steamers and ships as anchor base in all seasons. Important progress was achieved in goods transport in the earlier five year plans, as the coastal ports made remarkable development. At this time, there were a light port yard, apart from the 14 private owned and two controlled by the department. From here, there was sea voyage service to Laccadives. Even now there is regular goods transport services to Laccadives. Accordingly under the seventh five year plan, in the first phase, 12.50 crores was sanctioned

for port improvement scheme and at an estimated expenditure of Rs.9.4 crores, construction of 252 metres long port yard and other developmental works were undertaken. This work started in 1989 was completed in 1992. In 1992, there was an import of 87,800 tons of goods and an export of 23,294 tons. (For details See table 7.19).

Table 7.19: Import and Export Transactions of Important Ports in the District from 1956-2004.

(in Metric tons)

Sl. No.	Port	Year	Import	Export	Total	Fees from Goods in Rs.
1	**Malpe#**	1956-57	10,882	10,161	21,048	—
		1979-80	1,854	5,913	7,767	6,982
		1989-90	3,657	24,141	27,798	77,805
		1997-98	2,151	27,375	29,526	1,96,696
2	**Hangarkatte#**	1956-57	2,503	2,367	4,870	—
		1979-80	834	3,955	4,789	2,589
		1989-90	—	1,060	1,060	1,607
		1997-98#	—	-	-	-
3	**Kundapura#**	1956-57	11,309	25,415	36,724	—
		1979-80	4,311	37,343	41,654	48,036
		1989-90	747	12,763	13,510	25,465
		1997-98#	—	464	464	1,146
4	**Mangalore**	1956-57	71,672	1,96,452	2,78,104	—
	Old Port $	1963-64	76,834	4,62040	5,18,874	—
		1979-80	33,371	1,44,792	1,78,163	4,76,874
		1989-90	1,11,345	30,399	1,41,744	7,48,708
		1997-98	56,563	83,703	1,40,266	9,91,316
		2001-02	43,130	1,38,986	1,82,116	13,01,082
		2003-04	12,025	94,808	1,06,833	10,78,099
5	**Mulki****	1957-58	388	887	1,275	—
		1958-59	197	367	564	—
		1959-60	107	58	165	—
		1960-61	—	—	107	—

* From 1-1-1980, this port belonged to State Port and Naval Departments.

** From 14-3-1961, this Port was closed.

\# From 1997, this belongs to Udupi district.

New Mangalore (Panambur) **Port**

The old Mangalore Port is a favourable seasonal port which works eight months (from 16th September to 15th May) in a year. During the south-west mansoon and at the confluence of Nethravathi and Gurupura rivers, with the sea, due to the strong waves, there is no opportunity for movement of any type of ships. In this background development of Mangalore Port became inevitable for the economic progress of inland. This was under consideration since a long time. As a result, as per the recommendations of the West Coast Port Development Committee in 1950, the Government of India by conducting model experiments at Poona Central Water Energy Research Centre, formed deep canals at Mangalore Port. At this time, the Government of India and the Madras Governments made statements to undertake Mangalore port development work based on the result of Poona Laboratory test. The model experiments of Poona confirmed to form Mangalore Port as an all season port to accommodate steamers with 24 ft. anchoring by forming two canals of 2000 ft. at a distance of 1250 ft.gap. After considering the suggestions Technical expert committee of Central Transport Ministry of put forth the idea to not only develop the old Mangalore port but also to form newly an all season port containing deep waters at Panambur nine Kms. north of Mangalore. In this regard, it was decided to frame a detailed scheme for the construction of the new port.

The strength behind the Mangalore port is vivid. The areas rich in iron and manganese minerals viz., the neighbouring Kudremukha belt in Chickmagalur district having rich iron ore deposits, the Mangalore port is the only natural outlet for its despatch. Rich forests, the iron and steel companies of Bhadravathi, coffee, cashew plantation, sugar, paper, cement, Mangalore tiles, super phosphate chemical fertilizer factories etc., in the vicility of Mangalore Coastal town have made it more significant. But due to the lack of all season port. The inland import and export activities of Mangalore port was carried out through Madras Cochin and Marma Goa ports. Goods related to import and export of Manganese ore, Ferrosilicon, Ferrochrome, tiles, hematite, iron ore, salt, forest products, fisheries products, cashew nuts, copra, arecanut, fertilizer, raw materials required for fertilizer, charcoal, cake, cement, petroleum products, food products etc., may be mentioned here. For all these reasons, construction of an all season port which can be handled commercially throughout the year became inevitable.

Accordingly, in the initial stages three separate ship anchoring yards inter connecting with each other required to import raw materials was

formed respectively for (1) ordinary goods, (2) iron and manganese ores and (3) to import raw materials of fertilizer factories. For the export of chemical fertilizers, construction of anchoring yard with low depth for transport of ordinary goods, kerosene and petroleum was planned. Moreover, keeping in view the increased quantity of goods by 1975-76, it was planned to form additional shipyards. In this port, a dockyard of 30 ft. depth was formed for ships containing goods. The estimated cost towards this scheme was Rs.24.30 crores including a foreign exchange of Rs.2.065 crores. At the time of completion of this port, it was expected to manage an annual turnover of Rs.29.6 lakh tons and by 1975-76, its annual turnover was expected to raise to Rs.32.4 lakh tons. At this juncture, in the first phase Rs.3778 was spent. In the second phase, it was planned to extend the port by building a shipyard of 40 ft. depth required for the transport of 60,000 DWT capacity ores, required for the export of iron ore. It was also planned to form a separate dock yard required for using a mechanized vehicle with a filling capacity of 4000 tons of ore. In all these, provision was made in the original plan. In the course of time, a blue print was prepared for the transport of one lakh ton of goods. About 2,341 acres of land was acquired from private and public sectors. A well equipped laboratory consisting of a first grade observatory, soil, concrete and chemical testing divisions, photography division including wave gauging equipment of good quality was also planned.

At the initial stage, 299 permanent houses of different categories were constructed for the use of personnel. A separate guest house was constructed for bachelor employees. An administrative office building was constructed for the use of port office. Three storage buildings, four sheds, workshop, market, police station, primary school, health centre, nursery school, community centre for women, restaurant and two inspection bunglows were constructed for temporary use. Connecting roads to mines, internal roads to staff colony and certain port roads were formed as per requirement. Two wells with 30 ft. diametre not so deep, two water tanks and distribution pipes were installed and a concrete tank with a capacity of two lakh gallons of water, was constructed. An average daily requirement of five lakh gallons of water was expected for the construction of port, initially and after 15-20 years this was expected to raise to 30 million lakh gallons of water. Even today water is supplied to New Mangalore Port from Nethravathi river.

Regulators to control floods was completed and a sewerage treatment unit was established. The port area was leveled by cutting the undulated

land as per requirements. Desilting work for formation of canal and to improve the depth of coast line, was simultaneously undertaken. As a result, Rs.41.32 crores was spent for this scheme, at the end of August 1972. Renowned as the ninth port of the Nation, the New Mangalore Port started functioning on 4th May 1974,and it was formally inaugurated by the Prime Minister of India on 11th January 1975 and dedicated to the Nation. According to Main Port Act 1963, a Port Trust Committee for this Port came into existence from 1-4-1980. After this, New Mangalore Port achieved considerable progress. In the later years, the New Mangalore Port has increased its goods transport transaction from one lakh tons to 22.89 million lakh tons at the end of 2005.

In order to meet the requirements of sea trade in the New Mangalore Port there were four store houses, 15 launches, 6 cranes and 12 dockyards of 7-14 metres depth with suitable electrification. Among these yards of about 125 to 320 metre length, 7 yards has the capacity of ten lakh tons, one port yard with 7.50 million lakh metric tons capacity and there are four yards with 19.20 million lakh tons capacity. The Port Trust Committee has co-operated in providing 11 Ware houses, 55 liquid collection store houses and three open air collections. As a result, New Mangalore Port is famous for goods transport. This port has facilities required for transport of liquid petroleum LPG type of goods on a large scale by taking into account, the requisitions which may forth come 21 century. (See tables 7.20 and 7.21).

Table 7.20: Details of Goods Transport in New Mangalore Port (1974-2005)

Year	Goods Transport (in million tons)	Number of ships arrived to the port
1974-75	0.09	77
1978-79	0.87	286
1984-85	3.38	342
1988-89	7.08	432
1994-95	8.00	514
1996-97	12.45	645
1998-99	14.21	724
2000-01	17.89	734
2003-04	26.67	876
2004-05	33.89	1,057

Source: New Mangalore Port Committee Report, Panambur, New Mangalore.

Table 7.21: Details of Export and Import Tranactions in New Mangalore Port (1996-2005)

Year	Import (in metric tons	Export (in metric tons	No. of ships arrived
1995-96	18,83,555	70,00,760	505
1996-97	44,25,846	79,74,306	645
1998-99	68,94,779	72,77,719	724
1999-2000	84,39,172	91,47,584	749
2001-02	87,56,816	87,44,273	763
2003-04	1,30,45,149	1,36,24,366	876
2004-05	1,55,11,967	1,83,79,023	1,057

Speciality of New Mangalore Port: Managing the L.P.G. on a huge scale in the Country is the special feature of this port. There is a canal of about 150.40 metre depth to enter the port. This is the first port having cement transport centre. In this port, iron ores, petroleum products, liquid chemicals. Iron ores, billets, Manganese ores, products of Mangalore Refineries, Chromite ores, granite, plywood etc., are the major products of exports and petroleum, crude oil, cement, fertilizer, chemical products, L.P.G., sugar and edible oil are the major products of import.

Every year four to six ships bring cruise tourists from America, Germany and other places to New Mangalore Port. Tourists thus come, undertakes inland tour and return to their countries by sea.

Light House: It is built in a hilly area for the advantage of ships reaching the coast at night times. There is a light house of 33 ft. height on Mangalore light house hill. There is another light house of 144 ft. height near Suratkal.

Inland Transport

In early times, the Rivers of the district were advantageous for both passengers movement and transport of goods. The older generation still remember their boat journey of leaving Bantwal in the night reaching Mangalore in the morning by paying three annas and this memory is fading slowly. Before the construction of bridges, over the rivers, transport between Mangalore and Udupi depended upon Belle Subbayya Shetty's transport services in the beginning of the last century. Goods transported on packed animals like donkeys between Mangalore-Koolur, Koolur-Panambur, Panambur-Gurupura, Gurupura-Udyavara and Udyavara-Udupi, and in between Koolur, Panambur, Gurupura and

Udyavara rivers were crossed by means of boats and basket boats. Donkeys were used for transport of goods on land, while basket boats and boats were used to cross rivers and rivulets and in between these places goods were exchanged. But due to the increased usage of jatkas, use of donkeys decreased. But even to-day foot print of packen oxen tracks can be seen near Pane Mangalore. Due to the destruction of forests existence of sand dunes in the river mouths, and the islands formed in the rivers have restricted inland voyage. It is to be sorted out. As there are no proper canals, to link coastal area with inland, it has become impossible to open new water routes, as opined in 1973. But the narratives of foreign travelers who visited during the Portuguese rule, gives information about the arrival of foreign boats in the rivers of the district and thereby reaching the towns situated at a distance of five Kms. The backwaters of Kerala State situated at the southern end of western ghats was used for ship voyage till a long distance and this type of limited ship voyage was in practice in Dakshina Kannada district too. Among the two routes which were in use in the district as on 1972, was 1) Mangalore-Pane, Mangalore-Bantwal (29 Kms.) traverses till Nethravathi river and another route 2) Mangalore-Gurupura (16 Kms.) traverses up to Gurupura river. Through these routes rice and other commodities were transported in small quantities in country boats from interior villages to Mangalore city. The south-west monsoon caused disturbances for movement of boats and during the remaining season, there was heavy movement of boats. The confluence of Nethravathi and Gurupura rivers creating a wide bay of backwaters and the sand dunes running to six kms. separates, this from the sea. After every rainy season, there will be variations in this, and the entry point of Gurupura river to the sea is closed in 1887, when the sand dunes spread widely over about 300-1000 ft. In the early decades of the last century, about eight Kms. of water route traversing in coastal backwaters from Mangalore to Panambur is an prominent route and there was a provision for inland transport of 29 Kms. in Nethravathi river, flowing east-west at the coastal side. Apart from this river borne water transport, consumer goods were transported through country boats across Mangalore-Kundapura coastal line. To traverse this distance of 96.6 Kms. by boats filled with goods 25-30 hours was required excluding the monsoon months there was considerable goods transport and generally local boats and basket boats were in service.

When construction of bridges for the rivers were considered as expensive, boats and basket boat services were found to be much useful

to the public. A large number of ferries are to be found in Nethravathi, Gurupura and Kumaradhara river, and by 1857-58, among 78 ferries under Zilla Board control, Mangalore (16), Puttur (16) and Belthangadi (14) taluks had 46 ferries of different categories. Later, as a result of construction of bridges and due to non-availability of contractors, the use of ferries and basket boats declined. With the abolition of Zilla Boards, in 1972-73 ferries were subjected to the control of Taluk Development Boards. At that time, among the 62 ferries of the district, 35 ferries were in Dakshina Kannada Dist viz.,Mangalore (7), Bantwal (13), Puttur (6), Belthngadi (4) and Sulya (5) taluks. Among these, a few of which were under the control of Public Works Department. There were three ferries used for crossing Nariya river in Belthangadi taluk. Among the 66 ferries in the district during 1980, two were under the control of the Department, and eight were given on contract through auction. Later in 1992, among 55 ferries of the district, three were under the control of the Department, nine working on contract basis and the remaining were under private ownership. By 1998, this was declined to 45 and out of this, three were under the control of the Department and nine were given on contract. After the division of the district in 1997, this declined to 35 by 2002 and out of these, two were under the control of the Department and six were working on contract basis. Later in 2004, this declined to 27 and out of these three were under the control of the Department and six worked on contract basis. (For details see Table 7.22).

Table 7.22: Details of Ferry Service in the District (1979-2005)

Year	Total Ferrys	Department controlled	Auctioned
1979-80	99	2	8
1981-82	99	2	9
1983-84	99	3	9
1989-90	55	2	9
1993-94	55	3	9
1997-98	45	3	6
1999-2000	45	3	8
2001-02*	35	2	6
2003-04	35	2	6
2004-05	35	2	7

* Though the district was divided in 1997, independent informationis available from 2001-02 only.

Earlier there was ferry services under the control of municipality to reach Mangalore town (surrounded by river Nethravathi in the south and Gurupura in the west) through Nethravathi river side near Jeppu and through Gurupura river side near Bolar. Now there are mechanized boats from old Mangalore port to Nadugadde and from Sultan Battery to Tannir Bhavi. Along with the passengers transport, goods transport were also made through boats and launch, whenever the winds and waves favoured. Small boats in Kumaradhara and Nethravathi rivers near Kukke Subrhamanya and Dharmasthala were earlier very popular with the local people. But, at present ferry service is declining due to the construction of bridges

Postal Services

Inspite of the revolutionary developments occurred in the field of communication in recent years, the postal services has still retained its importance. The Postal Department has succeeded in establishing communication over thousands of kilometres between individuals and institutions with emotional relationships and trade activities in helping the common man. It is having its own heritage.

The word 'Anche' is derived from the Sanskrit word 'Hamsa'. Swan and Pigeons were used for sending messages in ancient India and it was quite popular during the time of Kavi Kalidasa. There were *Volekars, Talawars and Rayasas(Messengers)* and even spies who were used to despatch letters of the royal courts. This system was followed during the time of Alupas, Hoysalas, Vijayanagara, Keladi and local rulers in the district. Later, the local postal system was in existence in Mysore, Cochin and Travancore principalities. During the time of Haider Ali and Tipu Sultan, behari chavadi and postal divisions assumed much importance. Later in 1799 with the fall of Tipu, when the Dakshina Kannada district came under the control of General Post Office established by British in Madras (1786). In the first decade of 19th century, Post Offices were started by the British at Bangalore and Mangalore. In 1833, a fee of 12 anas was charged for a post cover reaching 436 miles from Madras to Mangalore. By 1837, a sub post office was working in Mangalore, under the control of Madras Post Master General. Among the Post Offices of Madras Presidency existed in 1854, the Mangalore post office was recorded as the main post office and Honnavara and Sirsi post offices were working under this post office. Prior to the introduction of Stamps in 1854, there was a system to pay postal charges in advance. By 1858, the Mangalore Post Office was headed by one Deputy Post Master, with

two assistants, two postmen, and 26 runners for the three runner routes, and for the maintenance of this Post Office, Rs.196 was spent annually. John Gomes was the first Deputy Post Master General of the Mangalore Head Post Office and in 1867, G.Cross was appointed as the first Post Master of Mangalore Post Office. Among the two postal routes, operating in 1863-64 one route passed from Bangalore to Mangalore via., Mysore-Madikeri, and there was a system of harikars dispatching post through *Kavadis.* The system of using one anna receipt stamp for receiving the salary started in 1873. In order to provide postal services to the rural areas in Madras Presidency, in September 1880, the school masters were given the posts of Postal Mutsaddi with a monthly honorarium of Rs. 3/- and this system prevailed in the district. The postal bags carried by postal runners who ran a specific distance alongwith a stick tied with bells were recruited at regular intervals served the purpose. By 1893, the district had one Central Post Office, seven Sub post offices and 22 branch post offices with saving services was available.

After independence, the neighbouring Cannanore district of Kerala State was under the control of the Postal Division of Dakshina Kannada district, controlled by Department of Indian Post and Telegraphs. However, till 2-1-1949, Dakshina Kannada district was under the control of Malabar Postal Division. Later from 2-1-1949 Postal Division of Dakshina Kannada district came into existence. After reorganization, the Postal Division of Dakshina Kannada district was divided into Mangalore and Udupi divisions. In July 1979, Mangalore Postal Division was again divided and Puttur Division came into existence. After the formation of unified Karnataka State, including neighbouring Kodagu district with its one village, the whole of Dakshina Kannada district postal administration vested with the Divisional Post Office at Mangalore, and three sub post offices were working under it.

By 1972, there were eight sub-divisional post offices in the district, respectively viz., five at Mangalore, Puttur, Bantwal, Belthangadi and Mulki and the remaining three in Udupi district, maintained by the Postal inspectors. Out of the four main post offices in the district, two were in Mangalore and two at Puttur. Out of 700 post offices of different categories there were 144 Sub post offices, two non-departmental Sub post offices and 554 non-departmental Branch post offices including one branch post office of Kodagu district. By 1972, there were daily postal services to 666 villages in the district and in three villages there were only services for three days in a week. Money order services and Savings Bank services was available in Post Offices. To despatch post from

Mangalore to other places, water transport, road transport and air transport were also used as means. By 1977, the district had 714 post offices and by March end 1983, 763 post offices were working in the district. By 1988, this rose to 773, and by March end 1992, this rose to 779. The district had three (Mangalore, Udupi and Puttur) Divisional, eight, two at Mangalore, three each at Puttur and Udupi Main Post Offices, 176 Sub post offices, 117 non-departmental Sub post offices, and 478 non-departmental Branch post offices. After the division of the district in 1997 Mangalore and Puttur of present Dakshina Kannada district had Divisional post offices which supervised the postal services of the district. By 2001, the district had 486 post offices, but reduced to 440 at the end of March 2005. (See Table 7.23). Moreover by providing Speed post services, passport services, Western Union International Money Transfer services, postal stamp distribution services, Mediapost, E.M, E-post pick-up service and such other services to the customers, the Postal Department is trying to gain the popularity in the public.

Telegraph Services

For the first time telegraph service was started in Calcutta in 1851. Subsequently after four years, telegraph services were started in Mysore province, and services were also extended to Bangalore in 1857. This was possible in Madras Presidency by 1853 due to the formation of Madras-Mumbai Transport. Later this service was extended to Mangalore town in Western ghats, and linking a section of route in 1865 from Cannanore (Kerala) to Mangalore. As a result of this development, there were four combined Post and Telegraph Offices in the district in 1893. By 1971, along with one main Telegraph office in the district headquarters of Mangalore, there were 150 combined post and telegraph offices. In 1977, this rose to 224 and by 1983, this rose to 410. This rose to 498 at the end of March 1992. After the division of the district in 1997, by 2005, there were four independent main telegraph offices and 336 combined post offices having telegraph services in the district. (See Table 7.23).

Telephones

Telephones play an important role in the revolutionary development of communication due to progress in technology. Through the facility of telephones, communication is possible with remote places in any corner of the world situated at a distance of thousands of kilometres. Telephone service was started in Madras city in 1884. Later in 1889, due to Khedda operations in Mysore State, telecommunication services

Table 7.23 Details of Post and Telegraph Office, Telephone Exchange, Telephones and Radios.

Year	Post Offices	Composite Post Tele-graph offices	Telephone Exchange centres in existence	Telephone	Radio
1966	674	-	24	3,291	15,563
1969	683	-	28	5,169	25,583
1971	694	-	-	6,445	32,845
1973	703	195	29	6,445	52,443
1976	707	377	-	10,308	54,424
1980	742	372	-	12,480	1,10,667
1984	773	426	109	17,241	63,495
1989	771	463	160	30,263	*Radio License renewal rule was abolished
1990	772	496	164	33,466	
1992	779	498	170	43,782	
1996	788	532	191	85,268	-
1998*	473	337	123	85,901	-
2001	468	357	125	1,48,403	-
2003	468	340	144	1,75,918	-
2005	440	340	147	1,78,716	-

* In 1997, the district was bifurcated.

between Hunsur and Kakanakote for a distance of 58 kms. was started. In 1940, telephone services made its appearance in Mangalore town. In 1960, when Karnataka circle was started in the State, there was a common administrative circle for post and telecommunications. Due to the increased popularity of telephone facility, at the end of March 1971, 33 telephone exchanges provided services to 7350 persons and 4200 telephones were working in Mangalore city. Apart from this, there were 139 local calls and booths 42 trunk call centres in the district. In September 1974, the Karnataka Post and Telegraph Circle was divided and a separate postal circle for posts, and a separate telecommunication circle for telephones was formed. As a result, remarkable progress was achieved in telecommunication services.

By 1977, there were 68 telephone exchanges in the district, and 11,577 telephones were in service. By 1983, the number of telephones rose to 17,909. Later at the end of March 1992, there were 171 telephone exchanges in the district, and 43,782 telephones were in service. At the end of March 1992, there were 248 telex units in the district. By 1996, there were 191 telephone exchanges and 85,268 telephones in the district. After the bifurcation of district in 1997, and subsequently at the end of 2001, the district had 125 telephone exchange centres and 1,48,364 telephones in service. At the end of 2004, 125 telephone exchanges, provided 1,74,790 telephone services in the district. At the end of March 2005, there were 1,78,716 telephones in the district and its talukwise distribution is: Mangalore – 1,01,582, Bantwal - 25,001, Belthangadi – 13,662, Puttur – 24,536 and Sulya – 13,935.

With the introduction of S.T.D. and I.S.T.D. Public services in 1980, Inter State and International communication became easily available to the public. With the advancement of technology, now the telephone services in the district is available at local call rates and telephone services are easily available even in rural areas. In order to reach rural people, the Telecom department is giving special concessions in deposit amounts, telephone hire charges, tax rate and free calls to rural customers.

Telex – Fax, E (Electronics) Mail service, available in the district have made simple the process of sending information and messages. Innovations in Computer Technology and Information Technology through internet services, Website hosting and such other services have made Mass communication media very rich and useful. The computerized Deputy Commissioner's office has direct link with the Chief Minister's office. At the taluk level, computerization process in the taluk offices is under progress. Computer training centres are coming up in taluk and hobli centres . On par with the Telephone Department, private companies like B.P.L., Vodafone, Airtel, Spice, Tata Indicom, Aircell, Reliance etc are also providing telephone services more actively. This clearly indicates the healthy and competitive development in improving telecommunication services in the country.

Bharath Sanchar Nigam Ltd. (BSNL)

There is remarkable change in telephone services due to the liberalization and privatization policy adopted by Indian Telecom Industry since 1992. Airtel, Hutch, Samsung, Nokia, Tata Indicom, Reliance and other private companies are providing telephone services. In the

beginning the Indian Telecom Industry was known as Videsh Sanchar Nigama Ltd. (1995) (VSNL), and later renamed as Bharathiya Sanchara Nigama Ltd., (BSNL) is providing good services to the customers through healthy competition. Due to the upcoming of various private telephone companies the telephone instruments, rates and service facilities of local, National and International calls have improved to a great extent. The role played by National Telephone Policy (NTP) 1994 and 1999 is remarkable. Cell phone (Mobile) and internet services are available to the customers. Instead of cable telephones, the use of wireless telephones or radio system telephones with one or more points has become more simple and effective with the installation of Optical Fibre cable connectivity on Highways (Railway line) and by the side of gas pipe lines inter town communication has become more simple. That too with the installation of Ultra Deep Wave Multi Flexing technique, the rates are coming down and it is expected to further come down during the coming years. As per the National Telephone Policy of 1999, railways, electricity and gas companies can lease or sold to telephone companies by forming Optical Fibre Cable connections. Gas Authority of India (GAIL) is involved in this venture and is a powerful competitor to Bharath Sanchar Nigam Ltd. The demand for landline is declining and the demand for mobile phones is gaining importance. The advent of BSNL Mobile cell phones (2002) has successfully reduced the demand for expensive private mobile phones remarkable.

Mobile phones have multiple features like Videogames, Camera, Television, SMS, Mail services and they may also be converted into Television and Computers in the near future. BSNL which is providing communication facility all over the country including towns and villages coming under National Highways and prominent railway routes. There is a great demand for pre-paid Excel and post-paid BSNL Mobile phones in the market.

In India, the authority of Telephones Department which was providing Internet services through the BSNL since 1995 was abolished in 1998. As a result, many private companies are providing internet services to the customers. Inspite of a tough competition from private companies, BSNL is trying to provide internet services to the customers at lesser rates. The Telephones Department has a separate Corporation known as Mahanagara Palike Telephone Nigama Limited (MTNL) to manage the telephone systems of Mumbai and Delhi cities and the

telephone systems of other cities of the country are under the control of B.S.N.L. The BSNL has also started providing Answering Machine Services (AMS) to landlines through which the customers are able to get call messages.

All India Radio

Radios, introduced in the fourth decade of 20th century (1940), has played an important role in the daily life of common man. Subsequently, even though it regressed with the advent of Televisions in 1980, it is gaining importance with its variety of programmes and F.M. services. Prior to the starting of All India Radio station in Mangalore on 14th November 1976, the Dakshina Kannada district received programmes broadcasted from Bangalore and Dharwad. All India Radio stations. After 1976, a studio in Mangalore and a broadcast station in Brahmavara were started.By 1967, there were 17,832 Radio sets. It rose to 34,417 radio sets with licence in 1972 in the district. This regularly increased and by 1978, it rose to 62,104 and to 1,10,667 in 1980. In 1982, it declined to 55,922, but increased to 63,495 in 1983. Afterwards there is no proper information available. This was mainly due to the abolition of radio licence renewal rules followed earlier by Government of India. Inspite of this, walkman like small radios and even mobiles are providing F.M. services effectively.

Doordarshan (Television)

Though the television which gained much popularity was introduced in India as early as 1959, it entered Karnataka only in 1977. Later when the Doordarshan Kendra was started in 1981 at Bangalore, the district also got T.V. facility. In the beginning (1982), only nine Televisions were registered in the district. This rose to 26 in 1983. Meanwhile transmitters of 100 wats capacity were established during 1984, in 10 different cities of the State including the Mangalore city (21-07-1984). In Udupi, 100 watt capacity transmitter station was established on 29-10-1989. As per the Government of India scheme and on local request, all Doordarshan sub stations were linked to Bangalore Doordrshan Kendra, as a result, programmes of Bangalore Doordarshan simultaneously reached the people throughout the State. At that time Bangalore Doordarshan Kendra broadcasted programmes between 5.30 to 8.30 in the evening.

Apart from this, programmes in Tamil, Telugu, Marathi, Malayalam, Urdu, Kodava, Konkani and other Indian languages were also broadcasted. Later, in October 1993, Bangalore Kendra started the

Second channel. With this, Doordarshan gaining much popularity by providing services to about 3.8 lakhs of people in urban areas and 6.2 lakh people in rural areas, and grew to be a powerful media.

The Prasara Bharathi Nigam of Government of India recently introduced D.T.H. (Direct to Home) services and as a result by adjusting 45-60 cm. diametre small antena and one set top box to their Television, the users can see more than 40 national and international programmes along with listening the All India Radio programmes. There is a move to raise the capacity of Mangalore Doordarshan Kendra to 10 K.watts and for this to highten the tower to 150 metres, a proposal has been submitted to Civil Aviation Department. The capacity of Doordarshan relay station near Bantwal has been raised from 100 watts to 500 watts. As a result it is estimated that Doordarshan services has reached on an average 92% of population in the district.

Tourism

From tourism point of view, after Kashmir, Karnataka occupies the next place and with this background, Karnataka has been described as the tourists paradise. To get such an appreciation the role of Coastal belt is also remarkable. The Coastal district has Ullala, Sasihitlu, Panambur and Tanneerbhavi beaches, and the ever green Western ghats suitable for trecking. The water falls of Kumaradhara, Kukkanje, Bandaje, Didupe and Devaragudi formed by the rivers flowing throughout the year, beautiful places of natural attraction viz., Kemmaru lake, Bendertheertha and Pilakula Nisargadhama; places of pilgrimage such as Dharmasthala, Kukke Subrhamanya, Someswara, Kadri, Moodabidri, Venur, Ullala; historic places like Sultan batheri, Ballalarayadurga, Jamalabad, Bellare; old Mangalore port and New Mangalore (Panambur) of international trade importance; Mangalore, Suratkal and other places of educational, industrial and commercial importance have contributed in attracting tourists to the district like a magnet. To attract visitors to the tourist places of the district, tourist information, route directory, facility of good roads, hotels for the food and accommodations is already available to the tourists. In this regard, the Tourism Department is active in the district. There is a branch office of Karnataka State Tourism Development Corporation in Mangalore. Still there is sufficient scope for the development of tourism in the district.

Guest Houses

From times immemorial mantapas, temples, mathas, choultries and other places have provided boarding and lodging facilities to travellers

and pilgrims. The rulers, generals, rich merchants, philanthrophists and donors have constructed resting mantapas, *Aravattige, Dharmachattras* in early times and this practice continued even in the district. After the fall of Tipu, and the transfer of the district to the British, Inspection Bungalows, Travellers Bungalows, and Circuit Houses were constructed and maintained by the Government. These rest houses were called the 'Dak Bungalows', as they were also used for changing the horses and bullocks of Tappal carts, apart from being used as rest houses. These rest houses were supervised by the local postal officers and they had the power for advance reservation and allotment. In the beginning the maintenance of travellers bungalows rested with the District Boards. Later it was shifted to the Taluk Boards. By 1893, the district had 28 travellers' bungalows controlled by Mangalore Municipality and Taluk Boards. Among these there were five in Mangalore taluk (Mangalore Travellers' Bungalow was under the control of Municipality), Uppinangadi (7), Udupi (7), Kasargod (7) and Kundapura (2) taluks. Out of these, 11 were furnished, six partially furnished and the remaining 10 had no furnitures. There were no serving of food. The public had provisions to stay in them and there was no special priority for Government officials. Generally, one rupee was charged for a single person and 1 ½ rupees for a couple. But in Mulki, Charmadi and other places the charges were half this rate and in Hiriyadka, Travellers Bungalow, charges were 4 and 6 annas respectively. In Mangalore taluk, Mangalore, Pharangipete, Gurupur, Bantwal, Punjalkatta, Mulki, Prantha and Suratkal; in Uppinangadi taluk, Belthangadi, Charmadi, Puttur, Sampaje, Shiradi, Sulya, and Uppinangadi, and the guest houses in Pane Mangalore, charges were Re. one and Rs.1 ½ respectively. Apart from this in Mangalore town, there were municipal choultries for the public and *Dharmachatras* for Bhairagis at Bajpe, Guruvayanakere, Punjalakatta, Mulki, Prantha and Suratkal, Uppinangadi in Uppinangadi taluk, Bailahalli, Charmadi, Kasaba Kukke, Yermekaya and Kabaka choulties were reserved for Hindu travellers. Among these choultries, some were of private nature and some were managed out of local funds. Moodabidri choultry of Prantha, Polyada Choultry of Kabaka, Subrhamanya temple choultry of Kasabakukke, Dharmasthala Manjunatha temple choultry of Mallaramadi, Neriyada Devakamma Hebbarathi house choultry (Mularnidagal), Ujre Naraina Padavatanayya house choultry,Kothgere Bhageerathi Ammas Choultry of Pane Mangalore, Thimmayya Bhat choultry and Vittala Arasu choultry of Vittala etc., were some private owned choultries of the district. In the later decades many new Travellers

Bungalows were constructed. As a result by 1926, there were in the district different categories of resting places belonging to District Board (117), Taluk Boards (9), Forest Department (9), Grama Panchayath (1) and Municipality (1) with a total of 137 Travellers Bungalows, and by 1934, the number of rest houses in the district declined to 120. Out of these there were Travellers Bungalows under the control of District Board (108), Forest Department (9), Grama Panchayath (1), Municipality (1) and Public Works Department (1). Later due to the changes, by 1972, the district had – two first grade circuit houses, one main and two sub-main Inspection bungalows and nine second grade Inspection bungalows and five Travellers Bungalows. Subsequently, the district had sufficient development and there are well furnished circuit houses in Kadri hills at Manglore, Travellers Bungalows at Malligeri and other places including Taluk centres. At the end of March 2002, the district headquarters of Mangalore city had two, Moodabidri, Malpe, Bantwal, Puttur, Sulya, Belthangadi (two each) and Vittala had travellers bungalows. Moreover Dharmasthala, Kukke Subrhamanya, Kadri, and other religious places have Guest houses maintained by the respective temples. There are also private lodges in considerable number in the district.

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